Key parameters for analysing banking stocks essay sample

Finance, Banking

Unlike any other manufacturing or service company, a bank's accounts are presented in a different manner (as per banking regulations). The analysis of a bank account differs significantly from any other company. The key operating and financial ratios, which one would normally evaluate before investing in company, may not hold true for a bank (like say operating margins). Cash is the raw material for a bank. The ability to grow in the long-term therefore, depends upon the capital with a bank (i. e. capital adequacy ratio).

Capital comes primarily from net worth. This is the reason why price to book value is important. As a result, price to book value is important while analyzing a banking stock rather than P/E. But deduct the net non-performing asset from net worth to get a true feel of the available capital for growth.

Let's look at some of the key ratios that determine a bank's performance.

Net interest margin (NIM):

For banks, interest expenses are their main costs (similar to manufacturing cost for companies) and interest income is their main revenue source. The difference between interest income and expense is known as net interest income. It is the income, which the bank earns from its core business of lending. Net interest margin is the net interest income earned by the bank on its average earning assets. These assets comprises of advances, investments, balance with the central bank and money at call.

NIM = (Interest income – Interest expenses) / Average earning assets

Operating profit margins (OPM):

Banks operating profit is calculated after deducting administrative expenses, which mainly include salary cost and network expansion cost. Operating margins are profits earned by the bank on its total interest income. For some private sector banks the ratio is negative on account of their large IT and network expansion spending.

OPM = (Net interest income – Operating expenses) / Total interest income

Cost to income ratio:

Controlling overheads are critical for enhancing the bank's return on equity. Branch rationalization and technology upgrade account for a major part of operating expenses for new generation banks. Even though, these expenses result in higher cost to income ratio, in long term they help the bank in improving its return on equity. The ratio is calculated as a proportion of operating profit including non-interest income (fee based income).

Cost to income ratio = Operating expenses / (Net interest income + non interest income)

Other income to total income:

Fee based income account for a major portion of the bank's other income. The bank generates higher fee income through innovative products and adapting the technology for sustained service levels. This stream of revenues is not depended on the bank's capital adequacy and consequently, potential to generate the income is immense. The higher ratio indicates increasing proportion of fee-based income. The ratio is also influenced by

gains on government securities, which fluctuates depending on interest rate movement in the economy.

Credit to deposit ratio (CD ratio):

The ratio is indicative of the percentage of funds lent by the bank out of the total amount raised through deposits. Higher ratio reflects ability of the bank to make optimal use of the available resources. The point to note here is that loans given by bank would also include its investments in debentures, bonds and commercial papers of the companies (these are generally included as a part of investments in the balance sheet).

Capital adequacy ratio (CAR):

A bank's capital ratio is the ratio of qualifying capital to risk adjusted (or weighted) assets. For example, the central bank has set the minimum capital adequacy ratio at 10% for all banks. A ratio below the minimum defined by central bank indicates that the bank is not adequately capitalized to expand its operations. The ratio ensures that the bank do not expand their business without having adequate capital.

CAR = Tier I capital + Tier II capital / Risk weighted assets

NPA ratio:

The net non-performing assets to loans (advances) ratio is used as a measure of the overall quality of the bank's loan book. Net NPAs are calculated by reducing cumulative balance of provisions outstanding at a period end from gross NPAs. Higher ratio reflects rising bad quality of loans.

NPA ratio = Net non performing assets / Loans given

Provision coverage ratio:

The key relationship in analyzing asset quality of the bank is between the cumulative provision balances of the bank as on a particular date to gross NPAs. It is a measure that indicates the extent to which the bank has provided against the troubled part of its loan portfolio. A high ratio suggests that additional provisions to be made by the bank in the coming years would be relatively low (if gross non-performing assets do not rise at a faster clip).

Provision coverage ratio = (Cumulative provisions) / Gross NPAs

Profile of the Banking Sector in India:

The primary business of a bank is to accept deposits and give out loans. So in case of a bank, capital is a raw material as well as the final product. Bank accepts deposits and pays the depositor an interest on those deposits. The bank then uses these deposits to give out loans for which it charges interest from the borrower.

Of the cash reserve, a bank is mandated to maintain a certain percentage of deposits with the Reserve Bank of India (RBI) as CRR (cash reserve ratio), on which it earns lower interest. Whenever there is a reduction in CRR announced in the monetary policy, the amount available with a bank, to advance as loans, increases which acts as a positive for Banks in healthy credit off-take scenario.

The second part of regulatory requirement is to invest in Government Securities that is a part of its statutory liquidity ratio (SLR). The bank's revenues are basically derived from the interest it earns from the loans it gives out as well as from the fixed income investments it makes. If credit demand is lower, the bank increases the quantum of investments in Government Securities.

Apart from this, a bank also derives revenues in the form of fees that it charges for the various services it provides (like processing fees for loans and forex transactions). In developed economies, banks derive nearly 50% of revenues from this stream. This stream of revenues contributes a relatively lower 15% in the Indian context.

Having looked at the profile of the sector in brief, let us consider some key factors that influence a bank's operations.

One of the key parameters used to analyze a bank is the Net Interest Income (NII). NII is essentially the difference between the bank's interest revenues and its interest expenses. This parameter indicates how effectively the bank conducts its lending and borrowing operations (in short, how to generate more from advances and spend less on deposits).

Interest revenues:

Interest revenues = Interest earned on loans + Interest earned on investments + Interest on deposits with RBI.

Interest on loans:

Since banking operations basically deal with ‘ interest’, interest rates prevailing in the economy have a big role to play. So, in a high interest rate scenario, while banks earn more on loans, it must be noted that it has to pay higher on deposits also. But if interest rates are high, both corporates and retail classes will hesitate to borrow. But when interest rates are low, banks find it difficult to generate revenues from advances.

While deposit rates also fall, it has been observed that there is a squeeze on a bank when bank rate is soft. A bank cannot reduce interest rates on deposits significantly, so as to maintain its customer base, because there are other avenues of investments available to them (like mutual funds, equities, public savings scheme).

Since a bank lends to both retail as well as corporate clients, interest revenues on advances also depend upon factors that influence demand for money. Firstly, the business is heavily dependent on the economy. Obviously, government policies (say reforms) cannot be ignored when it comes to economic growth. In times of economic slowdown, corporates tighten their purse strings and curtail spending (especially for new capacities).

This means that they will borrow lesser. Companies also become more efficient and so they tend to borrow lesser even for their day-to-day operations (working capital needs). In periods of good economic growth, credit off-take picks up as corporates invest in anticipation of higher demand

going forward. Similarly, growth drivers for the retail segment are more or less similar to the corporate borrowers.

However, the elasticity to a fall in interest rate is higher in the retail market as compared to corporates. Income levels and cost of financing also play a vital role. Availability of credit and increased awareness are other key growth stimulants, as demand will not be met if the distribution channel is inadequate.

Interest on Investments and deposits with the RBI:
The bank's interest income from investments depends upon some key factors like government policies (CRR and SLR limits) and credit demand. If a bank had invested in Government Securities in a high interest rate scenario, the book value of the investment would have appreciated significantly when interest rates fall from those high levels or vice versa.

Interest expenses:
A bank's main expense is in the form of interest outgo on deposits and borrowings. This in turn is dependent on the factors that drive cost of deposits. If a bank has high savings and current deposits, cost of deposits will be lower. The propensity of the public to save also plays a crucial role in this process. If the spending power for the populace increases, the need to save reduces and this in turn reduces the quantum of savings.

The banking sector plays a very vital role in the working of the economy and it is very important that banks fulfill their roles with utmost integrity. Since banks deal with cash, there have been cases of mismanagement and greed

in the global markets. And hence, investors need to check up on the quality of management.

HOW TO MEASURE BANK PERFORMANCE

Although net income gives us an idea of how well a bank is doing, it suffers from one major drawback. It does not adjust for the bank's size, thus making it hard to compare how well one bank is doing relative to another. A basic measure of bank profitability that corrects for the size of the bank is the return on assets (ROA). Secondly, because the owners of a bank must know whether their bank is being managed well, ROA serves as a good method to identify it.

ROA = Net profit after taxes / assets

The return on assets provide information on how efficiently a bank is being run because it indicates how much profits are generated by each dollar of assets.

However, what the bank's owners (equity holders) care about most is how much the bank is earning on their equity investment. This information is provided by the other basic measure of bank profitability, the return on equity (ROE).

ROE = Net profit after taxes / equity capital

There is a direct relationship between return on assets (which measures how efficiently the bank is run) and the return on equity (which measures how well the owners are doing on their investment). This relationship is

determined by the equity multiplier (EM), the amount of assets per dollar of equity capital.

EM = Assets / Equity capital

ROE can also be expressed as a multiplication of ROA and EM

ROE = ROA * EM

This formula tells us what happens to the return on equity when a bank holds a smaller amount of capital (equity) for a given amount of assets. For example, X bank has $100 million of assets and $10 million of equity, which gives it an equity multiplier of 10 (= $100 million / $10 million). The Y bank, in contrast, has only $4 million of equity and $100 million of assets, which gives it and equity multiplier of 25 (= $100 million / $4million).

Suppose that these banks have been equally well run so that they have the same return on assets, 1%. The return on equity for the X bank equals to 1% * 10 = 10% , while the return on equity for the Y bank equals 1% * 25 = 25%. The equity holders in the Y bank are clearly a lot happier than the equity holders in the X bank because they are earning more than twice as high a return. We now can see why the owners of bank may not want it to hold a lot of capital. Given the return on assets, the lower the bank capital, the higher the return for the owners of the bank.

Another commonly used measure of bank performance is called the net interest margin (NIM). NIM is the difference between interest income and interest expenses as a percentage of total assets.

NIM = (Interest income – Interest expenses) / Assets

One of the bank's primary intermediation functions is to issue liabilities and use the proceeds to purchase income earnings assets. If a bank manager has done a good job of asset and liability management such that the bank earns substantial income on its assets and have low costs on its liability, profits will be high. How well a bank manages its asset and liabilities is affected by the spread between the interest earned on the bank's assets and the interest cost on its liabilities. This spread is exactly what net interest margin measures.

If the bank is able to raise funds with liabilities that have low interest costs and is able to acquire assets with high interest income, the net interest margin will be high and the bank is likely to be highly profitable. If the interest cost of its liabilities rises relatively to the interest earned on its assets, the net interest margin will fall, and bank profitability will suffer.