

Criteria Report

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

Analysts

Alex Griffiths  
+44 20 7417 4207  
alex.griffiths@fitchratings.com

Bridget Gandy  
+44 20 7417 4346  
bridget.gandy@fitchratings.com

William Mann  
+1 212 908 0583  
william.mann@fitchratings.com

■ 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](http://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](http://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**

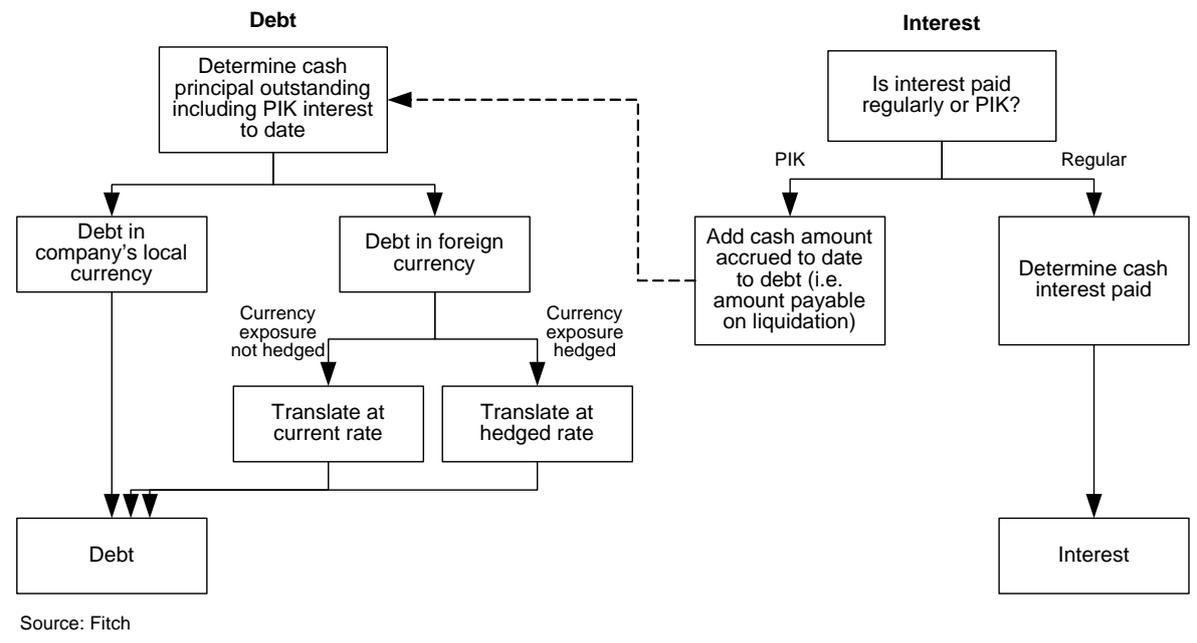
Fitch computes interest coverage ratios using cash interest paid as the basis of the denominator. This will exclude the impact of fair value movements in debt and derivatives, but will include any interest rate or exchange rate swaps or collars on annual interest paid.

**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.

Summary of Fitch Treatment



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