

# The Fitch Universal Format on BankScope

April 2009

## Introduction

For many years, Fitch Ratings has formatted and analyzed bank data in templates which reflect the idiosyncratic formats of the accounting systems of each of the countries for which it collects bank data. Each template had its own raw data and spreadsheet format. To assist with comparisons across templates, Fitch devised a global representation of this data which attempted to place all the accounting systems on the same basis.

With the adoption of IFRS by the majority of European banks, as well as many Asian and Central American banks, and the gradual convergence of IFRS and US GAAP, Fitch has been able to develop a single spreadsheet for the entire universe of banks which is global, transparent and adaptable. While recognizing that figures are still being reported under different accounting systems and the necessity of an awareness of the implications of different systems, the continuing convergence of accounting systems toward one universal approach renders it possible to make global comparisons more easily and reliably than in the past. The new spreadsheet and ratios are also a better reflection of the way Fitch approaches the analysis of financial statements, tailoring them to fit the needs of analysts, and using information found in the notes to the accounts to adjust the statements. The ways in which Fitch has achieved this are detailed below, as the agency compares the new template with the “global” section of the original presentations.

## Changes

Within the body of the earlier 208 templates, there were four sections of raw data, into which financial input was entered, a spreadsheet which was largely standardized but reflected some country-based details, and a “global” section which presented the data in a standardized format. Both the spreadsheet and the global section comprised data and ratios. The spreadsheet was the document which was appended to Fitch’s credit reports. With the advent of IFRS, a second spreadsheet was added to the template for use with credit reports, while the original spreadsheet format was kept for credit reports for non-US banks not reporting under IFRS and for BankScope. With the new template, input will be entered directly into the single spreadsheet, which will be the document appended to credit reports, shown under the Financials tab in Fitch Research and distributed with BankScope. The spreadsheet will have four primary sections, income statement, assets and off-balance-sheet volumes, liabilities and equity and analytical ratios. The “what you see is what you get” approach to input ensures that individual items are placed where analytically appropriate and increases the checks on the accuracy of the data. The use of one spreadsheet, rather than several for different purposes, guards against data being presented in varying ways, which is often more confusing than helpful. In addition to the spreadsheet, there are several sections of supporting data, which further illuminate the data on the spreadsheet and add transparency to Fitch defined line items, such as eligible capital. The Income Statement is shown in a format that builds from net interest income to pre-impairment operating profit and then operating profit, to pre-tax and net income and finally to Fitch comprehensive income.

## Net Interest Income

For most banks and under the traditional banking business model, net interest revenue is the largest source of income. While the original spreadsheet format displayed only total interest income and total interest expense, the new one displays the major component sources of interest income and expense, to the extent that these are published, and there is a more detailed breakdown in the supporting data. Interest income and expense will exclude insurance-related interest when it is disclosed separately.

Notice that dividend income is included as interest income. The rationale behind this placement is that a fixed and regular periodic reward for an investment is closer to an interest coupon on a bond or interest received on a loan. Fitch does, however, display it on a separate line rather than amalgamating it with other interest. If dividends are sufficiently substantial that they are considered analytically to be like a share in the paying company's net income, the analyst may classify them as "At equity profit/loss", a category which was not included in the original global format.

The same rationale can be applied to the dividend payment on preference shares. Dividends on preference shares are generally considered a distribution for tax purposes and are displayed that way on US GAAP statements. Under IFRS, dividends paid on redeemable preference shares are classified as interest expense, while those on perpetual preferred stock are considered distributions. In the new template, as with Fitch's original IFRS template, dividends on all preference shares, as well as any other instrument classified as a "hybrid security", are classified as an interest expense item.

## Non-Interest Operating Income

- Net gains (losses) on trading and derivatives;
- Net gains (losses) on other securities;
- Net gains (losses) at fair value though the income statement;
- Net insurance income: For banks with insurance operations, a large portion of insurance assets are held on behalf of policyholders and thus not available to the bank; insurance-related income, expense, assets and liabilities are shown on separate lines on the spreadsheet rather than commingled with other operations when it is possible to do so.
- Net fees and commissions: These are net fees and commissions which have not been accounted for as interest income and which are not insurance related.
- Other operating income: Any other income identified as operating, such as rental income or ongoing revenue from non-banking businesses.

## Non-Interest Operating Expenses

- Personnel expenses: This category includes wages and salaries, social security costs, pension expenses and other personnel costs, including the expensing of staff stock options.
- Other operating expenses: In this category are depreciation, amortization, occupancy costs, operating lease rentals and other administrative expenses.
- 'At-equity' profit/loss (operating): This is primarily income from associated companies which is accounted for on an 'at-equity' basis, but may also include dividends received which the analyst does not consider part of interest income.

The analyst determines whether the income is categorized as operating or nonoperating.

## Pre-Impairment Operating Profit

This advance calculation of operating profit is primarily illuminating when compared with the same figure taken after impairment charges.

Loan impairment charge: The loan impairment charge comprises impairment losses which relate to specific loans and “collective” or general loan loss provisions (LLPs).

Other credit impairment charges: These will be provisions and impairment losses related to lending to banks, securities and off-balance-sheet items.

## Operating Profit

Operating profit is at the core of income statement analysis, comprising the results of sustainable operations within the scope of a bank’s core business. Note that the operating profit resulting from Fitch’s analysis of the bank’s financial statements and footnotes may differ from the operating profit reported by the bank, if indeed operating profit is reported.

## Non-Operating Income and Expenses

At-equity profit/loss (non-operating): For a definition, see the same item in the operating section. An analyst may determine that the income does not meet Fitch’s definition of operating income (see ‘Operating Profit’ above).

Non-recurring income and non-recurring expense: These are exceptional or extraordinary items which are not part of the bank’s core business and occur as singular instances. While the “extraordinary” classification remains under US GAAP, it is not permitted under IFRS. Analysts determine what is included in these categories.

Change on fair value of own debt: Classifying the fair-value movement of debt in this line of the spreadsheet removes it from operating profit. A gain is recorded here for periods when the fair value of the debt liability declines or a loss if it increases. This relates to debt obligations the bank has opted to report at fair value or does so as a result of hedge accounting. It is excluded from operating profit in the spreadsheet because credit analysis focuses on the debt to be repaid rather than the current value of debt obligations in the market.

Other non-operating income and expenses: Any income or expense which cannot be classified above.

## Pre-Tax Profit, Taxes and Net Income

· Pre-tax profit: This item is self-explanatory. Its primary use is in the computation of the effective tax rate for the company. · Taxes: Net of current tax expense, plus deferred tax expense taken through the income statement. · Net income: This becomes the first step in the computation of comprehensive income. In most banks it will equate to published net income before allocation to non-controlling interests less preference share dividends and discontinued operations.

## Fitch Comprehensive Income

· Profit/loss from discontinued operations: All gains and losses related to discontinued operations are reported here on a post-tax basis. · Change in value of AFS investments: This is the net amount of the revaluation of available-for-sale securities for the reporting period which was taken directly through the other comprehensive income (OCI) equity component by the bank. · Currency translation differences: This is the change in the currency translation reserve for the period. · Other OCI gains/losses: This includes any other gains and losses reported directly to equity rather than before net income. The most common of these is actuarial movements on the pension reserve.

· Fitch comprehensive income: By taking into account OCI gains and losses that go directly to equity, Fitch comprehensive income comprises a more complete and comparative reflection of the bank's activities during the period than net income.

## Non-Controlling Interests

This represents the interest in net income of the non-controlling (previously called "minority") shareholders of the bank.

### Income Statement

<b>New format</b>	<b>Original global format</b>
Interest income on loans	Interest income
Other interest income	Interest expense
Dividend income	Net interest revenue
Gross interest and dividend income	Commission income
Interest expense on customer deposits	Commission expense
Preferred dividends paid and declared	Net commission revenue
Other interest expense	Fee income
Total interest expense	Fee expense
Net interest income	Net fee income
Net gains (losses) on trading and derivatives	Trading income
Net gains (losses) on other securities	Trading expense
Net gains (losses) on assets at FV through income statement	Net trading income
Net insurance income	Other operating income
Net fees and commissions	Total operating income
Other operating income	Personnel expenses
Total non-interest operating income	Other admin expenses
Personnel expenses	Other operating expenses
Other operating expenses	Goodwill write-off
Total non-interest expenses	Loan loss provisions
At equity profit/loss - operating	Other provisions
Pre-impairment operating profit	Total operating expense
Loan impairment charge	Non-operating income
Other credit impairment charges	Non-operating expense
Operating profit	Extraordinary income
At equity profit/loss - non-operating	Extraordinary expense
Non-recurring income	Exceptional income
Non-recurring expense	Exceptional expense
Change in fair-value of own debt	
Other non-operating income and expenses	Pre-tax profit
Pre-tax profit	Taxes
Taxes	Post tax profit
Net income	Transfer to/(from) fund for general banking risks
Profit/loss from discontinued operations	Published net income
Change in value of AFS investments	Preference dividends
Currency translation differences	Other dividends
Other OCI gains/(losses)	Other distributions
Fitch comprehensive income	Retained income
Memo: profit allocation to non-controlling interests	Minority interests
Memo: net income after allocation to non-controlling interests	

Memo: common dividends paid or declared

Source: Fitch

## Loans

In the previous templates loans were sometimes categorized by type and sometimes by maturity, with the global section being an amalgam of the two. Fitch has chosen to make loan type the basic format with maturities being presented in the supplementary data section. There is also additional information on impaired loans and reserves in the supplementary data. The categories comprise two types of retail lending, residential mortgages and other consumer loans, as well as corporate and commercial loans. Notice that there are memo lines for gross loans, impaired (or non-performing) loans and loans at fair value.

## Loans

<b>New format</b>	<b>Original global format</b>
Residential mortgage loans	Loans sub 3 months
Other consumer/retail loans	Loans 3-6 months
Corporate and commercial loans	Loans 6 months-1year
Other loans	Loans 1-5 years
Less: reserves for impaired loans/NPLs	Loans 5 years +
Total loans	Loans where no split available
Memo: gross loans	Loans to municipalities/government
Memo: impaired loans included above	Mortgages
Memo: loans at fair value included above	HP/lease
	Other loans
	Loans to group companies/associates
	Loans to other corporate
	Loans to banks
	Customer loans
	Problem loans
	Problem loans - memo
	Overdue loans
	Restructured loans
	Other non-performing loans
	Total problem loans
	Loan loss reserves - included in above
	General loan loss reserves
	Specific loan loss reserves
	Loan loss reserves - included in above
	Loan loss reserves - previously deducted
	Other lending
	Trust account lending
	Other lending
	Total other lending
	Total loans - net

Source: Fitch

## Other Earning Assets

The presentation of other earning assets departs significantly from the global section of the original templates. Fitch follows current accounting convention and now shows trading, AFS and held-to-maturity as the three major components of securities and distinguishes derivatives from trading securities. As it is such a significant departure each new line is briefly described:

- Loans and advances to banks: These are interest-earning balances with central and other banks, excluding impairment allowance, but including amounts due under reverse repurchase agreements.

- Trading securities: Trading securities include all securities classified as held for trading, including government securities which were formerly excluded. They are reported at fair value under most accounting systems. Profits and losses flow through the income statement.
- Derivatives: These are all in-the-money trading derivatives and derivatives recognized for hedging, less the value of netting arrangements as reported

(note these vary from one jurisdiction to another and there can be important differences, for example between IFRS and US GAAP). Previously, derivatives were included in trading securities in Fitch's global data. They are reported at fair value under most accounting systems.

- Available-for-sale securities: These securities are reported at fair value. Unrealized profits or losses are taken through equity, and reflected in Fitch Comprehensive Income.
- Held-to-maturity securities: These securities are reported at amortized cost.
- At-equity investments: These are investments in associated companies.
- Other securities: Anything not classifiable above. As the original statements do not have the breakdown above, the original categories and historical data will be combined in this line.
- Memo: Government securities included above: These are treasury bills and bonds and other government securities which are included in the above categories.
- Investments in property: These represent genuine investments and are distinct from properties which are acquired by foreclosure and shown as non-earning assets.
- Insurance assets: As with the income statement, total insurance assets are reported separately.

### Other Earning Assets

<b>New format</b>	<b>Original global format</b>
Loans and advances to banks	Deposits with banks
Trading securities	Due from central banks
Derivatives	Due from other banks
Available-for-sale securities	Due from other credit institutions
Held-to-maturity securities	Government securities
At-equity investments	Other listed securities
Other securities	Non-listed securities
Total securities	Other securities
Memo: government securities included above	Investment securities
Investments in property	Trading securities
Insurance assets	Total securities
Other earning assets	Treasury bills
Total earning assets	Other bills
	Bonds

CDs  
 Equity investments  
 Other investments  
 Total other earning assets

Source: Fitch

## Non-Earning Assets

<b>New format</b>	<b>Original global format</b>
Cash and due from banks	Cash and due from banks
Foreclosed real estate	Deferred tax receivable
Fixed assets	Intangible assets
Goodwill	Other non-earning assets
Other intangibles	Total non earning assets
Current tax assets	Land and buildings
Deferred tax	Other tangible assets
Discontinued operations	Total fixed assets
Other assets	

Source: Fitch

The non-earning assets section is similar to the original global format, but has somewhat greater detail. Goodwill is segregated from other intangibles and there is new disclosure of foreclosed real estate held by the bank.

## Off-Balance-Sheet Items

Off-balance-sheet items include assets that the bank does not control, but where it may have some exposure to losses — for which it is most likely being paid a fee or is remunerated in some other way. The presentation of off-balance-sheet volumes in the spreadsheet is greatly increased from the original templates, which displayed three summary lines of acceptances, documentary credits and guarantees. The volumes shown will depend on the disclosure given by the banks, which can vary substantially.

- Managed securitized assets reported off-balance-sheet: This line shows securitized assets that are managed by the bank, often because it originated them or set up the securitization, but which it does not have to consolidate because it does not control them.
- Liquidity lines to SPEs: Lines of liquidity provided to SPEs that are off-balance sheet and not managed by the bank.
- Guarantees: Total amount guaranteed by the bank.
- Acceptances reported off-balance-sheet: Total amounts the bank “accepts” to pay, usually under international trade finance arrangements where reported off balance sheet. These are usually reported on-balance-sheet (as a liability, often matched by a corresponding asset for a claim by the bank on the recipient of goods) under US GAAP and IFRS.
- Committed credit lines: Total committed and undrawn lines of credit extended by the bank.
- Other contingent liabilities: Total other potential liabilities, to the extent that these are disclosed.
- Total business volume: This is the total of the above items plus total assets.
- Memo: Total weighted risks: This is the number reported to the regulators that forms the denominator of regulatory capital ratios and of Fitch’s eligible capital ratios.

## Off-Balance-Sheet Items

<b>New format</b>	<b>Original global format</b>
Managed securitized assets reported off-balance-sheet	Acceptances
Liquidity lines to SPEs	Documentary credits
Guarantees	Guarantees
Acceptances reported off-balance-sheet	Other
Committed credit lines	Total contingent liabilities
Other contingent liabilities	
Total business volume	
Memo: total weighted risks	

Source: Fitch

## Liabilities, Hybrids and Equity

### Interest-Bearing Liabilities

As with loans, Fitch uses deposit type as the primary category, with maturity breakdowns in the supplementary data.

- Customer deposits — Current: Current accounts, which may or may not be interest bearing, are subject to immediate and unlimited withdrawal at the option of the customer. Non-interest bearing deposits are treated by Fitch as interest-bearing at a zero rate.
- Customer deposits — Savings: Savings accounts place some limitation on the frequency of withdrawals. They generally pay higher interest than current accounts.
- Customer deposits — Term: Term deposits have a fixed maturity date.
- Deposits from banks: Deposits and short-term placements from other banks, including those not licensed to take deposits, also include cash owed to banks under repurchase agreements.
- Other deposits and short-term borrowings: Any short-term funding not classifiable above.
- Long-term borrowing: Loans from banks and unsubordinated debt securities with a maturity of more than one year, including the liability component of convertible bonds (the equity component is reported in equity under IFRS and for some convertibles under US GAAP).
- Subordinated borrowing: All subordinated loans and debt, including dated hybrid instruments.
- Other funding: Any funding source which cannot be classified above. This amount will include any non-controlling interest judged by an analyst to be nonloss absorbing.
- Derivatives: These are out-of-the-money trading and hedging derivatives, less the value of netting arrangements as reported (see Derivatives under 'Other Earning Assets' above).
- Trading liabilities: Short positions and other liabilities classified as held for trading.

## Interest-Bearing Liabilities

<b>New format</b>	<b>Original global format</b>
Customer deposits - current	Deposits - demand
Customer deposits - savings	Deposits - savings
Customer deposits - term	Deposits - sub 3 months
Total customer deposits	Deposits - 3-6 months
Deposits from banks	Deposits - 6 months-1year
Other deposits and short-term borrowings	Deposits - 1-5 years
Total deposits, money market and short-term funding	Deposits - 5 years +
Long-term borrowing	Deposits where no time split available
Subordinated borrowing	Customer deposits
Other funding	Municipalities/government deposits
Total long term funding	Other deposits
Derivatives	Commercial deposits
Trading liabilities	Banks deposits
Total interest bearing liabilities	Total deposits
	Certificates of deposit
	Commercial paper
	Debt securities
	Securities loaned
	Other securities
	Other negotiable instruments
	Total money market funding
	Convertible bonds
	Mortgage bonds
	Other bonds
	Subordinated debt
	Hybrid capital
	Other funding
	Total other funding

Source: Fitch

## Non-Interest Bearing Liabilities

As with non-earning assets, there is greater disclosure than in the original format. Most of the items are self-explanatory, but the fair-value portion of debt needs some clarification:

· Fair-value portion of debt: Debt instruments are reported at fair value either when hedge accounting is applied or at the option of the bank (the option can be applied for each individual security, so most commonly only some debt is reported at fair value). The amount shown here is the difference between the amount the bank is required to repay at maturity (shown under the respective interest-bearing liabilities headings above) and the fair value of the debt as reported on the balance sheet. Note that this item will be negative if the fair value of debt is more than the amount due at maturity. The impact on the income statement is discussed above.

## Non-Interest Bearing Liabilities

<b>New format</b>	<b>Original global format</b>
Fair-value portion of debt	General loan loss reserves
Credit impairment reserves	Other non equity reserves
Reserves for pensions and other	Total loan loss and other reserves
Current tax liabilities	Other liabilities
Deferred taxes	
Other deferred liabilities	
Discontinued operations	

Insurance  
Other non-interest bearing liabilities  
Source: Fitch

## Hybrid Capital

The original global format did not distinguish hybrid capital from liabilities and equity. Fitch recognizes that there are some financial instruments, like preference capital and trust preferred securities, which have debt and equity characteristics. There are two lines for hybrid capital on the spreadsheet to reflect whether the amount was reported by the bank as debt or equity. Fitch has specific criteria for giving “equity credit” to hybrid capital instruments. See Fitch criteria report, “Equity Credit for Hybrids & Other Capital Securities,” published on [www.fitchratings.com](http://www.fitchratings.com) on 25 June 2008.

## Equity

<b>New format</b>	<b>Original global format</b>
Common equity	Preference shares
Non-controlling interest	Common shares
Securities revaluation reserves	Total share capital
Other accumulated OCI	Total equity
Total equity	

Source: Fitch

## Equity Capital

Again, the categories are self-evident, with somewhat more detail in the new format. As noted above, preference shares are considered hybrid capital.

## Core Capital and Eligible Capital

The concepts of core and eligible capital will be new to users of the original global format but not to those familiar with Fitch’s credit rating analysis and the IFRS spreadsheets distributed with Fitch’s credit reports. Core capital comprises equity (excluding hybrids and including loss-absorbing non-controlling interests), goodwill, other intangibles and certain deferred tax assets as determined by the analyst, and augmented by (or diminished by) the fair-value adjustment to own debt.

Eligible capital is core capital, enhanced by a portion of hybrid capital. For a full discussion as to the determination of allowable hybrid capital See aforementioned Fitch criteria report, “Equity Credit for Hybrids & Other Capital Securities”. Eligible capital is the amount which Fitch determines to be available for the absorption of losses.

## Summary Analytics

### Profitability Ratios

Both the number and the nature of the profitability ratios are dramatically different from the original global format, which measured revenues and expenses primarily in terms of total assets, while the new format uses average earning assets and interest-bearing liabilities. Fitch also introduces the concept of comprehensive income, discussed above, to the ratios. The traditional “return on average assets” and “return on average total equity” are preserved partly for historical comparison but also because they are still used by some investors.

### Interest Ratios

- Interest income on loans/average net loans: This blended yield on loans is primarily influenced by the types of lending the bank conducts, pricing policy, and the impact of impaired loans on recognized income, all of which need to be considered when making comparisons among different banks. The ratio will only be calculated if interest on loans is disclosed separately.
- Interest expense on customer deposits/average customer deposits: This ratio reflects the cost of the bank’s deposits (remember that demand deposits are included as interest-bearing with a zero rate).
- Interest income/average earning assets: This ratio will generally be lower than the loan yield because of the lower yield of the investment portfolio. A yield higher than the loan yield may point to severe loan credit quality problems, or an aggressively priced portfolio. If the ratio is much lower, it may indicate a low level of loans to earning assets or a highly liquid portfolio.
- Interest expense/average interest-bearing liabilities: This ratio measures the blended costs of all debt funding.
- Net interest revenue/average earning assets: This measure, often called the net interest margin (NIM), of the level of spread-based income needs to be analyzed in the context of yield and expense ratios. Is a high ratio indicative of pricing, funding costs or level of risk taken? Has it been relatively stable or have there been recent changes? Remember that Fitch includes preferred stock dividends as part of total interest expense.
- Net interest income less loan impairment charges/average earning assets: By reducing net interest income by the cost of impaired loans, Fitch incorporates the costs of the loan portfolio into its analysis of the NIM.

### Other Operating Profitability Ratios

- Non-interest income/gross revenue: For many banks, fee-based income has become an increasing part of the revenue stream. As with asset-based income, the sources need to be considered as well as the overall income contribution and its volatility.
- Non-interest expense/gross revenues: This ratio, often call the efficiency or cost/income ratio, shows the extent to which operating expenses absorb operating revenues. It is most useful in the comparison of entities with similar business lines. It is often a headline ratio, leading to a “lower is better” mentality. This can be dangerous if the reasons behind the ratio are not fully explored.
- Pre-impairment operating profit/average equity: This ratio and the next one need to be evaluated in relationship to their post-impairment partners. They can be helpful in comparing banks with different impairment charging policies or levels.
- Pre-impairment operating profit/average total assets.

- Credit impairment charges/pre-impairment operating profit: This ratio distills the difference between the pre- and post-impairment ratios. It shows the extent to which net operating earnings are needed to cover credit impairment.
- Operating profit/average equity: This is the pre-tax “bottom-line” ratio of a bank’s core operations, expressing sustainable core-business profit before tax as a return on capital employed.
- Operating profit/average total assets: While more useful than ROA based on net income, this ratio is hard to analyze without first acquiring familiarity with the bank’s business and asset profile.
- Taxes/pre-tax profit: This is the effective tax rate and can be used as a proxy with operating profit to derive a sustainable profitability ratio. The appropriate level for this ratio will vary depending upon the tax rates of the localities in which it does business. It should be fairly consistent over time barring dramatic changes in tax rates.

## Other Profitability Ratios

Once non-recurring and non-operating factors are included in the data and ratios become more analytically obscure.

- Net income/average total equity: This ratio is more useful to shareholders than ROA because the ability to earn a strong return on capital is an indicator of dividend capacity and stock price performance. It is necessary to consider the effect of leverage on this ratio and its sustainability.
- Net income/average total assets: This ratio is included because of its widespread use rather than its analytical value. A combination of recurring and non-recurring items, operating and non-operating sources of revenue and expenses as well as its ignorance of asset-based and non-asset-based operations leaves it severely flawed.
- Fitch comprehensive income/average total equity: Comprehensive income is discussed above. By incorporating items taken directly through equity, it becomes a more complete “bottom-line” ratio than traditional ROE and ROA. Primary analysis, however, is still conducted on an operating basis.
- Fitch comprehensive income/average total assets: see above.
- Net income/average total assets plus average managed assets: This final profitability metric brings the level of managed off-balance-sheet volumes into the mix.

## Capitalization

Capital adequacy ratios (CARs) seek to measure whether the pool of permanent funds available to the bank is sufficient to neutralize the risks. They should be evaluated in light of the bank’s profitability, asset quality and liquidity.

- Fitch eligible capital/regulatory weighted risks: This is a key measure of capital coverage, reflecting an analytically adjusted measure of capital and risk weighted volumes both on- and off-balance-sheet.
- Tangible common equity/tangible assets: This is a crude measure of capital coverage. Goodwill and other intangible assets are deducted from common equity in the numerator and from total assets in the denominator. Total assets are as reported rather than weighted according to perceived risk of potential loss, and the denominator excludes any exposure to off-balance sheet items.

- Tier 1 regulatory capital ratio: This regulatory ratio is presented as reported by the bank.
- Total regulatory capital ratio: This regulatory ratio is presented as reported by the bank.
- Fitch eligible capital/Tier 1 regulatory capital: This ratio is an indication of whether there are important differences between regulatory capital and capital as defined by Fitch.

- Equity/total assets: This legacy ratio is included because it is widely used outside of Fitch.
- Cash dividends paid and declared/net income: This is the dividend on common shares only, with the dividend on preference shares included in interest expense. This ratio and the next reflect the bank's dividend policy, as well as its willingness to maintain that policy under varying financial scenarios. · Cash dividend paid or declared/Fitch comprehensive income: The use of comprehensive income makes this a more inclusive interpretation.
- Net income — cash dividends/total equity: This ratio, sometimes called internal capital generation, measures the capital generated and retained by the bank excluding any external capital infusions.

## Loan Quality

- Lending remains the primary business line for the banking industry, and credit quality remains the predominant source of risk. All of these ratios need to be considered in light of the definition the bank is using for “impaired loans” or its equivalent thereof, particularly when making comparisons across accounting systems.
- Growth of total assets: Asset growth can result from both internal growth and business combinations. Rapid growth can be a key sign of over-extension, but it is impossible to evaluate this ratio without considering the asset/liability mix, the growth and mix of off-balance-sheet volumes and the economic environment in which the bank is operating.
  - Growth of gross loans: This ratio should be evaluated in the context of the one above to determine the effect of strategic direction or business combinations. If loans are growing at a significantly different rate from assets, it may indicate a change in business strategy. It is also important to remember that rapid loan growth diminishes the apparent magnitude of charge-off and impairment ratios, because of the relatively high volume of unseasoned loans.
  - Impaired loans (NPLs)/gross loans: This ratio should be evaluated in comparison with other banks and over time.
  - Loan impairment reserves/gross loans: This ratio needs to be analyzed in terms of the bank's loan mix, considering what might be appropriate for each type of loan the bank makes and then building an appropriate blended allowance.
  - Reserves for impaired loans/impaired loans: The trend of this ratio is important, but its usefulness will relate to how effective a bank is in identifying specific impaired loans. It is also important to recognize that the performing portfolio needs to be reserved against for expected risk as well, although accounting standards may not allow for this.
  - Impaired loans less reserves for impaired loans/equity: As equity is the ultimate cushion for loan losses, it is important to monitor the trend and level of this ratio.
  - Loan impairment charges/ average gross loans: This ratio measures the income statement impact of credit quality management against the size of the loan portfolio.
  - Net charge-offs/average gross loans: Charge-off policy varies from country to country. Within a common judicial structure it is a good measure of credit quality and the bank's policy of recognizing loan losses. When the components of charge-offs and recoveries are disclosed a continuing high level of recoveries may indicate conservative management. Note that high recoveries from legacy loans may conceal escalating losses.
  - Impaired loans plus foreclosed assets/gross loans plus foreclosed assets: Primarily used for US banks, this ratio includes real estate acquired as the result of mortgage loan foreclosures. Note that a rising level of non-performing ratios and a falling level of charge-offs is highly suspect, while the reverse can signal a clean-up period.

## Liquidity

Liquidity ratios can only offer a starting point in the assessment of a bank's liquidity position, particularly when using consolidated financial statements. More important than any single liquidity ratio is the overall soundness of the bank. With that caveat, Fitch offers five ratios which indicate the basic structure of bank funding. Liquid assets are trading assets and loans and advances with a maturity of less than three months. Wholesale funding comprises other deposits and short-term borrowings, total long-term funding, trading liabilities and preference shares and hybrid capital.

- Loans/customer deposits;
- Loans/deposits and short-term funding;
- Liquid assets/total assets;
- Liquid assets/wholesale funding; and
- Wholesale funding/total funding and capital.

## Summary Analytics

### New format

### Original global format

#### Profitability ratios

#### Interest ratios

Interest income on loans/average net loans

1. Operating profit/total assets (av)

Interest expense on customer deposits/average customer deposits

2. Operating profit/total equity (av)

Interest income/average earning assets

3. Pre-tax profit/total assets (av)

Interest expense/average interest-bearing liabilities

4. Pre-tax profit/total equity (av)

Net interest revenue/average earning assets

5. Post-tax profit/total assets (av)

Net int. inc less loan impairment charges/av. earning assets

6. Post-tax profit/total equity (av)

#### Other operating profitability ratios

7. Post-tax profit less preference dividends/common equity (av)

Non-interest income/gross revenue

8. Pre provision operating profit/total assets (av)

Non-interest expense/gross revenues

9. Cost to income ratio

Pre-impairment op. profit/average equity

10. Net interest revenue/total assets (av)

Pre-impairment op. profit/average total assets

11. Net interest revenue/total equity (av)

Credit impairment charges/pre-impairment op. profit

Operating profit/average equity

Operating profit/average total assets

Taxes/pre-tax profit

#### Other profitability ratios

Published net income/average total equity

Published net income/average total assets

Fitch comprehensive income/average total equity

Fitch comprehensive income/average total assets

Published net income/av. total assets plus av. managed assets

#### Capitalization

Fitch eligible capital/regulatory weighted risks

1. Tier 1 capital ratio

Total weighted hybrid capital/Fitch eligible capital

2. Total capital ratio

Tier 1 regulatory capital ratio

3. Total equity/total assets

Total regulatory capital ratio

4. Common equity/total assets

Fitch eligible capital/tier 1 regulatory capital

5. Fitch grade capital/total assets

Equity/total assets

6. Internal capital generation

Cash dividends paid and declared/published net income

7. Net loans/total equity

Cash dividend paid and declared/Fitch comprehensive

8. Dividend pay-out ratio

income

Published net income - cash dividends/total equity

Loan quality

Growth of total assets

Growth of gross loans

Impaired loans(NPLs)/gross loans

Loan impairment reserves/gross loans

Reserves for impaired loans/impaired loans

Impaired loans less reserves for imp loans/equity

Loan impairment charges/average gross loans

Net charge-offs/average gross loans

Impaired loans plus foreclosed assets/gross loans  
foreclosed assets

Liquidity

Loans/customer deposits

Loans/deposits and short-term funding

Liquid assets/total assets

Liquid assets/wholesale funding

Wholesale funding/total funding and capital

1. Loan loss provisions/gross loans (av)

2. Loan loss provisions/pre provision  
operating profit

3. Loan loss provisions/net interest revenue

4. Specific loan loss reserves/total problem  
loans

5. Total loan loss reserves/total problem  
loans

6. Total loan loss reserves/gross loans

7. Total problem loans/gross loans

8. Problem loans net/total equity

9. Net charge-offs/gross loans (av)

1. Liquid assets/deposits and money market  
funfing

2. Liquid assets and marketable debt  
securities/deposits and money market  
funding

3. Net loans/deposits and money market  
funding

4. Net loans/total deposits

5. Net loans/total assets

6. Interbank ratio

Derivatives

Source: Fitch