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July 1, 2008

Ms. Florence E. Harmon
Acting Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: File Number 4-560:

Comments on Fair Value Accounting Standards

Dear Ms Harmon:

Fitch Ratings welcomes the opportunity to provide its insights on fair value accounting standards to the Securities and Exchange Commission in advance of its scheduled roundtable discussion on this topic on July 9, 2008.

Fitch Ratings is a leading global rating agency committed to providing the world's credit markets with independent, timely and prospective credit opinions. Fitch's corporate finance ratings make use of both qualitative and quantitative analyses to assess the business and financial risks of fixed-income issuers. Therefore, Fitch directly relies on the financial statements and that reliance places us in an informed position to comment on information we believe is useful and crucial in the credit evaluation process, which is a critical component of efficient capital markets.

Fitch prepares its research from a credit analyst perspective. Since the roundtable will be discussing fair value accounting issues from the perspective of investors, the agency thought it important to share with the Commission both its most recent reports on this subject as well as its criteria for adjusting fair values of debt and derivatives in corporate analysis.

- "Fair Value Disclosures: A Reality Check". The analysis in this report was based upon a review of 2007 annual reports and 10-Ks of the world's largest banking groups. It concludes that the new fair value disclosures are obvious improvements compared to prior disclosures but do not go far enough. Investors and analysts need better and more extensive disclosure around fair value measurements.
- "Fair Value Accounting: Is It Helpful in Illiquid Markets?" This report explores the issues of setting fair values in illiquid markets, the need for use of sound judgment in

its application and ultimately concludes that improved disclosure and presentation requirements would restore trust among the investor community.

- "Accounting for Insurance Contracts: Will Fair Value Fix It?" This report was prepared in response to the International Accounting Standard Board's discussion paper on accounting for insurance contracts which proposed a current exit value method for measuring liabilities. Fitch believes that the appropriate measurement attribute and real "fair value" of insurance contracts should reflect the expectation of cash outflows to settle the contract rather than cash outflows to transfer the contract to a hypothetical third party.
- "Adjusting for Fair Value of Debt and Related Derivatives in Corporate Analysis." This criteria report addresses Fitch's treatment of fair value movements in derivatives hedging debt. It discusses the agency's approach to arriving at a debt figure for use in its analysis and outlines how Fitch adjusts for fair value accounting for derivatives and debt in computing leverage and coverage ratios for corporate issuers.

The overarching theme to each of these reports is that more extensive disclosures will help investors to understand the limitations around fair value.

We appreciate the Commissions' consideration of our reports and would be happy to discuss them at any time.

Yours sincerely,

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Attachments

Special Report

Fair Value Disclosures

A Reality Check

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Related Research

- *Special Report, "Accounting For Insurance Contracts - Will Fair Value Fix It?" May 29, 2008.*
- *Special Report, "Fair Value Accounting: Is It Helpful In Illiquid Markets?" April 28, 2008.*
- *Special Report, "Fair Value Accounting: An Overview of the Requirements," Jan. 24, 2008.*
- *Criteria Report, "Adjusting for Fair Value of Debt and Related Derivatives in Corporate Analysis," dated April 25, 2006.*

Comment letters to standard setters and regulators as well as reports published on fair value and other major accounting issues can be found on the Accounting and Corporate Governance page under Market Focus at www.fitchratings.com.

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Overview

The need for better fair value disclosures is an important part of the ongoing fair value debate. Fitch's analysts sometimes have the opportunity to talk to managements about issues that are not in the public domain, and the degree of reliability and assumptions around fair value measurements has been an important topic of discussion for financial institutions analysts looking at 2007 and 2008 financial reporting to date. This report highlights specific disclosures that Fitch considers helpful to credit analysts in evaluating fair value measurements. In addition, the report points out certain areas where more extensive disclosure would assist the reader in understanding a company's numbers. The report is primarily based on a review of 2007 annual reports and 10-Ks from the world's largest banking groups (listed in Appendix A on page 15)—in particular, notes to financial statements, critical accounting policies and summaries of significant accounting policies relevant to fair value measurements.

Key Findings

- The implementation of new accounting standards around fair value coincided with sharp declines in the values of subprime and related debt instruments.
- The new disclosures are obvious improvements on prior disclosures but do not go far enough. Investors and analysts need better and more extensive disclosure around fair value measurements.
- The tabular format required by Statement of Financial Accounting Standards (SFAS) 157, distinguishing between Level 1, 2 and 3 valuations, is clear and easy for readers to understand, at least at a basic level. Fitch would like to see those companies reporting under International Financial Reporting Standards (IFRS) with a high proportion of assets/liabilities at fair value make use of this format.
- Level 2 measurements make up an average of 72% of total assets and liabilities measured at fair value for the US institutions reviewed and 67% for the European institutions at fiscal year-end 2007, with some institutions reporting as much as 88% in this category. This highlights the need to consider the makeup of and the disclosures surrounding Level 2 assets and liabilities.
- The sensitivities of fair value measurements to changes in significant assumptions are particularly important when valuations are model-based. IFRS require the disclosure of the potential effect of using "reasonably possible alternative assumptions" while US Generally Accepted Accounting Principles (GAAP) do not. Fitch would like to see better disclosure around sensitivities of fair value measurements.
- Disclosures about valuation methodologies, adjustments and controls are often vague and scant for both US GAAP and IFRS filers. The more insightful disclosures included specific details of significant valuation models, key inputs, significant assumptions, specific control processes and specific valuation adjustments made to ensure the accuracy of fair value measurements.

Background

In the United States, SFAS 157 spells out specific fair value measurement and disclosure requirements. Under IFRS, measurement of all financial assets and liabilities (including fair value measurement) is dealt with in International Accounting Standard (IAS) 39, while disclosure of these is in IFRS 7.

IFRS 7 was mandatory for accounting periods starting on or after Jan. 1, 2007, but as most IFRS reporters provide only limited information in their interim statements, the standard was really only implemented for the first time in the end-2007 annual reports. In the United States, some of the large banks and securities firms adopted SFAS 157 early, with full disclosure in third-quarter 2007 and their full-year 10-Ks for year-end 2007, while the standard became mandatory for annual accounting periods starting after Nov. 15, 2007, so that many US companies implemented it for the first time in their first-quarter 2008 interim statements. For further information on accounting requirements regarding fair value, see Fitch's Special Report, "Fair Value Accounting — An Overview of the Requirements," dated Jan. 24, 2008, and available at www.fitchratings.com

Fair Value Hierarchy

US GAAP

The fair value hierarchy is the crux of SFAS 157. The hierarchy prioritizes the relative reliability of the fair value inputs to a valuation technique. It consists of three levels,

The Fair Value Measurements table presents Merrill Lynch's fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of Dec. 28, 2007

Merrill Lynch & Co., Inc. — Fair Value Measurements on a Recurring Basis

($ Mil., As of Dec. 28, 2007)

	Level 1	Level 2	Level 3	Netting Adj.[a]	Total
Assets					
Securities Segregated for Regulatory Purposes or Deposited with Clearing Organizations	1,478	5,595	84	—	**7,157**
Receivables Under Resale Agreements[b]	—	100,214	—	—	**100,214**
Trading Assets, Excluding Derivative Contracts	71,038	81,169	9,773	—	**161,980**
Derivative Contracts	4,916	522,014	26,038	(480,279)	**72,689**
Investment Securities	2,240	53,403	5,491	—	**61,134**
Securities Received as Collateral	42,451	2,794	—	—	**45,245**
Loans, Notes and Mortgages	—	1,145	63	—	**1,208**
Other Assets[c]	7	1,739	—	(24)	**1,722**
Liabilities					
Payables Under Repurchase Agreements[b]	—	89,733	—	—	**89,733**
Trading Liabilities, Excluding Derivative Contracts	43,609	6,685	—	—	**50,294**
Derivative Contracts	5,562	526,780	35,107	(494,155)	**73,294**
Obligation to Return Securities Received as Collateral	42,451	2,794	—	—	**45,245**
Long-Term Borrowings[d]	—	75,984	4,765	—	**80,749**
Other payables — Interest and Other[c]	2	287	—	(13)	**276**

Level 3 Assets and Liabilities

Level 3 trading assets primarily include corporate bonds and loans of $5.4 billion and US ABS CDOs of $2.4 billion, of which $1.0 billion was subprime-related. Level 3 derivative contracts (assets) primarily relate to derivative positions on US ABS CDOs of $18.9 billion, of which $14.7 billion is subprime-related, and $5.1 billion of equity derivatives that are long-dated and/or have unobservable correlation. Level 3 investment securities primarily relate to certain private equity and principal investment positions of $4.0 billion, as well as US ABS CDOs of $834 million that are accounted for as trading securities under SFAS No. 115. Level 3 derivative contracts (liabilities) primarily relate to derivative positions on US ABS CDOs of $25.1 billion, of which $23.9 billion relates to subprime, and $8.3 billion of equity derivatives that are long-dated and/or have unobservable correlation. Level 3 long-term borrowings primarily relate to structured notes with embedded long-dated equity and currency derivatives.

[a]Represents counterparty and cash collateral netting. [b]Resale and repurchase agreements are shown gross of counterparty netting. [c]Primarily represents certain derivatives used for non-trading purposes. [d]Includes bifurcated embedded derivatives carried at fair value.

Source: Merrill Lynch & Co., Inc. Form 10K filing for the fiscal year ended Dec. 28, 2007.

with Level 1 representing the most reliable inputs and Level 3 the least objective and transparent. SFAS 157 requires a tabular disclosure of where financial assets and liabilities fall within the fair value hierarchy. In addition, the standard requires a reconciliation of the beginning and ending balances of Level 3 measurements, explaining the causes of the differences between the two balances.

The tabular format was disclosed consistently across the companies Fitch reviewed that report US GAAP. We found Merrill Lynch & Co., Inc.'s (Merrill Lynch) SFAS 157 disclosure to be particularly informative. The disclosure went beyond the required minimum disclosure by providing additional information on the makeup of Level 3 assets in the notes following the Fair Value Measurements table on page 2.

As well as disclosing a general breakdown of Level 3 assets and liabilities, Merrill Lynch also provided detail in addition to the required disclosure on the changes in fair value of Level 3 assets and liabilities, and the effect of Level 3 gains and losses on income, as shown in the table below and on page 4. This information helps the user to understand the company's exposure to certain asset classes and to see the specific types of financial assets and liabilities that are moving into Level 3 because market information is no longer available.

The following table provides a summary of changes in fair value of Merrill Lynch's Level 3 financial assets and liabilities for the year ended Dec. 28, 2007.

Merrill Lynch & Co., Inc. — Level 3 Financial Assets and Liabilities

Mil., Year Ended Dec. 28, 2007)

	Beginning Balance	Total Realized and Unrealized Gains/(Losses) Included in Income: Principal Transactions	Total Realized and Unrealized Gains/(Losses) Included in Income: Other Revenue	Total Realized and Unrealized Gains/(Losses) Included in Income: Interest	Total Realized and Unrealized Gains/ (Losses) Included in Income	Purchases, Issuances and Settlements	Transfers In (Out)	Ending Balance
Assets								
Securities Segregated for Regulatory Purposes or Deposited with Clearing Organizations	—	(5)	—	1	(4)	—	88	84
Trading Assets	2,021	(4,205)	—	46	(4,201)	2,945	8,941	9,773
Derivative Contracts, Net	(2,030)	(7,826)	(2)	25	(7,803)	465	154	(9,069)
Investment Securities	5,117	(2,412)	428	8	(1,976)	3,000	(740)	5,491
Loans, Notes and Mortgages	7	-	1	—	1	(5)	79	63
Liabilities								
Long-Term Borrowings	—	524	7	—	531	2,203	3,093	4,765

Net losses in principal transactions were due primarily to $16.7 billion of write-downs related to U.S. ABS CDOs and other sub-prime related instruments that are classified as Level 3, partially offset by $1.4 billion in gains on non-subprime mortgage-related items and net gains in equity-related products.

The increases attributable to purchases, issuances, and settlements on Level 3 assets and liabilities included the exercise of certain purchase obligations in the third quarter of 2007 that required Merrill Lynch to buy underlying assets, primarily U.S. ABS CDOs. In addition, Level 3 assets and liabilities increased due to the consolidation of an SPE which also primarily contained U.S. ABS CDOs.

The increases attributable to net transfers in on Level 3 assets and liabilities were due primarily to the decrease in observability of market pricing for instruments which had previously been classified as Level 2. These were primarily U.S. ABS CDOs and related instruments of $6.8 billion and corporate bonds and loans that are classified as trading assets of $3.9 billion, offset by $2.7 billion of net transfers out of equity derivatives.

Source: Merrill Lynch & Co., Inc. Form 10K filing for the fiscal year ended Dec. 28, 2007.

The Unrealized Gains table below provides the portion of gains or losses included in income for the year ended Dec. 28, 2007, attributable to unrealized gains or losses relating to those Level 3 assets and liabilities still held at Dec. 28, 2007.

Merrill Lynch & Co., Inc. — Unrealized Gains or (Losses) for Level 3 Assets and Liabilities Still Held at Dec. 28, 2007

($ Mil.)

	Principal Transactions	Other Revenue	Interest	Total
Assets				
Securities Segregated for Regulatory Purposes or Deposited with Clearing Organizations	(5)	—	1	(4)
Trading Assets	(4,205)	—	4	(4,201)
Derivative Contracts, Net	(7,826)	(2)	25	(7,803)
Investment Securities	(2,412)	428	8	(1,976)
Loans, Notes and Mortgages	—	1	—	1
Liabilities				
Long-Term Borrowings	524	7	—	531

Total net unrealized losses were primarily due to $16.7 billion of write-downs related to U.S. ABS CDOs and other sub-prime related instruments that are classified as Level 3, partially offset by $1.4 billion in gains on non-subprime mortgage-related items and net gains in equity-related products.
Source: Merrill Lynch & Co., Inc. Form 10K filing for the fiscal year ended Dec. 28, 2007.

Fitch Believes the Expansion of Level 2 Disclosures Would Be Beneficial for Users

Fair value measurement is used for a relatively high proportion of assets and liabilities in many financial institutions. This is particularly the case for the European and US banking groups reviewed, where assets reported at fair value averaged 50% of the year-end 2007 balance sheets, while liabilities at fair value averaged 31% compared to other financial institutions and certainly compared to most corporates. These groups also have some of the more complex and hard-to-value assets and liabilities on their books, so many make use of valuation models with few observable inputs.

It would be particularly informative for users of the accounts to have the most reliable and least reliable Level 2 measurements reported separately, potentially introducing Level 2A and 2B categories.

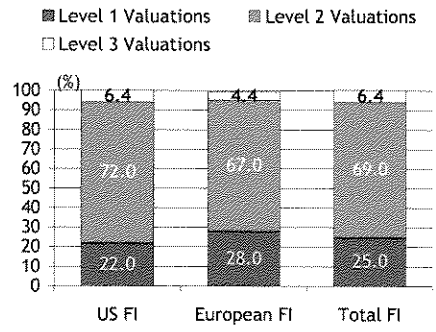
As shown in the charts on page 5, most of the financial assets and liabilities reported at fair value for the banking groups reviewed fall into Level 2. Given this, along with the range of measurements that fall into Level 2, Fitch would like to see more information about Level 2 measurements. It would be particularly informative for users of the accounts to have the most reliable and least reliable Level 2 measurements reported separately, potentially introducing Level 2A and 2B categories. The inevitable difficulty with this and with allocating measurements to "buckets" in the first place is that not everything falls easily into one place.

For the grey areas around the edges of the categories, Fitch prefers good disclosure about what decisions were made and why. If this is not understood by the user, attempts to use the information in comparative analysis become less meaningful. In an ideal world analysts would have all fair values derived from reliable market information, but where this is not the case, the disclosures should point out where measurements are more subjective, so that analysts can decide whether to adjust. Analysts need some insight into what the main decisions made about measurements were; otherwise, the numbers reported will at best be treated with some caution.

Fitch would like to see Level 3 disclosures—a reconciliation of beginning and ending balances, including the changes during the period and income statement-related disclosures, including total gains and losses and where the gains/losses are reported on the income statement—extended to Level 2 assets and liabilities whose measurement is relatively

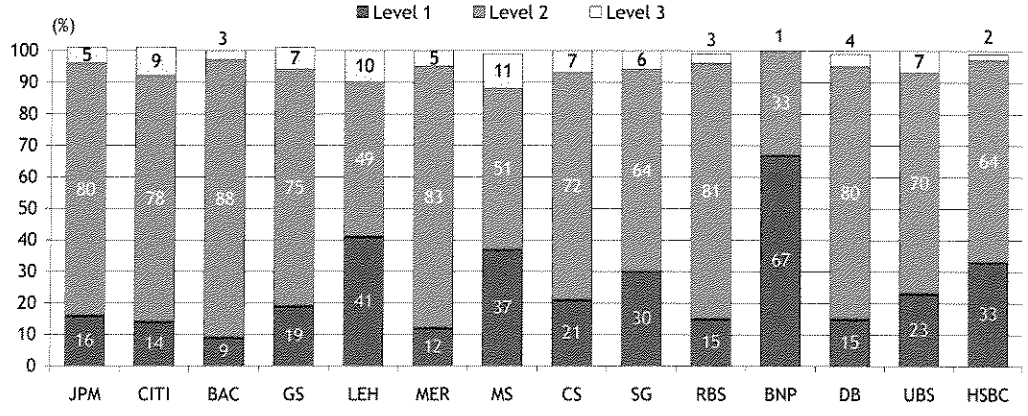
subjective and, therefore, close to Level 3. Such additional disclosure also would be helpful due to the frequency with which firms are moving assets and liabilities between Level 2 to Level 3 and back. Fitch understands that many of the assets in Level 3 at year-end 2007 or first-quarter 2008 would have been in Level 2 a year earlier—for example, subprime mortgage-related assets and liabilities, including collateralized debt obligations. Furthermore, many assets and liabilities in Levels 1 and 3 are wholly or partially hedged by derivatives that are primarily (Fitch understand this to be upwards of 80%) classified in Level 2. Disclosure about how portfolios are managed and hedged is necessary for the reader to understand the data provided. This is probably best done in the risk management section of the management review reports. It is reassuring for users when this reporting is easy to tie into the notes to the financial statements as much as possible.

Aggregate Fair Value Hierarchy — Combines Assets and Liabilities



FI – Financial institutions.
Source: Company annual reports.

Issuer Fair Value Hierarchy — Combines Assets and Liabilities



Note: Numbers may not add up to 100 due to rounding.
Source: Company annual reports.

The Issuer Fair Value Hierarchy chart above shows the breakdown of the relative proportion of fair value measurements per the fair value hierarchy for the firms reviewed (Credit Agricole, Barclays and the Chinese banks did not disclose the three-tiered hierarchy)[a, b].

[a] The proportion of assets and liabilities in Level 1 for BNP Paribas is an obvious outlier. However, the bank's limited presentation and broad classification of the hierarchy make it difficult to understand why this might be. The bank does not disclose where individual financial instrument categories are classified in the hierarchy. See the BNP Paribas table on page 7.

[b] Derivatives are presented within the hierarchy as per the balance sheet for IFRS filers and grossed up for the US GAAP filers reviewed, except Lehman Brothers, which is presents net. (Netting of derivative positions is much more difficult to achieve under IFRS than US GAAP, so positions are usually disclosed gross on the balance sheet.)

IFRS

The principles of the fair value measurement hierarchy are set out in paragraph 48A of IAS 39 and in the application guidance to the standard, although the structure is less precisely defined than in SFAS 157. While IFRS 7 does not require disclosure under the three-bucket tabular format, all but two IFRS filers reviewed (Barclays and Credit

The table below shows financial instruments carried at fair value at Dec. 31, 2007, by valuation method.

Royal Bank of Scotland Group — Financial Instruments Measured at Fair Value, by Valuation Method

(GBP Bil., At Dec. 31, 2007)

	Quoted Prices in Active Markets[a]	Valuation Techniques Based on Observable Market Data[b]	Valuation Techniques Incorporating Information Other than Observable Market Data[c]	Total
Assets				
Fair Value Though Profit or Loss				
Loans and Advances to Banks	—	71.5	0.1	**71.6**
Loans and Advances to Customers	—	94.4	13.1	**107.5**
Treasury and Other Eligible Bills and Debt Securities	83.1	101.7	11.6	**196.4**
Equity Shares	36.5	8.1	0.8	**45.4**
Derivatives	1.9	330.3	5.2	**337.4**
Available-for-Sale				
Treasury and Other Eligible Bills and Debt Securities	32.1	62.4	1.1	**95.6**
Equity Shares	5.8	1	0.8	**7.6**
Total	**159.4**	**669.4**	**32.7**	**861.5**
Liabilities				
Deposits by Banks and Customer Accounts	—	131.9	1.5	**133.4**
Debt Securities in Issue	—	42.1	9.2	**51.3**
Short Positions	63.6	9.9	—	**73.5**
Derivatives	2.1	325.6	4.4	**332.1**
Other Financial Liabilities[d]	—	0.9	0.2	**1.1**
Total	**65.7**	**510.4**	**15.3**	**591.4**

[a]Financial assets and financial liabilities valued using unadjusted quoted prices in active markets for identical assets or liabilities. This category includes listed equity shares, exchange-traded derivatives, UK, US and certain other government securities, and US agency securities in active markets.

[b]Financial assets and financial liabilities valued using techniques based on observable market data. Instruments in this category are valued using:

a) quoted prices for similar assets or liabilities, or identical assets or liabilities in markets which are considered to be less than active; or

b) valuation techniques where all the inputs that have a significant effect on the valuation are directly or indirectly based on observable market data.

Financial assets and financial liabilities in this category include repos, reverse repos, structured and US commercial mortgage loans, structured deposits, investment contracts issued by the Group's life assurance businesses, corporate and municipal debt securities, most debt securities in issue, certain unlisted equity shares for which recent market data are available, the majority of the Group's OTC derivatives and certain instruments listed in (1) above where markets are considered to be less than active.

[c]Valuation techniques incorporating information other than observable market data are used for instruments where at least one input (which could have a significant effect on the instrument's valuation) cannot be based on observable market data. Where inputs can be observed from market data without undue cost and effort, the observed input is used; if not, the input is estimated. Financial assets and liabilities in this category include certain syndicated and commercial mortgage loans, unlisted equity shares, certain residual interests in securitisations, super senior tranches of high grade and mezzanine collateralised debt obligations (CDOs) and other sub-prime trading inventory, less liquid debt securities, certain structured debt securities in issue and OTC derivatives where valuation depends upon unobservable inputs such as certain long dated and exotic contracts. No gain or loss is recognised on the initial recognition of a financial instrument valued using a technique incorporating significant unobservable data.

[d]Other financial liabilities comprise subordinated liabilities and provisions relating to undrawn syndicated loan facilities.

Source: Royal Bank of Scotland Group PLC, Form 20-F for the fiscal year ended Dec. 31, 2007.

The following tables set out the total financial instruments stated at fair value as of Dec. 31, 2007, and those fair values are calculated with valuation techniques using unobservable inputs.

Barclays PLC — Breakdown of Financial Instruments at Fair Value and Those Fair Values with Valuation Techniques Using Unobservable Inputs

(GBP Mil., at Dec. 31, 2007)

	Unobservable Inputs	Total
Assets Stated at Fair Value		
Trading Portfolio Assets	4,457	193,691
Financial Assets Designated at Fair Value:		
— Held on Own Account	16,819	56,629
— Held in Respect of Linked Liabilities to Customers Under Investment Contracts	—	90,851
Derivative Financial Instruments	2,707	248,088
Available for Sale Financial Investments	810	43,072
Total	**24,793**	**632,331**
Liabilities Stated at Fair Value		
Trading Portfolio Liabilities	42	65,402
Financial Liabilities Designated at Fair Value	6,172	74,489
Liabilities to Customers Under Investment Contracts	—	92,639
Derivative Financial Instruments	4,382	248,288
Total	**10,596**	**480,818**

Source: Barclays PLC, Annual Report 2007.

Agricole) disclosed fair value measurements in this format. Fitch finds this encouraging given that it is a helpful way to present the information. A leading practice for IFRS filers is shown in the extract from Royal Bank of Scotland's notes to financial statements (see the Financial Instruments table on page 6).

There were varying levels of breakdown for the financial assets and liabilities among

The breakdown of financial instruments by type of fair value measurement given in the following table has been prepared in accordance with categories defined in note 1.c.9, "Determination of fair value."

BNP Paribas Group — Breakdown of Financial Instruments by Type of Fair Price Measurement

(EUR Mil., at Dec. 31)

	2007				2006			
	Market Price (Cat. 1)	Model with Observable Parameters (Cat. 2)	Model with Non-Observable Parameters (Cat. 3)	Total	Market Price (Cat. 1)	Model with Observable Parameters (Cat. 2)	Model with Non-Observable Parameters (Cat. 3)	Total
Financial Assets								
Financial Assets Held for Trading Purposes at Fair Value through Profit or Loss	624,062	250,518	3,643	**878,243**	516,399	173,257	2,569	**692,225**
Financial Assets at Fair Value through Profit or Loss Under the Fair Value Option	46,790	6,673	—	**53,463**	46,171	6,462	—	**52,633**
Financial Liabilities								
Financial Assets Held for Trading Purposes at Fair Value through Profit or Loss	481,831	229,786	7,828	**719,447**	434,873	152,915	5,869	**593,657**
Financial Assets at Fair Value through Profit or Loss Under the Fair Value Option	451	76,227	—	**76,678**	—	59,671	—	**69,671**

Source: BNP Paribas, 2007 Registration Document.

the banks reviewed. Outside this group of market leaders, Fitch unfortunately has seen little use of the tabular format to date. The format in the Financial Instruments table on page 6 is more helpful to the user than those in the tables on page 7. The Barclays table does not show Levels 1 and 2, while the BNP Paribas table lacks sufficient granularity among assets and liabilities.

Valuation Methodologies

SFAS 157 and IFRS require annual disclosure of the technique(s) used to measure fair value. SFAS 157 explicitly also requires discussion of changes in the techniques, if any, during the year.

The more insightful disclosures included details on the valuation models, the key inputs into the models and significant assumptions.

A review of the financial statement disclosures on valuation methodologies shows that most firms filing under US GAAP and IFRS disclosed valuation methodologies with some firms providing more insight than others. The more insightful disclosures included details on the valuation models, the key inputs into the models and significant assumptions.

JPMorgan Chase & Co.'s (JPMorgan) disclosure was particularly helpful in citing specific market-standard models and briefly commenting on how the ABX Index is used in its valuation. The disclosure reads as follows.

JPMorgan Chase & Co.: Note 4 — Fair Value Measurement (I)

"Securities

Where quoted prices are available in an active market, securities are classified in Level 1 of the valuation hierarchy. Level 1 securities included highly liquid government bonds, mortgage products for which there are quoted prices in active markets and exchange-traded equities. If quoted market prices are not available for the specific security, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. Examples of such instruments are collateralized mortgage obligations and high-yield debt securities which would generally be classified within Level 2 of the valuation hierarchy. In certain cases where there is limited activity or less transparency around inputs to the valuation, securities are classified within Level 3 of the valuation hierarchy. For instance, in the valuation of certain collateralized mortgage and debt obligations and high-yield debt securities the determination of fair value may require benchmarking to similar instruments or analyzing default and recovery rates. For cash collateralized debt obligations (CDOs), external price information is not available. Therefore, cash CDOs are valued using market-standard models, such as Intex, to model the specific collateral composition and cash flow structure of each deal; key inputs to the model are market spreads data for each credit rating, collateral type and other relevant contractual features. Asset-backed securities are valued based on external prices or spread data, using current market assumptions on prepayments and defaults. For those asset-backed securities where the external price data is not observable or the limited available data is opaque, the collateral performance is monitored and the value of the security is reviewed versus the ABX index, an index of mortgage-backed securities backed by subprime mortgages."

Although Fitch does not find the boilerplate language used in the example from Goldman Sachs Group Inc. (shown in the Level 3 Assets table on page 9) particularly helpful, the tabular format used to disclose the valuation techniques of its Level 3 assets at least makes the disclosure easy to follow.

The following table sets forth the fair values of assets classified as Level 3 within the fair value hierarchy, along with a brief description of the valuation technique for each type of asset

Goldman Sachs Group — Level 3 Assets at Fair Value

(As of Nov. 2007)

Description	($ Mil.)	Technique
Private Equity and Real Estate Fund Investments[a]	18,006	Initially valued at transaction price. Subsequently valued based on third-party investments, pending transactions or changes in financial ratios (e.g., earnings multiples) and discounted cash flows.
Bank Loans[b]	13,334	Initially valued at transaction price. Subsequently valued using market data for similar instruments (e.g., recent transactions or broker quotes), comparisons to benchmark derivative indices or movements in underlying credit spreads.
Corporate Debt Securities and Other Debt Obligations[c]	6,111	
Mortgage and Other Asset-backed Loans and Securities		
Loans and Securities Backed by Commercial Real Estate[d]	7,410	Initially valued at transaction price. Subsequently valued using transactions for similar instruments and discounted cash flow techniques (calibrated to trading activity, where applicable).
Loans and Securities Backed by Residential Real Estate[e]	2,484	Initially valued at transaction price. Subsequently valued by comparison to transactions in instruments with similar collateral and risk profiles, discounted cash flow techniques, option adjusted spread analyses, and hypothetical securitization analyses.
Loan Portfolios[f]	6,106	Initially valued at transaction price. Subsequently valued using transactions for similar instruments and discounted cash flow techniques.
Cash Instruments	53,451	
Derivative Contracts	15,700	Valuation models are calibrated to initial trade price. Subsequent valuations are based on observable inputs to the valuation model (e.g., interest rates, credit spreads, volatilities, etc.). Model inputs are changed only when corroborated by market data.
Total level 3 Assets at Fair Value	69,151	
Level 3 Assets for Which We Do Not Bear Economic Exposure[g]	(14,437)	
Level 3 Assets for Which We Bear Economic Exposure	54,714	

[a]Includes $7.06 billion of assets for which we do not bear economic exposure. Also includes $2.02 billion of real estate fund investments. [b]Includes mezzanine financing, leveraged loans arising from capital market transactions and other corporate bank debt. [c]Includes $2.49 billion of collateralized debt obligations (CDOs) backed by corporate obligations. [d]Loans and securities backed by commercial real estate were $19.02 billion, of which $7.41 billion were classified as level 3. [e]Includes subprime mortgage exposure of $507 million, including $316 million of CDOs backed by subprime mortgages. [f]Consists of acquired portfolios of distressed loans. These loans are primarily backed by commercial and residential real estate collateral. [g]We do not bear economic exposure to these Level 3 assets as they are financed by nonrecourse debt, attributable to minority investors or attributable to employee interests in certain consolidated funds.
Source: Goldman Sachs Group, Form 10K filing for the fiscal year ended November 2007.

It would be helpful to see more specificity about valuation methodologies than has been reported by most companies to date.

It would be helpful to see more specificity about valuation methodologies than has been reported by most companies to date. In particular, more disclosure around the significant assumptions made would be useful, showing what the main assumptions were, the alternatives, any changes made to assumptions in the period and the reasons for these.

Valuation Procedures and Controls

Neither SFAS 157 nor IFRS 7 require disclosure of the controls surrounding valuation. However, most of the firms reviewed identified valuation controls as a critical accounting policy. Some firms—e.g., American International Group, Inc., Morgan Stanley, Credit Suisse and Lehman Brothers—have recently disclosed control lapses that have led to surprising significant revisions in fair value measurements. These control lapses, depending on their severity and materiality, could potentially lead to financial statement restatements and a loss of credibility in the fair value process of the reporting firm.

Most of the firms reviewed provided at least a brief overview of independent oversight of valuation policies and procedures by management and the audit committee. The following disclosure from JPMorgan Chase regarding its control processes is more informative than those from the other firms reviewed because it is more specific.

JPMorgan Chase & Co.: Note 4 — Fair Value Measurement (II)

"The Firm has numerous controls in place intended to ensure that its fair valuations are appropriate. An independent model review group reviews the Firm's valuation models and approves them for use for specific products. All valuation models within the Firm are subject to this review process. A price verification group, independent from the risk taking function, ensures observable market prices and market-based parameters are used for valuation wherever possible. For those products with material parameter risk for which observable market levels do not exist, an independent review of the assumptions made on pricing is performed. Additional review includes deconstruction of the model valuations for certain structured instruments into their components, and benchmarking valuations, where possible, to similar products; validating valuation estimates through actual cash settlement; and detailed review and explanation of recorded gains and losses, which are analyzed daily and over time. Valuation adjustments, which are also determined by the independent price verification group, are based upon established policies and are applied consistently over time. Any changes to the valuation methodology are reviewed by management to confirm the changes are justified. As markets and products develop and the pricing for certain products becomes more or less transparent, the Firm continues to refine its valuation methodologies."

Valuation Adjustments

A number of firms gave qualitative descriptions of the valuation adjustments that are often made to ensure the accuracy of the fair value measurements of financial instruments. Given the illiquidity that pervaded some asset classes during the past year and the debate about how illiquidity was affecting fair values, JPMorgan's disclosure (below) about valuation adjustments, including liquidity valuation adjustments, was informative.

JPMorgan Chase & Co.: Note 4 — Fair Value Measurement (III)

"Liquidity valuation adjustments are necessary when the Firm may not be able to observe a recent market price for a financial instrument that trades in inactive (or less active) markets or to reflect the cost of exiting larger-than-normal market-size risk positions (liquidity adjustments are not taken for positions classified within Level 1 of the fair value hierarchy). The Firm tries to ascertain the amount of uncertainty in the initial valuation based upon the degree of liquidity of the market in which the financial instrument trades and makes liquidity adjustments to the carrying value of the financial instrument. The Firm measures the liquidity adjustment based upon the following factors: (1) the amount of time since the last relevant pricing point; (2) whether there was an actual trade or relevant external quote; and (3) the volatility of the principal risk component of the financial instrument. Costs to exit larger-than-normal market-size risk positions are determined based upon the size of the adverse market move that is likely to occur during the period required to bring a position down to a non-concentrated level."

Sensitivity Disclosure of Fair Value Estimates

Fair value estimates based on valuation techniques rely on significant input assumptions. Values can be very sensitive to some of the assumptions made. US GAAP does not require disclosure about the sensitivities of fair value assumptions, and this was hardly reported on at all by US GAAP companies. However, the Securities and Exchange

Commission (SEC) in a public letter to the chief financial officers of some public companies (see Appendix D on page 20) encouraged the disclosure of the sensitivities around fair value estimates (for material assets and liabilities) to significant inputs in the valuation models employed. Fitch would like to see companies provide meaningful quantitative information around the sensitivities of material assumptions made.

IFRS 7 requires disclosure of the effect of "reasonably possible alternative assumptions" used in valuation models for unobservable inputs. All IFRS filers reviewed provided this information in various formats, with some companies using a tabular format but most using a descriptive format. Fitch finds the tabular format provided by HSBC shown in the table below is a helpful way of presenting this information.

As discussed above, the fair value of financial instruments are, in certain circumstances, measured using valuation models that incorporate assumptions that are not supported by prices from observable current market transactions in the same instrument and are not based on observable market data. The table below shows the sensitivity of fair values to reasonably possible alternative assumptions.

HSBC Holdings PLC — Effect of Changes In Significant Non-Observable Assumptions to Reasonably Possible Alternatives

(US $ Mil.)

	Reflected in Profit/(Loss)		Reflected in Equity	
	Favorable Changes	Unfavorable Changes	Favorable Changes	Unfavorable Changes
At Dec. 31 2007				
Derivatives/Trading Assets/Trading Liabilities[a]	602	(415)	—	—
Financial Assets/Liabilities Designated at Fair Value	30	(30)	—	—
Financial Investments: Available-for-Sale	—	—	529	(591)
At Dec. 31 2006				
Derivatives/Trading Assets/Trading Liabilities	69	(72)	—	—
Financial Assets/Liabilities Designated at Fair Value	16	(16)	—	—
Financial Investments: Available-for-Sale	—	—	165	(165)

[a]Derivatives, trading assets and trading liabilities are presented as one category to reflect the manner in which these financial instruments are risk-managed.
Note: The increase in the effect of changes in significant non-observable inputs in relation to derivatives/trading assets/trading liabilities from Dec. 31, 2006, to Dec. 31, 2007, primarily reflects certain mortgage loans acquired for the purpose of securitization, and certain US mortgage-backed securities, that were valued using observable inputs at Dec. 31, 2006 that subsequently became non-observable in the second half of 2007 following the deterioration in market conditions. To a lesser degree, the increase also reflects increased uncertainty in determining the fair value of credit derivative transactions executed against certain monoline insurers, and a general increase in structured derivative business.
Source: HSBC Holdings PLC, Form 20-F for the fiscal year ended Dec. 31, 2007.

The "reasonably possible alternative assumptions" in IFRS 7 criteria lack specificity, and a variety of assumptions were combined by most banks reviewed to reflect net favorable and unfavorable changes. Although it is probably more informative to see disaggregation of sensitivity to the various key assumptions, there are overlaps and causal relationships between some of these which mean that totally disaggregated information may not be always ideal.

Under SFAS 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities," US GAAP reporters are required to disclose sensitivities about assumptions made in estimating fair values of retained interests in securitizations. The extract from Credit Suisse Group's financial statements (shown on the following page) illustrates this.

The fair values of retained interests are determined using fair value estimation techniques, such as the present value of estimated future cash flows that incorporate assumptions that market participants customarily use in these valuation techniques. The fair value of retained interests does not include any benefits from financial instruments that the group may utilize to hedge the risks inherent in these retained interests.

Credit Suisse Group — Retained Interests, Key Economic Assumptions and Sensitivity Analysis

(CHF Mil., Except Where Indicated)

In 2007	CMBS[a]	RMBS	CDO[b]	ABS
Fair Value of Retained Interests	2,641	1,471	148	109
of which Non-Investment Grade	194	110	57	45
Weighted-Average Life, in Years	4.3	5.4	5.3	15.3
Prepayment Speed Assumption (Rate Per Annum), in %[c]	—	0.5–32.0	—	6.0–26.2
Impact on Fair Value from 10% Adverse Change	—	(15.1)	—	(1.1)
Impact on Fair Value from 20% Adverse Change	—	(29.8)	—	(2.3)
Cash Flow Discount Rate (Rate Per Annum), in %[d]	0.0–17.8	8.0–28.3	11.7–14.0	12.8
Impact on Fair Value from 10% Adverse Change	(52.7)	(31.5)	(7.0)	(4.5)
Impact on Fair Value from 20% Adverse Change	(105.3)	(63.0)	(12.9)	(9.0)
Expected Credit Losses (Rate Per Annum), in %	2.6–8.5	2.0–2.6	7.7–8.1	8.7
Impact on Fair Value from 10% Adverse Change	(15.6)	(16.0)	(4.6)	(2.3)
Impact on Fair Value from 20% Adverse Change	(32.4)	(32.8)	(8.2)	(5.6)

[a]To deter prepayment, Commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances. [b]CDOs are generally structured to be protected from prepayment risk. [c]Prepayment speed assumption (PSA) is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the Constant Prepayment Rate (CPR) assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2% thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR. [d]The rate is based on the weighted-average yield on the retained interest.
Source: Credit Suisse Group, Form 20-F for the fiscal year ended Dec. 31, 2007.

The specificity in the example above is useful, although its rigid layout does not permit management to describe the interrelationships between the various components, so a net sensitivity number at the end might provide more insight. The detail here contrasts with the sparse numeric information provided on the sensitivity of fair value numbers by most of the companies Fitch has looked at, particularly those not reviewed specifically for this report. Some banks provide good information on interest rate sensitivity but give little information about other components of valuation calculations, leaving the user to fill in the blanks. For example, sensitivity disclosure that simply shows an arithmetic multiplication of data provided on the balance sheet does not add any information for the user, while showing the effect of reasonably possible alternative assumptions used in valuation models would do.

Movements in fair value of a liability due to a company's own credit risk improvement or deterioration are irrelevant to credit metrics, other than as an indication of future cash flows should the debt structure be replicated on maturity.

Disclosures Pertaining to the Fair Value of Liabilities

Both SFAS 159 ("The Fair Value Option for Financial Assets and Financial Liabilities") and IFRS 7 require companies to disclose the changes in the fair value of liabilities due to changes in firm's credit risk. This is a particularly helpful disclosure for Fitch's analysts, who generally will adjust fair value movements in liabilities to identify amounts due for repayment. Movements in the fair value of a liability due to a company's own credit risk improvement or deterioration are irrelevant to credit metrics, other than as an indication of future cash flows should the debt structure be replicated on maturity.

HSBC Holdings PLC — Net Income from Financial Instruments Designated at Fair Value

(US $ Mil.)

	2007	2006	2005
Net Income/(Expense) Arising from:			
— Financial Assets Held to Meet Liabilities Under Insurance and Investment Contracts	2,056	1,552	1,760
— Liabilities to Customers Under Investment Contracts	(940)	(1,008)	(1,126)
— HSBC's Long-Term Debt Issued and Related Derivatives	2,812	(35)	403
— Change in Own Credit Spread on Long-Term Debt	3,055	(388)	(70)
— Other Changes in Fair Value	(243)	353	473
— Other Instruments Designated at Fair Value and Related Derivatives	155	148	(3)
Net Income from Financial Instruments Designated at Fair Value	4,083	657	1,034

Source: HSBC Holdings PLC, Form 20-F for the fiscal year ended Dec. 31, 2007.

"HSBC adopted the "Amendment to IAS 39 Financial Instruments: Recognition and Measurement: the Fair Value Option," in effect as of Jan. 1, 2005. HSBC may designate financial instruments at fair value under the option in order to remove or reduce accounting mismatches in measurement or recognition; or where financial instruments are managed, and their performance is evaluated, together on a fair value basis. All income and expense on financial instruments for which the fair value option was taken were included in this line except for issued debt securities and related derivatives, where the interest components were shown in interest expense.

HSBC used the fair value designation principally in the following instances:

- for certain fixed-rate long-term debt issues whose interest rate characteristic has been changed to floating through interest rate swaps, as part of a documented interest rate management strategy. Approximately US$66 billion (2006: US$56 billion) of the Group's debt issues have been accounted for using the fair value option. The movement in fair value of these debt issues includes the effect of own credit spread changes and any ineffectiveness in the economic relationship between the related swaps and own debt;

- as credit spreads narrow, accounting losses are booked, and the reverse is true in the event of spreads widening. Ineffectiveness arises from the different credit characteristics of the swap and own debt coupled with the sensitivity of the floating leg of the swap to changes in short-term interest rates. In addition, the economic relationship between the swap and own debt can be affected by relative movements in market factors, such as bond and swap rates, and the relative bond and swap rates at inception. The size and direction of the accounting consequences of changes in own credit spread and ineffectiveness can be volatile from period to period, but do not alter the cash flows envisaged as part of the documented interest rate management strategy;

Year ended 31 December 2007 compared with year ended 31 December 2006

Credit spreads widened significantly in the second half of 2007, leading to a substantial increase in net income from financial instruments designated at fair value compared with 2006. This was primarily driven by a widening in credit spreads on certain fixed-rate long-term debt, issued by HSBC Holdings (HSBC) and its subsidiaries. These cumulative gains will fully reverse over the life of the debt. The cumulative adjustment to reserves where the policy is applied for the first time and, subsequently, the income statement in terms of change in own credit spread since the fair value option was available, is US$1.6 billion after taking account of the US$3.1 billion credit in 2007."

Most of the firms reviewed disclosed the effect of changes in their credit spreads on the fair values of their own debt, with varying prominence. Some firms footnoted the gains from liabilities as part of the fair value hierarchy, while others disclosed a general description of the amount and the circumstances that led to the gains. The table above shows HSBC's disclosure of the effect of fair value measurement of its own debt, while the grey box on page 14 shows Citigroup Inc.'s disclosure.

Citigroup Inc. —

"The fair value of liabilities for which the fair-value option was elected was impacted by the widening of the company's credit spread. The estimated change in the fair value of these liabilities due to such changes in the company's own credit risk (or instrument-specific credit risk) was a gain of $453 million for the 12 months ended Dec. 31, 2007. Changes in fair value resulting from changes in instrument-specific credit risk were estimated by incorporating the company's current observable credit spreads into the relevant valuation technique used to value each liability as described above."

Source: Citigroup Inc., Form 10K filing for the fiscal year ended Dec. 31, 2007

Fitch notes that while some firms—e.g., HSBC—disclosed the gains/losses from changes in credit spreads on the firm's own debt and "related" derivatives, most firms only disclosed the effect on financial instruments for which the fair value option was specifically taken, excluding derivatives. Although this is not a required disclosure under US GAAP and IFRS, Fitch finds the disclosure made by HSBC more helpful, and prefers companies to disclose separately the gains/losses from changes in credit spreads in the valuation of derivatives when material. The disclosure of the effect of the changes in the company's own credit spread enhances transparency of all fair value gains and losses flowing through the income statement.

Asian Financial Institutions Fair Value Reporting

Fitch reviewed the fair value disclosures of three large Chinese financial institutions: Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB) and Bank of China (BOC), as reported in their 2007 IFRS financial statements.

Fitch noted that the three large Chinese banks reviewed only measured an average of 3%—compared to an average of 41% for US and European banks—of their financial instruments at fair value.

Fitch noted that the three large Chinese banks reviewed measured only an average of 3% of their financial instruments at fair value, compared to an average of 41% for US and European banks. This may explain the limited amount of disclosure these banks gave about fair value measurement. Disclosures of valuation methodologies, procedures, controls and adjustments were not specific or insightful. None of the three banks disclosed information about the fair value hierarchy or sensitivities around fair value measurements. Two of the three banks did disclose that there was zero impact from changes in own credit risk on the income statement, while the third did not disclose the impact.

Fitch did not include the large Japanese banks—Mizuho Financial Group, Sumitomo Mitsui Financial Group and MUFG (Former Tokyo Mitsubishi UFJ)—in its review, as annual reports for the fiscal year ended March 31, 2008, are not yet available.

Appendix A

Companies Reviewed

Financial Institution	Sympol in Report	Currency	Total Balance Sheet (Mil.)	Assets @ FV on a Recurring Basis (Mil.)	% of Total Balance Sheet	Liabilities @ FV on a Recurring Basis (Mil.)	% of Total Balance Sheet
JPMorgan Chase	JPM	US$	1,562,147	635,468	41	254,286	16
Citigroup Inc.	C	US$	2,187,631	851,915	39	479,901	22
Bank of America	BAC	US$	1,715,746	461,365	27	102,425	6
Goldman Sachs	GS	US$	838,201	717,557	86	477,953	57
Lehman Brothers	LEH	US$	691,063	291,212	42	149,617	22
Merrill Lynch & Co.	MER	US$	1,020,050	451,349	44	339,591	33
Morgan Stanley	MS	US$	1,045,409	457,620	44	282,734	27
Credit Suisse Group	CS	CHF	1,360,680	865,316	64	526,374	39
Societe Generale Group	SG	€	1,071,762	489,959	46	340,751	32
Royal Bank of Scotland	RBS	£	1,900,519	861,500	45	591,000	31
BNP Paribas Group	BNP	€	1,440,343	931,706	65	796,125	55
Deutsche Bank	DB	€	2,020,349	1,518,619	75	969,937	48
UBS	UBS	CHF	2,272,579	1,219,300	54	800,200	35
HSBC Holdings PLC	HSBC	US$	2,354,266	948,618	40	587,912	25
Barclays PLC	BARC	£	1,227,361	632,331	52	480,818	39
Credit Agricole S.A.	ACA	€	1,414,223	628,656	44	332,571	24
Bank of China	BOC	RMB	5,991,217	170,504	3	102,656	2
Industrial and Commercial Bank of China	ICBC	RMB	8,683,712	585,225	7	22,717	0
China Construction Bank	CCB	RMB	6,598,177	474,071	7	7,952	0
US FI (Avg. of %)	—	—	—	—	46	—	26
European FI (Avg. of %)	—	—	—	—	54	—	36
Chinese FI (Avg. of %)	—	—	—	—	6	—	1
Total FI	—	—	—	—	43	—	27
US FI (Mean)	—	—	—	552,355	—	298,072	—
European FI (Mean)	—	—	—	899,556	—	602,854	—
Chinese FI (Mean)	—	—	—	409,933	—	44,442	—
Total FI	—	—	—	694,331	—	694,331	—

Source: Company FYE 2007 10-Ks and Annual Reports.

Appendix B — Excerpt from SFAS 157, "Disclosure Requirements on Fair Value Measurements"

32. For assets and liabilities that are measured at fair value on a recurring basis in periods subsequent to initial recognition (for example, trading securities), the reporting entity shall disclose information that enables users of its financial statements to assess the inputs used to develop those measurements and for recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on earnings (or changes in net assets) for the period. To meet that objective, the reporting entity shall disclose the following information for each interim and annual period (except as otherwise specified) separately for each major category of assets and liabilities:

a. The fair value measurements at the reporting date

b. The level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3)

c. For fair value measurements using significant unobservable inputs (Level 3), a reconciliation of the beginning and ending balances, separately presenting changes during the period attributable to the following:

   1) Total gains or losses for the period (realized and unrealized), segregating those gains or losses included in earnings (or changes in net assets), and a description of where those gains or losses included in earnings (or changes in net assets) are reported in the statement of income (or activities)

   2) Purchases, sales, issuances, and settlements (net)

   3) Transfers in and/or out of Level 3 (for example, transfers due to changes in the observability of significant inputs)

d. The amount of the total gains or losses for the period in subparagraph (c)(1) above included in earnings (or changes in net assets) that are attributable to the change in unrealized gains or losses relating to those assets and liabilities still held at the reporting date and a description of where those unrealized gains or losses are reported in the statement of income (or activities)

e. In annual periods only, the valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques, if any, during the period.

33. For assets and liabilities that are measured at fair value on a nonrecurring basis in periods subsequent to initial recognition (for example, impaired assets), the reporting entity shall disclose information that enables users of its financial statements to assess the inputs used to develop those measurements. To meet that objective, the reporting entity shall disclose the following information for each interim and annual period (except as otherwise specified) separately for each major category of assets and liabilities:

a. The fair value measurements recorded during the period and the reasons for the measurements

b. The level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other

observable inputs (Level 2), and significant unobservable inputs (Level 3)

c. For fair value measurements using significant unobservable inputs (Level 3), a description of the inputs and the information used to develop the inputs

d. In annual periods only, the valuation technique(s) used to measure fair value and a discussion of changes, if any, in the valuation technique(s) used to measure similar assets and/or liabilities in prior periods.

Appendix C — Excerpt from SFAS 159, "Disclosure Requirements on the Fair Value Option"

Required Disclosures as of Each Date for Which an Interim or Annual Statement of Financial Position is Presented

18. As of each date for which a statement of financial position is presented, entities shall disclose the following:

a. Management's reasons for electing a fair value option for each eligible item or group of similar eligible items

b. If the fair value option is elected for some but not all eligible items within a group of similar eligible items:

   1) A description of those similar items and the reasons for partial election

   2) Information to enable users to understand how the group of similar items relates to individual line items on the statement of financial position

c. For each line item in the statement of financial position that includes an item or items for which the fair value option has been elected:

   1) Information to enable users to understand how each line item in the statement of financial position relates to major categories of assets and liabilities presented in accordance with Statement 157's fair value disclosure requirements3

   2) The aggregate carrying amount of items included in each line item in the statement of financial position that are not eligible for the fair value option, if any

d. The difference between the aggregate fair value and the aggregate unpaid principal balance of:

   1) Loans and long-term receivables (other than securities subject to Statement 115) that have contractual principal amounts and for which the fair value option has been elected

   2) Long-term debt instruments that have contractual principal amounts and for which the fair value option has been elected

e. For loans held as assets for which the fair value option has been elected:

   1) The aggregate fair value of loans that are 90 days or more past due

   2) If the entity's policy is to recognize interest income separately from other changes in fair value, the aggregate fair value of loans in nonaccrual status

   3) The difference between the aggregate fair value and the aggregate unpaid principal balance for loans that are 90 days or more past due, in nonaccrual status, or both

f. For investments that would have been accounted for under the equity method if the entity had not chosen to apply the fair value option,4 the information required by paragraph 20 of APB Opinion No. 18, The Equity Method of Accounting for Investments in Common Stock (excluding the disclosures in paragraphs 20(a)(3), 20(b), and 20(e) of that Opinion).

Required Disclosures for Each Period for Which an Interim or Annual Income Statement Is Presented

19. For each period for which an income statement is presented, entities shall disclose the following about items for which the fair value option has been elected:

a. For each line item in the statement of financial position, the amounts of gains and losses from fair value changes included in earnings during the period and in which line in the income statement those gains and losses are reported (This Statement does not preclude an entity from meeting this requirement by disclosing amounts of gains and losses that include amounts of gains and losses for other items measured at fair value, such as items required to be measured at fair value.)

b. A description of how interest and dividends are measured and where they are reported in the income statement (This Statement does not address the methods used for recognizing and measuring the amount of dividend income, interest income, and interest expense for items for which the fair value option has been elected.)

c. For loans and other receivables held as assets:

   1) The estimated amount of gains or losses included in earnings during the period attributable to changes in instrument-specific credit risk

   2) How the gains or losses attributable to changes in instrument-specific credit risk were determined

d. For liabilities with fair values that have been significantly affected during the reporting period by changes in the instrument-specific credit risk:

   1) The estimated amount of gains and losses from fair value changes included in earnings that are attributable to changes in the instrument specific credit risk

   2) Qualitative information about the reasons for those changes

   3) How the gains and losses attributable to changes in instrument-specific credit risk were determined.

20. The disclosure requirements in paragraphs 18 and 19 do not eliminate disclosure requirements included in other GAAP pronouncements, including other disclosure requirements relating to fair value measurement.

Other Required Disclosures

21. In annual periods only, an entity shall disclose the methods and significant assumptions used to estimate the fair value of items for which the fair value option has been elected.

22. If an entity elects the fair value option at the time one of the events in paragraphs 9(d) and 9(e) occurs, the entity shall disclose the following in financial statements for the period of the election:

a. Qualitative information about the nature of the event

b. Quantitative information by line item in the statement of financial position indicating which line items in the income statement include the effect on earnings of initially electing the fair value option for an item.

Appendix D — Excerpt from SEC's Sample Letter Sent to Public Companies on MD&A Disclosure Regarding the Application of SFAS 157 (Fair Value Measurements)[c]

In this letter, we highlight some disclosure matters relating to SFAS 157 that you may wish to consider as you prepare your Form 10-Q. Given the judgment you must apply in using unobservable inputs to determine the fair value of your assets and liabilities, your use of them can have a material effect on your results of operations, liquidity, and capital resources, where for example, the fair value you determined falls within a broad range.

If you conclude that your use of unobservable inputs is material, please disclose in your MD&A, in a manner most useful to your particular facts and circumstances, how you determined them and how the resulting fair value of your assets and liabilities and possible changes to those values, impacted or could impact your results of operations, liquidity, and capital resources. Depending on your circumstances, the following disclosure and discussion points may be relevant as you prepare your MD&A:

- The amount of assets and liabilities you measured using significant unobservable inputs (Level 3 assets and liabilities) as a percentage of the total assets and liabilities you measured at fair value.
- The amount and reason for any material increase or decrease in Level 3 assets and liabilities resulting from your transfer of assets and liabilities from, or into, Level 1 or Level 2.
- If you transferred a material amount of assets or liabilities into Level 3 during the period, a discussion of:
  - the significant inputs that you no longer consider to be observable; and
  - any material gain or loss you recognized on those assets or liabilities during the period, and, to the extent you exclude that amount from the realized/unrealized gains (losses) line item in the Level 3 reconciliation, the amount you excluded.
- With regard to Level 3 assets or liabilities, a discussion of, to the extent material:
  - whether realized and unrealized gains (losses) affected your results of operations, liquidity or capital resources during the period, and if so, how;
  - the reason for any material decline or increase in the fair values; and
  - whether you believe the fair values diverge materially from the amounts you currently anticipate realizing on settlement or maturity. If so, disclose why and provide the basis for your views.
- The nature and type of assets underlying any asset-backed securities, for example, the types of loans (sub-prime, Alt-A, or home equity lines of credit) and the years of issuance as well as information about the credit ratings of the securities, including changes or potential changes to those ratings.

[c] Http://www.sec.gov/divisions/corpfin/guidance/fairvalueltr0308.htm.

Regardless of how you have classified your assets and liabilities within the SFAS 157 hierarchy, if you have not already done so in your Form 10-K, consider providing the following additional information in your MD&A:

- A general description of the valuation techniques or models you used with regard to your material assets or liabilities. Consider describing any material changes you made during the reporting period to those techniques or models, why you made them, and, to the extent possible, the quantitative effect of those changes.
- To the extent material, a discussion of the extent to which, and how, you used or considered relevant market indices, for example ABX or CMBX, in applying the techniques or models you used to value your material assets or liabilities. Consider describing any material adjustments you made during the reporting period to the fair value of your assets or liabilities based on market indices and your reasons for making those adjustments.
- A discussion of how you validate the techniques or models you use. For example, you may wish to discuss whether and how often you calibrate the technique or models to market, back-test, or otherwise validate it.
- A discussion of how sensitive the fair value estimates for your material assets or liabilities are to the significant inputs the technique or model uses. For example, consider providing a range of values around the fair value amount you arrived at to provide a sense of how the fair value estimate could potentially change as the significant inputs vary. To the extent you provide a range, discuss why you believe the range is appropriate, identifying the key drivers of variability, and discussing how you developed the inputs you used in determining the range. You may wish to refer to Section V of FR-72 "Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations" on Critical Accounting Estimates for guidance. FR-72 is available on our website at http://www.sec.gov/rules/interp/33-8350.htm.
- If material, a discussion of how increases and decreases in the aggregate fair value of your assets and liabilities may affect your liquidity and capital resources.

Appendix E — Excerpt from IFRS 7, "Disclosure Requirements on Fair Value "

Financial Assets or Financial Liabilities at Fair Value Through Profit or Loss

9. If the entity has designated a loan or receivable (or group of loans or receivables) as at fair value through profit or loss, it shall disclose:

a. the maximum exposure to credit risk (see paragraph 36(a)) of the loan or receivable (or group of loans or receivables) at the end of the reporting period.

b. the amount by which any related credit derivatives or similar instruments mitigate that maximum exposure to credit risk.

c. the amount of change, during the period and cumulatively, in the fair value of the loan or receivable (or group of loans or receivables) that is attributable to changes in the credit risk of the financial asset determined either:

1) as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk ; or

2) using an alternative method the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of the asset.

Changes in market conditions that give rise to market risk include changes in an observed (benchmark) interest rate, commodity price, foreign exchange rate or index of prices or rates.

d. the amount of the change in the fair value of any related credit derivatives or similar instruments that has occurred during the period and cumulatively since the loan or receivable was designated.

10. If the entity has designated a financial liability as at fair value through profit or loss in accordance with paragraph 9 of IAS 39, it shall disclose:

a. the amount of change, during the period and cumulatively, in the fair value of the financial liability that is attributable to changes in the credit risk of that liability determined either:

1) as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk (see Appendix B, paragraph B4); or

2) using an alternative method the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of the liability.

Changes in market conditions that give rise to market risk include changes in a benchmark interest rate, the price of another entity's financial instrument, a commodity price, a foreign exchange rate or an index of prices or rates. For contracts that include a unit-linking feature, changes in market conditions include changes in the performance of the related internal or external investment fund.

b. the difference between the financial liability's carrying amount and the amount the entity would be contractually required to pay at maturity to the holder of the obligation.

11. The entity shall disclose:

a. the methods used to comply with the requirements in paragraphs 9(c) and 10(a).

b. if the entity believes that the disclosure it has given to comply with the requirements in paragraph 9(c) or 10(a) does not faithfully represent the change in the fair value of the financial asset or financial liability attributable to changes in its credit risk, the reasons for reaching this conclusion and the factors it believes are relevant.

Disclosures — Fair Value

25. Except as set out in paragraph 29, for each class of financial assets and financial liabilities (see paragraph 6), an entity shall disclose the fair value of that class of assets and liabilities in a way that permits it to be compared with its carrying amount.

26. In disclosing fair values, an entity shall group financial assets and financial liabilities into classes, but shall offset them only to the extent that their carrying amounts are offset in the statement of financial position.

27. An entity shall disclose:

a. the methods and, when a valuation technique is used, the assumptions applied in determining fair values of each class of financial assets or financial liabilities. For example, if applicable, an entity discloses information about the assumptions relating to prepayment rates, rates of estimated credit losses, and interest rates or discount rates.

b. whether fair values are determined, in whole or in part, directly by reference to published price quotations in an active market or are estimated using a valuation technique (see paragraphs AG71-AG79 of IAS 39).

c. whether the fair values recognised or disclosed in the financial statements are determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument (ie without modification or repackaging) and not based on available observable market data. For fair values that are recognised in the financial statements, if changing one or more of those assumptions to reasonably possible alternative assumptions would change fair value significantly, the entity shall state this fact and disclose the effect of those changes. For this purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in other comprehensive income, total equity.

d. if (c) applies, the total amount of the change in fair value estimated using such a valuation technique that was recognised in profit or loss during the period.

28. If the market for a financial instrument is not active, an entity establishes its fair value using a valuation technique (see paragraphs AG74-AG79 of IAS 39). Nevertheless, the best evidence of fair value at initial recognition is the transaction price (ie the fair value of the consideration given or received), unless conditions described in paragraph AG76 of IAS 39 are met. It follows that there could be a difference between the fair value at initial recognition and the amount that would be determined at that date using the valuation technique. If such a difference exists, an entity shall disclose, by class of financial instrument:

a. its accounting policy for recognising that difference in profit or loss to reflect a

change in factors (including time) that market participants would consider in setting a price (see paragraph AG76A of IAS 39); and

b. the aggregate difference yet to be recognised in profit or loss at the beginning and end of the period and a reconciliation of changes in the balance of this difference.

29. Disclosures of fair value are not required:

a. when the carrying amount is a reasonable approximation of fair value, for example, for financial instruments such as short-term trade receivables and payables;

b. (b) for an investment in equity instruments that do not have a quoted market price in an active market, or derivatives linked to such equity instruments, that is measured at cost in accordance with IAS 39 because its fair value cannot be measured reliably; or

c. (c) for a contract containing a discretionary participation feature (as described in IFRS 4) if the fair value of that feature cannot be measured reliably.

30. In the cases described in paragraph 29(b) and (c), an entity shall disclose information to help users of the financial statements make their own judgements about the extent of possible differences between the carrying amount of those financial assets or financial liabilities and their fair value, including:

a. the fact that fair value information has not been disclosed for these instruments because their fair value cannot be measured reliably;

b. a description of the financial instruments, their carrying amount, and an explanation of why fair value cannot be measured reliably;

c. information about the market for the instruments;

d. information about whether and how the entity intends to dispose of the financial instruments; and

e. if financial instruments whose fair value previously could not be reliably measured are derecognised, that fact, their carrying amount at the time of derecognition, and the amount of gain or loss recognised.

Accounting Research
Special Report

Fair Value Accounting: Is It Helpful In Illiquid Markets?

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Related Research

- *Comment letters to standard setters and regulators as well as reports published on fair value and other major accounting issues can be found on the Accounting and Corporate Governance page under Market Focus at www.fitchratings.com*

Summary

Volatile financial market conditions have caused many reporting financial institutions to call for a relaxation of fair value accounting, allowing issuers the option of changing from fair value to historical cost accounting. In Fitch Ratings' view, the fundamental and intentional distortions that such unfettered flexibility would permit would not engender greater investor confidence in financial reporting nor would it foster sound capital markets or sound financial institutions.

Fair values are helpful to analysts and investors when they represent realistic and reliable indications of the net present values of future cash flows. The most salient issue in current market conditions is not whether fair value per se should be used to report numbers, but how that fair value should be measured. Once reported, analysts and investors then need improvements to presentation and disclosure to understand the assumptions and limitations of reported numbers so that they can make adjustments appropriate to their purposes. If the market genuinely wishes to see more meaningful financial statements in the medium term, this is the way to restore trust in the numbers among the investor community. There are barriers to overcome first. These issues are dealt with in this report, in summary:

- **Are fair values fair?** If values are being taken unadjusted from markets that are not striking a fair balance between buyers and sellers, it is hard to argue that those values are "fair". However, if alternative valuations are to be taken from those based on market prices, the rationale for these, along with assumptions and sensitivities, need to be given as well.
- **Judgement is needed.** Good financial reporting requires genuine exercise of judgement by the reporting companies and their auditors in interpreting the principles behind accounting standards, along with a willingness to report sufficient financial data that is above and beyond the minimum rules spelt out in the standards. This enables analysts and investors to understand the financial position and performance of a company in the reporting period and to trust the numbers.
- **What is stopping them?** Judgement can easily be impaired by a regulatory straitjacket or threat of litigation hanging over every statement made or every number reported that cannot be traced back to a documented rule.
- **Better disclosure is the way forward.** Much can be done by more extensive disclosure around the values reported – including indications of market prices versus expected cash flows, amounts companies expect to lose in real cash on assets written down to market values and how such assets will be funded while they are held for longer than originally anticipated.

When market liquidity has dried up, resulting in market prices that tell little about future cash flows of an entity that can hold onto an asset, clinging onto a strict interpretation of rules rather than exercising judgement can make a nonsense of financial reporting. Fitch would not support any loosening of accounting that enabled companies to move assets from one place in the balance sheet to another, because this would leave accounting wide open to profit smoothing. However, in terms of measuring the fair value of an asset in an illiquid market, a company's own discounted cash flow measurement may well provide a better indication of its "fair" value and provide analysts and investors with better information about future cash flows than the latest market transaction price.

Measurement of Fair Value: Are Market Values Fair?

Analysts at Fitch spend their time assessing the likelihood that entities will be able to meet their obligations as they fall due. Analysts and investors rely to a large extent on the information provided in the financial statements to estimate future cash flows. Fair value should represent a reliable net present value of future cash flows by using best estimates. Conceptually this is how a market with willing buyers and sellers would price assets, and these are the values internal models are trying to replicate – or claim to be replicating. It follows from this that internal models produce fair values that should be helpful for analysts and investors. The problem is that the models are opaque and analysts and investors do not trust the input or the output without good disclosure around it. "Observable" inputs based on market values are seen as the most reliable – at least in normal market conditions. However, in illiquid market conditions, the only prices available as benchmarks to model inputs may be a distorting rather than a helpful factor in the calculation of a model-sourced fair value.

- Market values may give a reliable value for a current exchange, but if there is no intention to exchange currently, these values may tell investors very little about future cash flows.

Market values give a reliable value for a current exchange and are the most meaningful way of measuring an asset that is likely to be sold in the near term. Holding assets in the trading book is a clear indication of intent to sell in the short term, in which case market values should be taken. If there is no intention to exchange in the coming year – and no need to because solid funding is in place and a company has sufficient liquidity to carry it through the period – the latest market prices may tell investors very little about future cash flows. The concept that market values are a fair indicator of the discounted cash flows expected by the market works well in a highly liquid market with numerous buyers and sellers, but they may not be a good indicator if the parties that will exchange real cash at a later date are not involved in setting the current pricing. This happens when holders of securities withdraw from a market until conditions improve. Price decreases for debt securities in illiquid markets may be exacerbated by instruments such as credit derivatives, which can be sold short by market participants such as hedge funds that have never owned nor have any intention of owning the underlying asset. For the trade to be done, there have to be buyers willing to take on the risk at that price, but in illiquid markets one or two trades can set the market price.

- Fair values can be helpful to analysts and investors if they reflect the current value of cash flows likely to be received.

Fair values can be helpful to analysts and investors if they reflect the current value of cash flows likely to be received. The ultra-conservative values based on market prices for some illiquid debt securities in Q407 and Q108 are of little help – as indeed are aggressive values based on equity prices in a bull run, unless there is a realistic expectation that the assets will be sold at these values (eg, they are part of a trading book). Basic supply and demand dynamics indicate the limitations of the ABX index when everyone is exiting risk and even shorting it: spread for credit protection widens – inflating credit risk premiums and lowering bond values. Some of the swing comes from a correction of pricing credit risk too low in the benign markets of recent years, when more and more players invested further down the credit curve to achieve better levels of investment return. However, the liquidity drain has undoubtedly caused the pendulum to swing in an equally demand-driven fashion to the opposite extreme.

Why Does Mark-to-Market Affect Profit?

US Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) provide various options on how to report investments in debt securities. These can be booked in one of three portfolios:

- trading book – fair value through the income statement;
- available-for-sale (AFS) – fair value direct to equity, with cash gains/losses and impairment through the income statement;
- held-to-maturity (HTM) – amortised historical cost less impairment.

The market picks up quickly on fair value write-downs in the trading book, because these hit the income statement straightaway. However, many financial institutions are also sitting on some hefty write-downs in their AFS portfolios, which will only hit the income statement once the assets are sold or deemed to be "other than temporarily" impaired. Companies are not, therefore, forced to use fair values and are certainly not forced to take mark-to-market changes through the income statement. However, the decision on how to account has to be made at the time the asset is first booked.

- Some financial institutions may have chosen to book investments in illiquid securities in their trading books because they carry less onerous regulatory capital requirements.

One issue little discussed is that some financial institutions may have chosen to book investments in illiquid securities in their trading books whether or not they had any intention of trading them in the short term, simply because of less onerous regulatory capital requirements. Now that write-downs have had a highly visible negative impact on their income statements, enthusiasm for trading book "warehousing" will likely abate. Also, the HTM category is rarely used because of strict "tainting" rules if securities in this portfolio are sold rather than held to maturity. Most derivatives, including credit derivatives, have to be accounted for at fair value through the income statement. Another point to note is that fair value gains and losses do not hit net income in full but net of deferred tax, reducing the impact on this key market metric.

Interpreting and Implementing Fair Value Measurement

Fair values provide important information and should not be easily manipulated by reporting entities. It is just as important to constrain irrational pessimism as it is to constrain irrational exuberance. Potential future disputes over the way accounting requirements are interpreted create significant litigation risk for many parties, which Fitch fears may have an increasingly distortive effect on reported accounts. Companies are understandably concerned lest they report based on a valuation method that may not be accepted as good practice by the US Securities and Exchange Commission (SEC), which has a tendency to write interpretative rules over and above accounting standards. Equally, when reviewing accounts, auditors face similar pressures that can hamper the ultimate aim of communicating financial statements that "faithfully represent" the business at the reporting date (or are "true and fair"). The audit firms also face direct review by the US Public Company Accounting Oversight Board (PCAOB).

Examples exist of the influence these pressures are having at a systematic level. A white paper published by the US Center for Audit Quality (CAQ) in October 2007 concluded that significantly lower transaction volumes in a market does not necessarily mean that there are forced or distressed sales, and that it would generally not be appropriate to disregard observable prices in an illiquid market. The CAQ's governing board includes the large multinational audit firms. A similar paper, with similar conclusions about auditing IFRS fair value reporting, was published by the Global Public Policy Committee, which represents the six largest international accounting networks. While containing valid insights, there were clear examples in Q407 and Q108 of market pricing that reflected severe market distortions brought about by technical factors that would not truly impair future cash flows of, for example, the HTM holder of an instrument. Nevertheless, influenced by the message sent by the auditing community through these papers, Fitch understands that some companies have used these prices directly rather than look to observable prices for potential guidance on valuation assumptions. With the alternative being a threat of regulatory action or litigation for a company and its auditor that exercised judgement and ignored current market pricing, a number of financial institutions reported large losses on fair valued debt securities held backed by sub-prime assets. These are likely to reverse to some extent at least when liquidity returns to the market, because the institutions are unlikely to sell the securities into illiquid markets, and prices will rise when liquidity returns. They will only be able to hold onto these securities and ride out the storm if they have

- Financial institutions will only be able to hold onto securities and ride out the storm if they have funding and liquidity available - and that comes at a real cash cost

funding and liquidity available. Funding and liquidity resources come at a real cash cost which should not be under-estimated. However, even with cash losses on the investment added on top, these may be substantially lower than the fair value-driven alternatives.

Although there are more than enough rules in current accounting, fair value measurement may gain more credibility with analysts and investors if market prices not directly related to the assets in question are only required to be used as valuation inputs into models when there is a minimum volume of transactions and market participants (eg, a percentage of the average in the past three years). While Fitch does not think that market prices from illiquid markets should be required as inputs if they do not relate directly to the assets being valued, the agency also does not think that they should be ignored. A company that is not using the best observable data available should explain why it is not using this data, demonstrate why the alternative measurement is more appropriate and provide an indication of how the value would have differed if the market prices were used as inputs in the notes to the accounts.

Improving Disclosure and Presentation Requirements

It is unfortunate and somewhat ironic that the focus has shifted to some of the shortfalls of accounting just at the time when accounting standards have started to require companies to report information that should be helpful to analysts and those investors willing to look at more than one or two metrics before making a decision. Fundamental analytical tools tend to be considered more when markets have turned down, while investors can lose sight of the risks when prices are spiralling upwards. Understanding what the accounting is saying is part of fundamental analysis, and for credit analysts should provide a good basis for working out where the downside outcomes might be. The best information on this is usually found in the notes to the accounts or supplemental disclosures rather than in the bottom line of the income statement ("net income") or balance sheet ("total assets"), although market convention still favours using these familiar metrics.

The two new standards currently being applied by companies around the globe for the first time are Statement of Financial Accounting Standard (SFAS) 157 "Fair Value Measurement" for US GAAP reporters and IFRS 7 Financial Instruments: Disclosures for IFRS reporters. These are described in Fitch's "*Fair Value Accounting — An Overview of the Requirements*" special report, dated 28 January 2008 and available at www.fitchratings.com.

SFAS 157 does not introduce any new fair value reporting into US GAAP but provides a strict definition of fair value and mandates extensive disclosure around it. It requires disclosure of fair valued instruments under a three-level hierarchy: Level 1 contains actively traded items for which quoted market prices are available; Level 2 includes valuations with inputs that are observable directly or indirectly; while Level 3 instruments are rarely traded if at all and their valuation is dependent on models that are based on hypothetical assumptions of what a market participant would pay for a transaction in the current market.

IFRS 7 aims to improve disclosure on exposure to — and management of — risks by qualitative and quantitative disclosure. It states that "an entity shall disclose information that enables users of its financial statements to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date". Typically this means disclosure about credit, liquidity and market risks.

IFRS 7 is less prescriptive than SFAS 157, but if best practice were to prevail over resorting to the minimum amount of disclosure the auditors will allow, it could produce good, detailed disclosure as well. In fact, many (but not all) of the large European banks have reported SFAS 157-like disclosure in their 2007 financial

reports, which provides more helpful information than the minimum required and promotes better – although still far from perfect – cross-border comparison.

Another area where US GAAP reporting is more extensive than IFRS is in interim accounts. The US Securities and Exchange Commission requires quarterly reporting, while many European stock exchanges only require half-yearly interim accounts. IFRS requires a minimal level of reporting in interims but does not mandate IFRS 7 disclosures, while SFAS 157 disclosures are required in US quarterly reports.

Fitch is currently reviewing IFRS 7 and SFAS 157 disclosures and expects to publish its thoughts on these shortly. It is already clear that most fair value calculations fall into the Level 2 bucket of the fair value hierarchy. From an analyst's perspective, without further disclosure, this is not helpful. The extent to which a valuation is derived from observable data within the Level 2 category can vary enormously – ranging between exclusively derived from observable inputs from liquid markets and model derived with hardly any observable inputs at all. Fitch understands that some companies have sought to avoid reporting assets under Level 3 where they can because of the more onerous disclosure requirements for valuations in this category.

Market discipline in theory should mean that, all else being equal, investors punish companies that disclose only minimal required information and reward those that genuinely attempt to disclose sufficient information for investors to understand the limitations of the reported numbers. Unfortunately, however, this does not often happen, and certainly not to the extent that it should. The onus then falls on accounting standards to enhance minimum disclosure requirements. These would provide better tools for analysis when markets are soaring upwards as well as spiralling down.

Discussion Papers: Investors' Participation Required

Accounting is currently undergoing major change. If accounting standards are to stand the best chance of delivering what investors need from financial reporting to help them as best they can to make investment decisions, investors and analysts need to join the discussion with the IASB and FASB when important standards are being developed. A productive way to do this is by writing comment letters in response to discussion papers or exposure drafts. Fitch has written a number of these over the past few years, which can be found on the 'Accounting and Corporate Governance' page under 'Market Focus' at www.fitchratings.com.

- Analysts and investors want to see movements in cash, accruals, impairments and fair value adjustments for the main categories of the balance sheet and income statement

The IASB and FASB are scheduled to publish a discussion paper in the next few months on the presentation of financial statements. In order to understand how fair values relate to real cash flows and to feel comfortable about using them in analysis, analysts and investors ideally want to see movements in cash, accruals, impairments and fair value adjustments for the main categories of the balance sheet and income statement. This is what much of analysts' time is spent trying to construct from what in some cases can be the scarce pickings of the current financial statements. This is the information the joint IASB/FASB project on the presentation of financial statements project looks set to provide. Given the efforts made to provide users of accounts with much of the information they are currently missing, it is unfortunate that the market's focus on the project to date has been on protesting that a potential result might have been the elimination of a net income number.

Another important discussion paper in the fair value accounting debate is the one published by the IASB in March 2008 on "Reducing Complexity in Reporting Financial Instruments". Under the guise of "reducing complexity" or simplification, the IASB is actually proposing moving more accounting to fair value. In tandem with proposed better presentation, this should bring more complete information and more transparency to those using the financial statements, but only for those investors willing to look beyond the net income or earnings per share (EPS) metrics.

Special Report

Accounting for Insurance Contracts

Will Fair Value Fix It?

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Related Research

- *Comment Letter to the FASB on "Agenda Proposal: Accounting for Insurance Contracts by Insurers and Policyholders," Nov. 19, 2007.*
- *Comment Letter to the IASB on "Discussion Paper: Preliminary Views on Insurance Contracts," Nov. 15, 2007.*
- *Special Report, "EEV: Valuable but Needs to Bed Down," dated Feb. 27, 2007.*
- *Special Report, "EEV 2006 — On the Road to Value," Sept. 28, 2007.*
- *Special Report, "Mind the GAAP: Fitch's View on Insurance IFRS," May 5, 2004.*

Further accounting research is available on the Accounting and Corporate Governance Web site at www.fitchratings.com.

Overview

Accounting for insurance contracts is complex and has been criticized for failing to provide a clear view of either the performance or the financial position of insurers. Therefore, analysts have relied on alternative reporting—regulatory filings in the United States and embedded value disclosure in Europe and Asia—to supplement financial reporting. In addition, current accounting is inconsistent across the major insurance markets, including among those companies reporting under International Financial Reporting Standards (IFRS).

As part of its ongoing initiative to improve insurance accounting and to introduce a comprehensive accounting standard for insurance contracts, the International Accounting Standards Board (IASB) published a discussion paper (DP) in May 2007 setting out the main areas of debate as well as some tentative views of the board members. This initiative, known as Phase II, follows Phase I, which became effective at year-end 2005 for most insurers.

The DP proposed a current exit value (CEV) method for measuring insurance liabilities. CEV is defined in the DP as the amount that the insurer would expect to pay at the reporting date to transfer its remaining contractual rights and obligations immediately to another party. This is similar to the definition of "fair value" as CEV under Statement of Financial Accounting Standard (SFAS) 157 of US Generally Accepted Accounting Principles (GAAP). The IASB has not yet determined whether CEV is its preferred and only definition of fair value.

Generally, Fitch is supportive of the efforts being made by the IASB and the Financial Accounting Standards Board (FASB) to bring greater comparability and increased disclosure to the insurance industry. Given the diversity in accounting for various insurance liabilities globally, the proposed project is generating the needed debate and views on accounting for insurance contracts.

Recent events triggered by the credit crunch underscore the need to consider the consequences of moving insurance contracts to a full "fair value" model based on estimated prices that would be available in a market of willing buyers and sellers if such a market existed (hereafter referred to as "market prices"). Insurance liabilities are bespoke, illiquid and rarely traded.

There are inherent difficulties in using CEV as a basis for determining measurement of a liability where little or no market exists. In order for market prices to be reliable and up to date, a liquid market is usually required. Applying prices derived from liquid assets (or liabilities) directly to illiquid assets/liabilities may result in a misestimation of the value of these assets and liabilities.

In most cases insurers must settle their liabilities directly with policyholders. Fitch believes that the appropriate measurement attribute and real "fair value" of insurance contracts should reflect the expectation of cash outflows to settle the contract rather than cash outflows to transfer the contract to a hypothetical third party. To a large extent, the two approaches to valuation overlap. Both look for estimations of cash to be paid out and received under insurance contracts discounted to present value. The

differences between the two relate to whether service costs, the risk margin and credit risk components of the calculations are entity-specific or market-neutral.

History and Context

The International Accounting Standards Committee—the predecessor organization to the IASB—started work on developing comprehensive international accounting guidance on insurance in 1997. In 2002, the IASB decided on a two-phase approach to the project. Phase I was designed as a short-term fix to enhance disclosure with limited improvement in measurement in order to keep insurance organizations on the same IFRS adoption schedule as other industries. IFRS 4 "Insurance Contracts" was published in 2004 and concluded Phase I of the project. Implementation followed for most insurers reporting under IFRS for year-end 2005[a]. Phase II focuses on developing a comprehensive accounting standard for all insurance contracts.

The development of Phase II of the insurance accounting standards is taking place while the industry in Europe also considers how best to structure insurance regulations (the Solvency II project). There are close linkages between capital requirements, transparency and the way that insurance liabilities are accounted for, and these two projects are running in parallel with a similar projected implementation date[b].

In contrast to IASB's recent work on IFRS 4, US GAAP have evolved through the development of fragmented standards that focus on products: SFAS 60 for short-and long-duration contracts, SFAS 97 for universal life-type contracts, SFAS 113 for reinsurance contracts, and SFAS 120 for participating contracts.

The development of the insurance contracts standard is taking place in the context of a strong trend in accounting standards toward the implementation of fair value measurement for financial assets and liabilities. In addition to this trend, there is a notable preference for the use of principles rather than rules in IFRS and new US GAAP standards. Other accounting developments that may have a bearing on the insurance contracts standard include SFAS 157 "Fair Value Measurement" and the IASB's DP on this, the joint IASB/FASB conceptual framework and the proposed amendments to IAS 37 "Provisions, Contingent Liabilities and Contingent Assets."

There is consensus among our analysts that their work would benefit from a global standard for insurance contracts, applicable to all types of insurance anywhere in the world.

Although the insurance DP was published by the IASB, it also was circulated for comment by the FASB. The FASB's invitation to comment sought comments from constituents on whether to add the insurance project to its agenda. Recent deliberations by the FASB indicate a lack of consensus on this point. This is partially due to the time constraints that may be indirectly imposed by the expected convergence of US GAAP to IFRS as the US Securities and Exchange Commission (SEC) looks set to permit US issuers to report in IFRS in the future. One way or another, it is likely that Phase II of the IASB's project has swept up the future of US insurance accounting as well as insurance accounting throughout most of the rest of the world. Fitch does not expect the standard to be implemented before 2011.

The timing and course of completing Phase II may prove challenging for the IASB, particularly if it tries to carry the FASB and the US accounting community along. Fitch

[a] IFRS 4 was required for companies reporting under IFRS for annual periods starting from Jan. 1, 2005, although earlier adoption was encouraged.

[b] Solvency II is now expected to be implemented in 2012. An exposure draft on Phase II of the insurance contracts standard is scheduled for 2009, although the timing of final implementation has yet to be determined.

would not like to see the project slowed down because the IASB is waiting to achieve consensus with the US accounting community. Fitch's insurance analysts in the United States do not see the same urgency in reforming insurance accounting as their European colleagues, primarily because US analysts are used to the standards they have and make use of extensive regulatory reporting, which is publicly available. Nevertheless, there is consensus among our analysts that their work would benefit from a global standard for insurance contracts, applicable to all types of insurance anywhere in the world that achieved consistent reporting, with good, transparent disclosure on the main assumptions made. As an interim step, Fitch would like to see the IASB persevere with developing IFRS 4 as a sound financial standard. Probably the best way to persuade the US insurance community to change its accounting would be to demonstrate to users how well the alternative can work in practice.

Phase I

The objective of Phase I was to make changes that promoted greater consistency and could be achieved easily. Phase I was not seen as a solution in its own right but just a stepping-stone on the way to a more comprehensive solution in the form of Phase II.

The objective of Phase I was to make changes that promoted greater consistency and could be achieved easily. Phase I was not seen as a solution in its own right but just a stepping-stone on the way to a more comprehensive solution in the form of Phase II.

Principal features of Phase I include a standard definition of insurance contracts, limited improvement to the accounting, and more detailed quantitative and qualitative disclosure on risk exposures.

Given these very limited expectations for IFRS 4, the standard has largely achieved its intended results. However, there are certainly substantial limitations with the standard including the following.

- **Significant differences remain in accounting between jurisdictions**

  As a "quick fix" standard, IFRS 4 does not set out detailed accounting principles for how to address accounting contracts; instead, insurers are expected to default to local insurance accounting regulations. This means that an insurer applying IFRS in the UK will generally use different accounting standards for insurance contracts from those applied by a similar insurer in France or Germany.

- **Inconsistency in application of the standard**

  Even where similar standards are used for insurance accounting, there can be significant differences in application. In some cases this reflects differences in interpretation of the principles (e.g., the definition of what constitutes "significant" insurance risk in order to be classified as an insurance contract), while in other cases it reflects a lack of guidance provided by IFRS 4 (e.g., non-life claims *triangles* [c] *are sometimes presented on a cumulative basis, sometimes non-*cumulative, sometimes net, sometimes gross, etc.). Where these differences exist it is much more difficult for analysts to compare insurers.

  Fitch favors greater consistency in this area, perhaps by specifying one minimum reporting level (e.g., net, cumulative) which must be used by everyone and

c A non-life claims triangle is a table that shows an insurer's estimate of the cost of claims (claims provisions and claims paid) at the end of each year of development in respect of each underwriting year or accident year and how this estimate develops over time. The older the underwriting year, the longer the development, hence the inverted triangle shape of the table.

allowing those who want to present more detailed or additional information to do so.

- **The existence of an accounting mismatch between assets (which are reported at fair value) and liabilities (which are not)**

  This is one of the key deficiencies in the current reporting regime that is now being addressed by Phase II. By accounting for both assets and liabilities on a fair value basis, relative movements in these two are expected to more closely reflect economic reality and, therefore, give a clearer picture of the performance and financial position of the group. However, determining what the fair value of insurance liabilities should be will be more challenging than taking prices for an insurance company's assets from liquid markets.

- **Limited recognition of options and guarantees that are embedded in products**

  Unlike a fair value approach to liabilities, which would require options and guarantees to be valued, current accounting does not necessarily require this step to be taken. Such information can be very useful for insurance analysts in order to estimate an insurer's ultimate obligation.

- **Lack of transparency in the level of prudence and conservatism in estimates**

  Phase I of the accounting contracts standard prohibited increasing the level of conservatism in reserving further, but did not require that a "best estimate" of reserving was used. Therefore, differing levels of prudence associated with reserves are not transparent to the users of accounts. This can make it more difficult to assess the true creditworthiness of a company. Phase II attempts to deal with this issue by requiring a best estimate provision as well as disclosures of key sensitivities to assumptions.

Phase II

The fundamentals of Phase II of the insurance contracts DP are not substantially different from what was outlined in Fitch's prior report on this topic published in May 2004 ("Mind the GAAP: Fitch's View on Insurance IFRS"). However, that is not to say that significant progress has not been made in the intervening period. It is now clearer how the accounting model would be structured. In addition, progress has been made on certain technical issues, especially those affecting the life assurance business.

One change that is notable from the previous draft statement of principles is a switch from favoring an "entry value" accounting methodology (where no profit would be permitted on day one of an insurance contract) to an "exit value" approach (where a day one profit can potentially occur, depending on the way that exit value is defined and calculated). While Fitch is not opposed to recognizing profits on day one for an insurance contract, the process for measuring the exit values that give rise to these needs careful consideration. Insurance contracts are rarely traded and transferred in a secondary market; rather the liabilities are usually settled directly with the policyholder.

Fitch believes that Phase II of the insurance contracts standard represents a very good opportunity to improve disclosure.

Fitch believes that Phase II of the insurance contracts standard represents a very good opportunity to improve disclosure. For example, although the increased disclosure required by IFRS 4 has been helpful, greater comparability of many of these disclosures would be more helpful for the users of financial statements (e.g., relating to non-life claim development triangles). Additional information on the expected cash flows and the sensitivity to key assumptions will also be important for Phase II of the insurance contracts project. Especially useful would be disclosure of inflation assumptions and how these link to the interest rates that have been used to establish the expected cash flows.

Fundamental Concepts

At the heart of Phase II for insurance contracts is the measurement of insurance liabilities. The IASB's preliminary view is that the objective of insurance liability measurement should be to get to a CEV, defined as "The amount an insurer would expect to pay at the reporting date to transfer its remaining contractual rights and obligations immediately to another entity." This differs narrowly from SFAS 157's definition of exit value as "The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." The DP's definition could be interpreted as looking at exit value mainly from the perspective of the insurer, while the SFAS 157 definition assumes that there are buyers and sellers willing to transact.

The three building blocks proposed for calculating current exit value are:

- Estimate of future cash flows;
- Discount rate; and
- Risk and service margins.

The IASB's current proposal is that in order to derive a CEV, insurance liabilities should be measured using three basic building blocks.

I. Explicit, unbiased, market-consistent, probability-weighted and current estimates of contractual cash flows.

II. Current market discount rates that adjust the estimated future cash flows for the time value of money.

III. An explicit and unbiased estimate of the margin that market participants require for bearing risk (a risk margin) and for providing other services (e.g., service margin).

I. Explicit, unbiased, market-consistent, probability-weighted and current estimates of contractual cash flows.

The first step computes the expected cash flows arising from the insurance liabilities. These should be:

Explicit — The expected cash flows should be documented and explicit in all cases. This requirement significantly increases the informational requirements for insurers, but should lead to clearer estimates as well as making it easier to track actual versus expected cash flows over time.

Unbiased, Probability-Weighted — Estimates used should be the best available and not (for example) contain margins for prudence or company-specific factors. The cash flow estimates would be based on weighted average probabilities and therefore represent the mean of estimated potential outcomes.

Market-Consistent — The liabilities should be consistent with market prices. Although this is challenging given the lack of a liquid market for insurance liabilities, this implies that model inputs to determine valuation should be based as far as possible on observable market information. By using this common benchmark for all firms, this can increase comparability between companies. However, this may be partially at the expense of comparability over time as changes to market valuations affect results.

Current — Estimates should be based on currently available information and updated for new information as it arises. The alternative, and the one most commonly used to date, would be to "lock in" assumptions that are made at the start of the contract but to apply a liability adequacy test such that liabilities are not understated.

Good, transparent disclosures of the main assumptions behind the cash flow estimates would provide critical information that financial statement users can factor into their analyses. In addition, this would also lead companies to establishing and adopting market-consistent assumptions. Fitch believes that achieving greater consistency of assumptions and methodologies for measurement is something that will evolve if disclosure is good.

Taken together, these requirements provide a best estimate of insurance cash flows in each time period on an undiscounted basis. These cash flows are then adjusted for risk and discounted as described in the following building blocks.

II. Current market discount rates that adjust the estimated future cash flows for the time value of money.

The IASB proposes that the discount rate should be based on "market discount" rates. Fitch would encourage a more precise definition of what the IASB means by "market discount" rates, particularly whether these should be Treasury bill rates; other determined "risk-free" rates, such as the 'AA' corporate bond rate currently applied to pension liabilities under IAS 19; or the company's own borrowing rate, as for liabilities under IAS 39. Fitch notes that the emerging standard in the determination of capital requirements (Solvency II) is to use "swap curves" for determining the discount rates to use at each time horizon.

Fitch considers some form of risk-free rate to be the most appropriate if company bias is to be taken out of the calculation, and paragraph 70 of the DP implies that this is also the IASB's favored approach, although this is not very clear. Fitch does not consider the company's own creditworthiness to be appropriate in measuring the value of a portfolio of insurance risk. Where expected cash flows have been calculated as the probability-weighted average of a number of possible scenarios, additional clarity would also be helpful as to whether the appropriate discount rate used should be that applicable in each scenario considered or whether to apply a single discount rate to the best estimate of cash flows.

Fitch has observed that that there is some resistance, particularly in the US non-life insurer community, to discounting reserves for non-life insurance contracts, and indeed from a credit analyst and investor's perspective discounting could result in a lower reserve buffer. However, Fitch would expect this buffer to be at least partly replaced by an alternative form of buffer that more closely relates to actual risk (i.e., the risk margin), and if necessary, this buffer may need to be supplemented by a higher level of equity to maintain a given level of financial security. Fitch considers that this will better reflect actual risk, increase transparency and maintain consistency in accounting. Fitch cannot see any strong argument why good accounting would distinguish between life and non-life reserves in respect of the application of discounting. Discounted reserves by both types of insurer would provide users with more comparable information when analyzing companies, especially bearing in mind that many rated insurance groups are conglomerates of life and non-life companies.

Fitch cannot see any strong argument why good accounting would distinguish between life and non-life reserves in respect of the application of discounting.

III. An explicit and unbiased estimate of the margin that market participants require for bearing risk (a risk margin) and for providing other services (e.g., service margin).

It is evident that market participants demand a risk premium where there is uncertainty. Since insurance liabilities are seldom traded, in calculating a current exit value it is necessary to estimate the risk premium for a particular set of cash flows that theoretical willing buyers and sellers would use to agree on a price at which to exchange.

Under the methodology suggested by the IASB, the risk margin would be calculated through a multi-step approach.

- Determine units for measuring risk (amount of required capital, percentile of probability distribution).
- Estimate the number of units of risk in the liability using cash flow scenarios.

- Estimate margin per unit of risk using pricing models and observed market prices for similar contracts.
- Multiply estimated margin per unit by the estimated number of units to determine absolute margin. Changes to the aggregate are viewed as income/expense.
- Test for errors and omissions.

The IASB has considered two main ways to calculate the risk margin per unit. Implementation A treats the initial risk margin as the balancing item between the estimated cash flows and the observed price the company has achieved for the insurance contracts. This ensures that there is no profit recorded on day one of a contract. Implementation B would allow companies to make their own estimation of the risk premium that is associated with a portfolio of business, although the observed price of the contracts would serve as a reasonableness check. This form of implementation would allow profit to be taken on day one of an insurance contract in some cases, while losses may have to be taken in other cases.

Fitch does not agree with Implementation A that the margin should be calibrated directly to the premium (less relevant acquisition costs), subject only to a liability adequacy test. Although this may well be closest to current practice for many insurers, in the agency's view insurance premium pricing incorporates an element of profit and loss depending on market conditions and a company's franchise.

In Fitch's view, Implementation B is the most appropriate in theory, although it could be cumbersome to apply in practice. The premium (less relevant acquisition costs) may provide evidence of the margin that market participants would require, but has no higher status than other possible evidence.

Fitch agrees with the IASB's proposed treatment to allow risk margins to be determined separately, rather than necessarily being calculated as a balancing figure between expected cash flows and the observed prices.

Fitch agrees with the IASB's proposed treatment to allow risk margins to be determined separately, rather than necessarily being calculated as a balancing figure between expected cash flows and the observed prices. This fits in well with the approach taken in the Solvency II requirements where liabilities are based on a best estimate and capital is available to absorb deviations from that best estimate.

A risk margin is an appropriate way to account for the uncertainties that arise from estimating future cash flows based on a variety of assumptions. Fitch supports the idea of having companies disclose information about how they derive their risk margins on various portfolios. Substantial disclosure about the methodology behind and assumptions made in deriving this number would be beneficial to users of the accounts. In addition, numeric information about the risk margin's sensitivity to changes in key assumptions would provide analysts and investors with valuable information over time that would help them to understand the risks the company is taking, how these are developing and how the company compares with its peers. Fitch finds it difficult to envisage how a preparer will be able to derive risk margins without entity-bias, although in some cases there may be some degree of regulatory oversight over the models used to determine risk. However, with adequate disclosure around the assumptions made, the impact of this on users should be minimized.

The service margin is defined by the IASB as, "The profit that market participants require for providing services, other than the service of bearing risk." Effectively, as Fitch sees it, this represents the estimated costs of administering the contract, including the costs of providing any investment services linked to the contract. Any service margin will have to start from an entity-biased calculation. Which services are determined to be provided and the way in which these are provided will inevitably differ from one company to the next. In developing its revised accounting standard for insurance contracts, the IASB will need to be more precise about where it thinks

companies should draw the line between direct and indirect service costs in an insurance contract.

Taken together, the three building blocks are designed to result in (a form of) fair value for insurance liabilities. This fair value is based on an expected present value of future cash flows, which is adjusted to reflect the risk premium that the market would demand for the risk.

Fitch agrees with the notion of using the three building blocks—cash flows, time value and risk margin—to arrive at a current exit value. However, the exit value must reflect the practical reality of the expected form of exit—settlement with the policyholder—rather than exit to a hypothetical third party.

Conceptually this should amount to something very close. However, Fitch believes that there is the possibility of an unexplained gap between the two approaches, which is worth exploring further.

Differences Between CEV and Settlement Value

There should be little difference between the first two building blocks from either an insurer's entity-specific perspective or a neutral market participant's view. The only potential difference between the two that Fitch can see is whether a credit risk factor would be applied to the first building block. Factoring in credit risk would mean some probability that the insurer would not pay under contract. Fitch advocates strongly against including own credit risk as a factor in accounting for a company's liabilities. This is not helpful information in analyzing a company as a going concern and Fitch adjusts for it whenever it is found in accounts.

The calculation of a service margin will differ depending on whether the estimated costs of administering contracts are seen from the insurer's own perspective or from the view of a hypothetical neutral market participant. In reality, the starting point for the latter could practically only be an adjusted estimate of the former. Analysts and investors might well benefit from knowing the gains and losses that emerge from portfolios of insurance contracts without factoring in the advantages or disadvantages an insurance company derives from its critical mass or cost management skills. However, with no market benchmarks, the calculations of market-neutral service margins will be subject to substantial judgment and are probably not worth the time and expense that would need to be involved.

The risk margin will also differ depending on whose view is taken. For an insurance company with a diversified portfolio of contracts, the risks of certain contracts will balance out again the risks of others (diversification effect), while a market-neutral perspective would strip this out. The risk margin is subject to a substantial element of judgment anyway, so that again insisting that insurance companies make the distinction between entity-specific and market-neutral risk in their accounting is unlikely to add much value for the user that could not be achieved by more disclosure of portfolio effects in the notes to the accounts.

An important impact of the Phase II accounting standard, if drafted according to current proposals would be that there would no longer be a need for a deferred acquisition cost (DAC) asset or an unearned premium reserve (UPR).

High Level Impact of the New Accounting Regime

Accounting Impact

An important impact of the Phase II accounting standard, if drafted according to current proposals, would be that there would no longer be a need for a deferred acquisition cost (DAC) asset or an unearned premium reserve (UPR). Neither of these constructs meets the current IASB or FASB definitions of an asset or liability. By

recognizing expected cash flows at their present value, such accounting entries are no longer required.

One effect of this is that profit or loss on day one of an insurance contract may be possible in some cases, depending on how the accounting is defined and calculated. *Although such decisions will not make any difference to the overall profit* that will be reported on a contract over its life, it does make a difference to the timing of that reported profitability.

Profit or loss may emerge in several ways.

Day One Insurance Profit or Loss — As noted, if the risk margin is calculated at a relatively low level then there may be a profit reported on writing the business. This would be the case where the present value of expected cash inflows (premiums, investment income, etc.) is higher than the combination of the present value of expected outflows (commissions, claim payments, expenses, etc.) and the estimated risk margin that a theoretical market participant would require to accept the risk. On the other hand, a day one loss arises if the present value of expected cash inflows is lower than the combination of the present value of expected outflows and the estimated risk margin that the market would require to accept the risk.

Changes to Cash Flow Assumptions — Cash flow assumptions have to be current and therefore updated on a regular basis. Changes to such assumptions will therefore lead directly to alterations in the valuation of liabilities from period to period. Changes in the valuation of liabilities that are not directly offset by similar movements in the value of assets will lead to a profit or loss being reported in the period that relates solely to changed assumptions.

Changes in the Risk Premium Over Time — Whatever definition of the risk premium is used at the start of a contract, this margin is generally expected to decrease in absolute terms between the start of the contract and the end as certainty increases. As the risk margin decreases on any particular contract, the value of liabilities is effectively falling relative to the value of assets and profits should generally rise. However, the perceived risk in a certain liability or category of liabilities can change over time. These changes in risk would cause market participants to demand a higher or lower risk margin as the obligation ages. Therefore the value of the liability will change relative to the value of assets and profits or losses will emerge. Clearly, on an aggregated basis, the total risk margin would be a function of the value of policies sold and the certainty of the risk that is associated with them.

Investment Income — The value of liabilities is discounted by using a particular term structure of interest rates. At the same time, investment income is being earned on the asset side of the balance sheet which is unlikely to equal the discount rates that have been applied. In general, a profit will be reported by the insurer on a particular set of contracts if the amount earned on assets derived from those contracts exceeds the unwinding of the discount rate that is applied to the liabilities. Differences between the investment return and the unwinding of the discount rate will, therefore, be another element of profitability.

Profit, therefore, would emerge differently under the proposal in the IASB's DP than under most current accounting regimes, although it will depend heavily on the definitions and calculations that are eventually made in a final standard.

A change in accounting does not directly affect economic reality and, therefore, would not be expected to have a direct impact on credit ratings.

Business Impact

A change in accounting does not directly affect economic reality and, therefore, would

not be expected to have a direct impact on credit ratings. That said, there may on occasion be an indirect effect on credit quality to the extent that risk management improves, product design or business mix changes or where a change in accounting leads to a real economic effect, such as a change in taxation basis or an increase in the amount of dividend paid out to shareholders (reducing the creditors' buffer).

Risk Management — By reducing the accounting mismatch and giving a clearer reflection of economic reality within a group, asset liability management may become clearer and more highly valued. Companies that hedge risks carefully may display reduced volatility relative to those with less sophisticated management of their assets and liabilities. This may increase the incentives for firms to more actively manage this volatility, especially if this becomes rewarded by the stock market. If nothing else, it would be expected to increase the focus on managing the economic position of the company and reduce the temptation to manage the accounting position.

Product Design — It is not clear how the new accounting standards would affect product design, although Fitch expects that there is likely to be a limited medium-term impact on products offered. The clearest trend is likely to be increased understanding by firms of the concept of a risk-adjusted return and the impact of offering guarantees and options. This is a trend that has been evident for several years as insurers have increasingly started to use sophisticated stochastic techniques to calculate capital requirements or to assess risk.

Possible Changes to Taxation — Calculation of the tax payable is based on financial accounting in some jurisdictions, so the way that profitability is determined may have some impact on actual cash flows. However, Fitch expects this possible economic effect to be very limited.

Changes to the Cost of Capital — To the extent that an improved form of accounting is able to address the concerns of investors about a lack of transparency in accounting or excessive volatility, it is conceivable that there could be a reduction in the cost of capital for the better insurers. Equally, the cost of capital could increase if the new accounting system shows more volatility or higher risks than were previously assumed. On balance, Fitch considers that the cost of capital for the industry is more likely to fall than to rise but that any such effect is likely to be very small in the medium term.

Significant costs are likely to be incurred in changing computer software systems and training staff in a bid to ensure a successful transition without business disruption.

Transition Costs and Risks — The proposed changes in insurance accounting will have cost implications. Significant costs are likely to be incurred in changing computer software systems and training staff in a bid to ensure a successful transition without business disruption. Communicating results to investors and analysts may initially be challenging as issuers will have to spend a lot more time explaining their results under the new accounting regime. Furthermore, companies will initially have to maintain parallel systems and will probably have to continue to provide supplemental reporting on the old accounting.

US public companies could be faced with an additional potential burden from an internal control compliance perspective (Sarbanes-Oxley Act). Material weaknesses may emerge at some companies in connection with the accounting transition. This could lead to restatements, an increase in audit fees and the threat of securities litigation.

Difficulties in the Use of Fair Values from a Credit Perspective

Market Values Do Not Represent Cash Flows

The sentiment of the market can change from period to period according to how the market regards or values risk at any particular point. This does not necessarily align closely to actual expected cash flows, which are critical to credit analysis. A company

may have exactly the same profitability, cash generation potential and obligations over several years, suggesting that its true credit quality is unchanged, but variations in market sentiment toward risk will change the market values over this time.

If insurance contracts were valued at an approximation of market value, the effects of changes in market sentiment would be to alter the value of liabilities, profitability and capitalization of the company. In some cases the changes to the valuation of risk may be related to a real change in perceived risk; in others, it may be due to more technical factors that alter the valuation of risk without changing its quantum. From a credit perspective, at least, it is the quantum of risk that is relevant rather than the market valuation of risk per se.

Fitch does recognize that market sentiment can have real economic impact on issuers. Even if cash flow expectations do not change, a change in perception of risk can lead to changes in financial flexibility; policyholder and counterparty behavior; and access to capital and liquidity sources.

Use of Fair Values Where There is No Market

Fair values are helpful to analysts and investors when they represent realistic and reliable indications of the net present values of future cash flows. In some respects, there is an inherent contradiction in trying to estimate a fair value. Market values that are used as fair value inputs are by their very nature for liquid assets or liabilities. Therefore, in the absence of adjustments to make allowance for this lack of liquidity, fair values of assets may be overstated and liabilities understated.

More importantly, in the absence of a market, it is necessary to make a number of assumptions in order to estimate a fair value. Reporting a fair value number can lead to a degree of confidence in the valuation that is misplaced and in some cases prone to manipulation that diminishes the reliability of the values reported.

For insurance liabilities, where there is only a very limited market, taking a company's own estimates of discounted future cash flows with a risk premium applied is as good a measure as any of fair value. Trying to build objectivity into this approach will be challenging, and Fitch questions whether it will provide any meaningful information. The company's time would be better spent preparing explanations of the main assumptions made and running stress tests on these.

Much can be done by more extensive disclosure around the values reported. Good disclosure of assumptions and sensitivities goes a long way in helping analysts understand the impact of illiquidity or market movements on the values reported.

Allowance for Own Credit Quality

A change to the valuation of liabilities to reflect alterations in the credit quality of an entity creates some difficulties for credit analysis. Part of this difficulty is practical, as in the absence of a liquid market for such liabilities or an objective measure of credit quality.

Adjusting for credit quality in this way also means that the balance sheet no longer represents expected or contractual cash flows. It carries the implications that a company may report a profit due to its credit quality weakening and that a weak company will appear to have stronger capitalization due to a lower valuation of liabilities, making it much more difficult for a weak company to become insolvent on an accounting basis. Fitch strongly disagrees with an accounting standard that allows management to generate earnings and capital formation by weakening its creditworthiness.

For the purposes of credit analysis, Fitch strongly favors a measurement model for

For the purposes of credit analysis, Fitch strongly favors a measurement model for liabilities that ignores an insurer's own credit risk.

liabilities that ignores an insurer's own credit risk. Although in the case of liquid debt, it can be argued that the debt can be repurchased and cancelled at the market price (although a distressed company's ability to repurchase debt may be limited), this is not the case for liabilities such as insurance liabilities where there are few if any third parties willing to take over the risk.

If allowance is made for own credit risk, Fitch would want to see detailed disclosures on the impact of this factor on the balance sheet and income statement. It would also be necessary to ensure that changes in own credit risk (e.g., in a stressed scenario) do not result in a build up of distributable capital, allowing shareholders to be paid dividends and resulting in a further weakening of the entity's credit quality.

Fitch's Views on Other Issues

Unit of Account — The IASB has taken steps to define an appropriate unit of account, i.e., the extent to which measurement issues vary according to portfolio effects. For example, the risk associated with a set of cash flows may be significantly lower if the cash flows for a large volume of diversified businesses are considered compared with the consideration of small individual portfolios and summing the results.

The IASB points out that due to adverse selection, it is very expensive to transfer one contract or part of a portfolio. There may be a natural scale for the unit of account.

The IASB's suggested definition (from IFRS 4) for a unit of account is a, "Portfolio of risks that are subject to broadly similar risks and managed together as a single portfolio." In line with its belief that the value of the liability should be independent of the entity that holds the asset or liability, the IASB concluded that risk margins should not consider diversification between portfolios. Fitch supports this approach and sees parallels in its rationale for not considering own credit quality.

Unbundling — Fitch believes that deposit and/or service components of insurance contracts should be isolated for accounting measurement and presentation in cases where this can be achieved relatively easily. However, insurance products are increasing in complexity, and unbundling generally makes accounting more difficult and costly for preparers, without adding much value in terms of helpful information for users, particularly if the economic substance of the transactions is lost in the process. The agency believes that requiring unbundling of all contracts would result in inconsistent application when determining measurement of the greyer areas. Footnote disclosure may be a better way to help analysts understand the dynamics of more complex insurance contracts.

Presentation of Separate Account Assets — Fitch would prefer to see such assets maintained on the balance sheet but separated from other assets of the company. This presentation makes it easier to exclude the investment risk associated with assets where this risk is borne directly by policyholders.

Volatility — One potential concern associated with Phase II of the insurance contracts standard is the volatility that would result from movements in market values (e.g., implied volatility affecting the valuation of options, different valuations of credit risk, etc.).

Fitch is not critical of volatility in the financial statements of an entity if it reflects the economic reality (i.e., economic volatility). However, volatility that does not reflect economic reality (accounting volatility) is unhelpful, as is reported stability that is misleading. Fitch would like at least to be provided with information from financial reporting that enables analysts to distinguish between profitability resulting from the underlying business and that derived from changes in market parameters.

Fitch would be very cautious about allowing reinsurance pricing to be used as a market price indication for any particular line of business.

Reinsurance — Fitch would be very cautious about allowing reinsurance pricing to be used as a market price indication for any particular line of business. Reinsurers can price business for many different reasons. A particular portfolio may have attributes that offset well with other risks that the reinsurer carries. In addition, a particular piece of business may be underpriced in order to gain access to some other, more lucrative piece of business from the same insurer.

Policyholder Behavior — Fitch believes that customer behavior, including recurring premiums and lapses, should be reflected in the measurement of liabilities. Not recognizing customer behavior would hold back some potentially helpful information from users. Fitch would, however, encourage substantial disclosure around assumptions made and conclusions reached in deriving these values.

Guaranteed Insurability — Fitch supports the IASB's favored criterion of recognizing cash flows resulting from payments that policyholders must make to retain a right to "guaranteed insurability" (less additional benefit payments that result from those premiums). "Guaranteed insurability" is defined as a right that permits continued coverage without reconfirmation of the policyholder's risk profile and at a price that is contractually constrained, but Fitch thinks more guidance will be needed to be clear about what this actually means in practice. There would need to be some certainty that this only covers contracts for prolonged periods and excludes short-term contracts with automatic renewal.

Appendix A — Example of Possible Accounting Treatment

The following very simplified example is designed to show the different ways that income emerges under the current deferral and matching approach and under the fair value approach. The example also shows the importance of the definition of fair values and the substantial impact that this may have on the pattern of income recognition. It is important to note that these examples are illustrative only. The examples have been constructed to demonstrate the general principles inherent in the discussion of Phase II and should not be taken as necessarily representing the way that accounting will work under Phase II. In particular, these examples have been presented in a simplified manner and do not represent the exact presentation that is envisaged at Phase II. The simplifying assumptions made for the examples below include the following.

- A single policy is written for 100 of premium; 60 of claims are expected to be paid (and are paid) in year four.
- Acquisition costs are 20, incurred at the time of writing the policy.
- The policy begins halfway through year one and lasts for one year.
- Premiums received and acquisition costs are paid at start of the policy. All other cash flows occur at year-ends.
- Discount rate is 3% (risk-free) with the yield curve assumed to be flat.
- Actual Investment Return equals 4%.
- The provision for risk and uncertainty (risk margin) is assumed to be calculated as 12 (pre-discount) where exit fair values are used and the risk is assumed to decline by one-third in year two and by a further 50% in year three prior to settlement in year four.
- Administration costs have been ignored for simplicity but estimated costs would also be recognized at net premiums.

Current Accounting: Deferral and Matching

($ 000)

	Year 1	Year 2	Year 3	Year 4	Total
Income Statement					
Net Premiums Written	100.0	—	—	—	100.0
Net Premiums Earned	50.0	50.0	—	—	100.0
Net Claims Expense	(30.0)	(30.0)	—	—	(60.0)
Acquisition Costs	(10.0)	(10.0)	—	—	(20.0)
Underwriting Profit	10.0	10.0	—	—	20.0
Investment Return	1.6	3.3	3.4	3.5	11.8
Profit	11.6	13.3	3.4	3.5	31.8
Balance Sheet					
Cash and Investments	81.6	84.9	88.3	31.8	
Deferred Acquisition Costs	10.0	—	—	—	
Assets	91.6	84.9	88.3	31.8	
Unearned Premiums	50.0	—	—	—	
Claims Reserves	30.0	60.0	60.0	—	
Retained Earnings	11.6	24.9	28.3	—	
Liabilities	91.6	84.9	88.3	31.8	
Cash Flow					
Premiums	100.0	—	—	—	100.0
Expenses	(20.0)	—	—	—	(20.0)
Claims	—	—	—	(60.0)	(60.0)
Investment Income	1.6	3.3	3.4	3.5	11.8
Total	81.6	3.3	3.4	(56.5)	31.8

Source: Fitch estimates.

Possible Accounting Treatment Using Exit Fair Value with Risk Margin

($ 000)

	Year 1	Year 2	Year 3	Year 4	Total
Income Statement					
Net Premiums (NPV)	100.0	—	—	—	100.0
Net Claims Expense	(54.1)	—	—	—	(54.1)
Provision for Risk and Uncertainty[a]	(12.0)	4.0	4.0	4.0	0.0
Acquisition Costs	(20.0)	—	—	—	(20.0)
Profit - Insurance Business	13.9	4.0	4.0	4.0	25.9
Investment Return	1.6	3.3	3.4	3.5	11.8
Unwind of Discount - Claim Reserve	(0.8)	(1.6)	(1.7)	(1.7)	(5.9)
Profit	14.7	5.6	5.7	5.8	31.8
Balance Sheet					
Cash and Investments	81.6	84.9	88.3	31.8	
Assets	81.6	84.9	88.3	31.8	
Claims Reserves	54.9	56.6	58.3	—	
Provision for Risk and Uncertainty	12.0	8.0	4.0	—	
Retained Earnings	14.7	20.3	26.0	31.8	
Liabilities	81.6	84.9	88.3	31.8	
Cash Flow					
Premiums	100.0	—	—	—	100.0
Expenses	(20.0)	—	—	—	(20.0)
Claims	—	—	—	(60.0)	(60.0)
Investment Income	1.6	3.3	3.4	3.5	11.8
Total	81.6	3.3	3.4	(56.5)	31.8

[a]Also known as Risk Margin.
Source: Fitch estimates.

Criteria Report

Adjusting for Fair Value of Debt and Related Derivatives in Corporate Analysis

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Summary

This paper outlines how Fitch Ratings will adjust cash flow analysis for fair value accounting for derivatives and, in some cases, debt, in computing leverage and coverage ratios for corporates. It should be read in conjunction with Fitch's special report "*Hedge Accounting and Derivatives Study for Corporates (Disclosure, Hedge Accounting, and Restatement Risk)*", published November 2004 and available on www.fitchratings.com. Note that this paper addresses corporates only. The policy laid out is consistent with that for financial institutions, but for a full description readers should refer to Fitch's paper "*IFRS and their Implications for Bank Analysis and Analytical Spreadsheets*" published in November 2005.

This paper addresses Fitch's treatment of fair value movements in derivatives hedging debt under IFRS and US GAAP. It discusses the agency's approach to arriving at a debt figure for use in its analysis under the two regimes; however this is not an exhaustive list. The paper does not discuss the treatment of derivatives used to hedge risks not associated with debt (for example foreign exchange risk on forecast future transactions or commodity risk). Nor does it address credit default swaps.

In summary:

- Local currency debt will be analysed on the basis of cash principal due on a going concern basis. The impact of fair value adjustments and derivatives will be eliminated from debt.
- The cash principal outstanding will generally be translated at the period-end spot rate for foreign currency debt. Debt will be translated at the contracted rate where a derivative has been used to fix the rate at which the debt will be repaid.
- For notes issued at a discount, or with interest paid only at the end of the instrument's life (such as PIK – payment-in-kind - notes) the cash principal taken will be the total amount payable, whether described as principal or interest, at the reporting date.
- Consideration will be given to fair values of derivatives in recovery analysis for issue ratings. Out-of-the-money derivatives are likely to be financial debt, generally ranking as a senior unsecured obligation, but sometimes raised in priority. It is unlikely that in-the-money derivatives will be easily monetised before the end of their term unless there is specific provision in the instrument for this.
- Fitch will use cash interest (including cash paid/received on derivatives such as interest rate swaps) to compute the denominator in its cash flow coverage ratios. Net cash paid on derivatives will be added to the numerator along with interest, preferred dividends and, where applicable, rental expenses in the FFO (funds from operations) and other coverage ratios.
- Where the movement in fair value of derivatives is included in operating profit, this will be excluded from Fitch's EBITDA and EBITDAR calculations unless fair value movements on the hedged assets/liabilities are also included in EBITDA.

■ Background

It is common practice for companies to use derivatives to hedge market risks in relation to issued debt. The most common risks hedged are:

- foreign currency risk
- interest rate risk

The treatment of derivatives and hedge accounting is similar (although not yet the same) under US GAAP and International Financial Reporting Standards ("IFRS"). This differs from many other accounting standards because the fair values of derivatives used for hedging are reported on the balance sheet, and changes to these included in the income statement.

The measurement and presentation of debt and derivatives under IFRS are primarily governed by three standards:

- IAS 32 ('Financial instruments : disclosure and presentation')
- IAS 39 ('Financial instruments: recognition and measurement')
- IAS 21 ('The effect of changes in foreign exchange rates')

For companies in the EU switching to IFRS, IAS 32 and IAS 39 had only to be implemented in reporting periods starting on or after 1 January 2005.

In the US, the accounting guidance is given by several standards and amendments to those standards. For the purposes of this paper, the applicable standards for measuring and presenting debt and derivatives are:

- APB 21: interest on receivables and payables, for measuring debt at historical cost.
- SFAS No. 52: foreign currency translation.
- SFAS No. 133: accounting for derivative instruments and hedging activities.
- SFAS No. 150: accounting for certain financial instruments with characteristics of both liabilities and equity("SFAS 150").

This report discusses the implications of these standards on the measurement and presentation of debt and derivatives in financial statements and Fitch's criteria for credit analysis.

■ Balance Sheet

Debt

Under US GAAP and IFRS, debt will generally be shown at amortised cost. Amortised cost is defined in IAS 39 as:

"the amount at which the financial asset or liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount...[IAS 39.9]"

In practical terms, where a simple non-discounted bond is issued paying a fixed interest rate throughout its life, amortised cost will approximate cost. Where a bond is issued at a discount, then the discount will be treated as additional interest and spread over the bond's life. As a starting point, the result will be a very similar – if not identical – debt number to that reported under most local GAAP.

In certain situations, IAS 39 also allows debt to be carried at fair value. This fair value will be recalculated at each balance sheet date and differences taken to the income statement. The FASB (Financial Accounting Standards Board) in the US has proposed similar guidance in the exposure draft titled "*The Fair Value Option for Financial Assets and Financial Liabilities (Including an amendment of FASB Statement No. 115)*" published in April 2006.

Where hedge accounting is used, it is possible that this fair value will not be a complete fair valuation, but rather a partial fair valuation – i.e. only fair valuing the part that is being hedged. The value of debt will be adjusted to reflect the fair value impact of movements in, for example, interest rates, which will then offset corresponding movements in the interest rate swap that is hedging the risk. Mechanically, the fair value adjustment to debt is designed to directly offset changes in the fair value of the hedging derivative.

Accumulated fair value adjustments in situations where hedge accounting has been achieved then lost may be spread over the bond's life. This can occur on initial transition to IFRS where hedge accounting was used under local GAAP but will not be used under IFRS.

For floating-rate debt, companies may elect to use "cash flow" hedges to counteract fluctuations in interest payments. In this scenario, debt will be carried at amortised cost unless the company elects to carry the debt at fair value.

The value of foreign currency-denominated debt, regardless of the elected treatment (fair value versus amortised cost), will initially be calculated in the currency in which it is denominated, then translated at the spot rate prevailing at the balance sheet date into the company's functional currency.

All of the above factors may lead to reported debt being significantly different from the amount of debt a company is committed to repay.

Derivatives

IFRS and US GAAP require derivatives be held on the balance sheet at fair value. The movement in fair value will be taken to the income statement, except where a cash flow hedge is used, when some or all of the gain may be deferred in equity. The movement in a fair value hedge is offset by a corresponding movement in the fair value of the hedged item (e.g. debt).

Since there is no fixed chart of accounts under IFRS, there is potential for different entities to classify derivatives in different parts of the balance sheet. For hedges linked to debt, out-of-the money derivatives are liabilities and may be included in debt or elsewhere in liabilities. In-the-money derivatives will be shown in one of the asset categories. For European corporates, Fitch uses a 'net debt' calculation that reduces gross debt by cash and cash equivalents. In-the-money derivatives may be included in cash equivalents on the balance sheet, but are more likely to be included in "other assets".

This further complicates the task of determining a 'clean' debt number, although the notes to the accounts should disclose where derivatives are included on the balance sheet.

Derivatives – Examples

For corporates with relatively simple hedging instruments such as cross-currency and interest rate swaps, out-of-the-money derivatives will be liabilities.

For example, a company uses an interest rate swap that swaps floating Libor euro interest rates for a fixed 5% rate. If Libor falls below 5%, the company is required to pay the difference – it is out of the money, has a negative fair value and is, therefore, a liability.

If Libor rises to 6%, then the amount of interest the entity paying is lower than it would have been – the derivative is in the money, has a positive fair value and is an asset.

Hybrid Instruments

The IFRS treatment of hybrid instruments (e.g. convertible notes) is similarly complex. The notes are valued at inception and split between an equity component, which remains fixed, and a debt component, which will be held at amortised cost or at fair value. In the US, accounting for hybrid instruments in accordance with SFAS 150 dictates that certain types of financial instruments that embody obligations of the issuer must be classified as debt. Under IFRS, however, the company may elect to value the entire instrument at fair value. (The fair value option of financial assets and liabilities is currently permitted under IFRS and proposed for adoption in the US.) Measurement criteria are such that the debt/equity split for convertibles is likely to be very different than it would be under Fitch's hybrid methodology.

The presentation of other hybrid instruments, particularly trust preferred securities, often differs between US GAAP and IFRS accounts. IFRS follow the principle that instruments issued by the company on which it has some obligation to repay interest or principal are classified as debt. The treatment of trust preferred instruments issued by a financing trust vehicle is subject to interpretation of "control" under consolidation rules, which differ in the two accounting regimes. This results in the consolidation of the vehicles under IFRS. Trust preferred securities are included within minority interests, which are now part of equity, with dividends paid also reported under minority interests.

Under US GAAP, these vehicles are often outside the scope of SFAS 150 and are accounted for under the complex rules-based interpretation of FIN 46-R: Consolidation of Variable Interest Entities – An Interpretation of ARB No. 51. FIN 46-R defines "variable interest entities" and dictates whether or not the vehicles are consolidated. When the vehicle is not consolidated by the issuer, the securities are treated as debt and interest paid as an interest expense.

For US GAAP, no trust preferreds are consolidated, rather they are treated as debt and interest is included in interest expenses.

Irrespective of accounting treatment, Fitch determines equity credit and what is to be shown as debt under its own criteria, based on loss-absorbing potential (see *"Hybrid Securities: Evaluating the Credit Impact – Revisited"*, published in April 2005 and available at www.fitchratings.com).

■ Impact on Income and Cash Flow Statements

While the bulk of their impact is likely to be reflected in finance costs (interest expense), fair value movements in debt and derivatives could impact the income and cash flow statements in a number of ways.

Classification

The lack of strict classification criteria under IFRS and US GAAP means that there is no set place to classify fair value movements on debt or derivatives. In addition, fluctuations in derivative fair values and amounts flowing through the financial statements will not typically be material and therefore will not be plainly identified on the face of the financial statements. Investors must look to footnotes and other disclosures to understand the impact of these fluctuations. Fitch identified weaknesses and inconsistencies in the special report "*Hedge Accounting and Derivatives Study for Corporates (Disclosure, Hedge Accounting, and Restatement Risk)*", November 2004. Both the FASB and IASB have acknowledged these issues and FASB has since undertaken a derivatives disclosure project to improve transparency.

While it is likely that debt-related derivatives and fair value movements will be classified as finance costs, fair value movements related to items such as derivatives used to hedge trade purchases (cash flow hedges) may be classified as part of operating costs.

Interest

As discussed above, interest shown in the income statement may differ significantly from the amount of cash interest that a company is required to pay in a period, including such items as debt accretion (accrual), fair value movements, and amortisation of financial assets and liabilities.

■ Fitch Response – Debt

The treatment of fair value in Fitch's Issuer Default Rating ("IDR") analysis assumes that the issuer will remain a going concern, so that derivatives are assumed to be held to maturity. For debt recovery ratings in a stressed scenario, Fitch will also consider when derivatives may become an immediate liability or asset.

Note that the adjustments proposed, both for the balance sheet and income statement, reflect the adjustments that should be made where information is available. In some instances, either the relevant information will not be available, in which case this uncertainty will be taken into account in Fitch's qualitative analysis, or it will be clear from disclosures that the amounts involved are not large enough to materially impact Fitch's analysis, in which case they will be ignored.

Local Currency Debt

Fitch's base case for computing debt will be to take debt as the cash principal outstanding. This will exclude the impact of fair value movements in derivatives designated as hedges. In other words, out of the money derivatives will not be included in the debt number and in the money derivatives will not offset it. Cash principal represents the current obligation outstanding, generally excluding interest accrued.

Where the value of the principal increases over time, for example for a bond initially issued at a discount, the figure incorporated in Fitch's analysis will be the principal accrued on the balance sheet date.

In certain circumstances, for example PIK notes, where interest is deferred over all or a substantial portion of the instrument's life, the debt amount Fitch recognises will be the principal plus interest accrued at the balance sheet date.

Where notes are index-linked, the agency will adjust principal to reflect indexation up to the balance sheet date. Again, this reflects the cash obligation at the balance sheet date.

Foreign Currency Debt

Where debt is denominated in a foreign currency, debt will generally be translated into the group's local currency at the spot rate prevailing at the balance sheet date.

An exception to this is where the company has purchased a derivative to hedge foreign currency exposure. In this case the amount to be repaid will be fixed in the entity's local currency, and Fitch will reflect this by translating the debt at the hedged rate.

In practice, this can be approximated by adding/deducting the fair value of the cross-currency swap to/from the debt translated at spot rate for a simple cross-currency swap, where the debt is held at amortised cost.

Consideration should be given to the creditworthiness of the counterparty to any derivative transaction before taking hedged rates into account. This is particularly the case in emerging markets, where a local counterparty may themselves be very exposed to currency shifts and not be able to honour the derivative contract in extreme circumstances.

Generally, analysts will consider the potential impact of currency movements on an entity's ability to repay its debt. There will be greater impact primarily where a company has debt denominated in a different currency from its earnings, a situation more likely to occur with emerging market issuers.

Foreign Currency Debt – Example

It is not unusual for companies to issue debt in a currency other than their own functional currency. This can be for a number of reasons, including:

- access to more liquid capital markets; or
- as a hedge for earnings or acquisitions in that currency.

If the debt is issued to access capital markets, companies may try to hedge it with cross-currency swaps, effectively fixing the exchange rate at the point at which the debt is issued.

Fitch's analysis reflects this by translating the debt at the hedged rate, as this reflects the amount that will have to be repaid.

For example, assume a European company, which reports in EUR, takes out a USD-denominated loan for USD1.5bn. At the time of the loan, the USD:EUR exchange rate is 1.5:1, so the company received EUR1bn. The company enters into a cross-currency swap to fix the exchange rate on the amount to be repaid at maturity at 1.5:1. The company elects to hold the loan at amortised cost (there is no election for entities reporting under US GAAP). The bond is issued at par.

Mid-way through the bond's life, the USD:EUR rate moves to 1:1, and on the company's balance sheet the debt is retranslated at this rate, and the liability will increase to EUR 1.5bn.

At the same time the fair value of the swap will have changed – it will be 'in the money' and will be on the balance sheet as an asset with fair value of EUR0.5bn.

If we were to include the bond translated at the current rate, then leverage ratios would not reflect the fact that on maturity the company will only have to pay EUR 1bn on a net basis to settle the bond, regardless of the prevailing exchange rate.

Translating the bond at the hedged rate (1.5) would reflect this fact. It is also, in theory, possible to work back to the EUR 1bn by adding the fair value of the derivative and the retranslated value of the bond (assuming the bond is held at amortised cost):

1.5bn floating FX liability - 0.5bn derivative = 1bn fixed FX liability.

In practice it is unlikely the result will be this exact, as various "noise" could distort the fair value of the derivative. While these impacts will generally be minor and the relationship should hold in broad terms in most circumstances, they could be exaggerated in conditions of extreme market volatility (for example large currency fluctuations in emerging markets). Furthermore, this relationship will only hold in the relatively simple circumstances where foreign currency debt is held at amortised cost, and is hedged via a simple cross-currency swap.

■ Impact on Recovery Analysis

In a recovery situation, out-of-the-money derivatives will become liabilities. If related to priority debt, these liabilities will often rank above senior unsecured creditors.

In contrast, it may be difficult to realise the value of in-the-money derivatives before maturity.

Fitch will consider significant derivative positions in its recovery analysis, and include out-of-the-money derivative creditors with appropriate priority. The agency will only take into account in-the-money derivatives in its analysis where either a contractual right of set-off exists or where the instrument includes early termination provisions.

■ Fitch Response – Cash Flow and Income Statement

Fitch's corporate analysis emphasises cash flow rather than income statement data.

Interest

Fitch computes interest coverage ratios using cash interest paid as the basis of the denominator. This will exclude the impact of fair value movements in debt and derivatives, but will include any interest rate or exchange rate swaps or collars on annual interest paid.

Fair Value Movements in Operating Profit

Fitch will exclude any movements in the fair value of derivatives included within operating profit from its calculation of EBITDA and EBITDAR unless fair value movements on the hedged assets/liabilities are also in EBITDA.

These movements, as non-cash, will be excluded as a matter of course from the agency's cash flow-based measures such as FFO.