Evaluating the Performance of Axis Bank in terms of Capital Adequacy using Financial Indicators

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Abstract
In 1991, the Indian economy went through a process of economic liberalization, which was followed up by the initiation of fundamental reforms in the banking sector in 1992. One of the primary motives behind this drive was to introduce an element of market discipline into the regulatory process that would reinforce the supervisory effort of the Reserve Bank of India (RBI). Market discipline, especially in the financial liberalization phase, reinforces regulatory and supervisory efforts and provides a strong incentive to banks to conduct their business in a prudent manner. A decade and a half has elapsed since the initiation of banking sector reforms in India. Over this period the Indian banking sector has experienced a paradigm shift. Hence it is high time to make performance appraisal of this sector. It is against the above background that the present study has been undertaken. This paper examines the financial strength and soundness of Axis bank in terms of capital adequacy as well as the effectiveness of financial ratios used to assess the performance by applying correlation and t-test.

Keywords
RBI Norms, Financial performance, Capital adequacy ratios, Axis Bank

I. Introduction:

A sound financial system is indispensable for a healthy and vibrant economy. The banking sector constitutes a predominant component of financial services industry and the performance of any country is dependent on the performance of banks to a large extent. Banking institution in our country has been assigned a significant role in the financing process of planned economic growth. In 1969, 14 banks were nationalized with the objective of extending credit to all segments of economy. Since nationalization the banking sector in India has witnessed structural and dimensional changes. The second step in the process of nationalizing banks was taken in 1980, when six other major banks were nationalized. Directed interest rates on deposits and lending, exchange control, directed credit became the hallmark of this tightly regulated new structure. Following the balance of payment crisis in 1991-92, wide ranging reforms were initiated in almost all the spheres of economy including banking sector. A decade and a half has elapsed since the initiation of banking sector reforms in India. Over this period the Indian banking sector has experienced a paradigm shift. Hence it is high time to make performance appraisal of this sector. It is against the above background that the present study has been undertaken.

II. Literature Review:

A. RBI Norms for Capital Adequacy

Adequacy of capital, portion of borrowings as compared to deposits and credit to deposit ratio represent the soundness of a bank. These ratios are used to evaluate the performance of Axis bank. Capital base of financial institutions facilitates depositors in forming their risk perception about the institutions. Also, it is the key parameter for financial managers to maintain adequate levels of capitalization. Moreover, besides absorbing unanticipated shocks, it signals that the institution will continue to honor its obligations. The most widely used indicator of capital adequacy is capital to risk-weighted assets ratio (CRWA). According to Bank Supervision Regulation Committee (The Basle Committee) of Bank for International Settlements, a minimum 9 percent CRWA is required. Capital adequacy ultimately determines how well financial institutions can cope with shocks to their balance sheets. Thus, it is useful to track capital-adequacy ratios that take .A sound capital base strengthens confidence of depositors. This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world.The following ratios measure capital adequacy:

1. Capital aqdequacy ratio
2. Debt-Equity ratio
3. Advances to assets ratio

The Reason for selecting Axis bank from amongst New-Private Sector banks-Axis Bank was the first of the new private banks to have begun operations in 1994, after the Government of India allowed new private banks to be established. The Bank was promoted jointly by the Administrator of the specified undertaking of the Unit Trust of India (UTI - I), Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC) and other four PSU insurance companies, i.e. National Insurance Company Ltd., The New India Assurance Company Ltd., The Oriental Insurance Company Ltd. and United India Insurance Company Ltd.The Bank today is capitalized to the extent of Rs. 358.56 crores with the public holding (other than promoters) at 57.57%.The Bank's Registered Office is at Ahmedabad and its Central Office is located at Mumbai. Presently, the Bank has a very wide network of more than 713 branch offices and Extension Counters. The Bank has a network of over 2904 ATMs providing 24 hrs a day banking convenience to its customers. This is one of the largest ATM networks in the country.

III. Objective of the research Work:

Banks are special—all its stakeholders believe that. Trust of the depositors on a bank and trust of the bank on its borrowers form the bedrock of the banking business. The measure of this trust is the strength and soundness of a bank.
How one of the new private sector bank has fared in the first few years of 21st century?

- To study the overall financial position of the bank
- To analyze the adequacy of capital by using capital adequacy ratios
- To identify the financial strength and soundness of the bank and provide suggestions for improvement

IV. Data Collection

The present study is essentially based on secondary data.

Reports, publications of Axis bank, books, journals, magazines and newspapers constitute important sources of data and information.

V. Financial Indicators for Capital Adequacy

A. Capital adequacy ratio-

Capital adequacy reflects the overall financial position of the bank.

Banks in India with international exposure are required to maintain capital funds equal to 8% of their risk weighted assets. This percentage has been increased to 9% with effect from 31St march 2000. The above requirement was introduced from 1992 after acceptance of Narsimhan committee report which recommended observance of prudential norms by commercial banks and financial institutions in respect of income recognition, asset classification, provisioning and capital adequacy standards as prescribed by bank for international settlements (BIS)

$$CAR = \frac{\text{capital fund of the bank}}{\text{Risk weighted assets}} * 100$$

Capital fund includes Tier I and Tier II capital

In the table given below the capital fund is taken as x and risk weighted assets as y. It shows the co-efficient of correlation between x and y. To test the validity of our hypothesis we have taken the help of t-test.

The calculation of above is shown in table 1,2 for the period of 4 years from 2006 to 2010.

There is a very high degree of correlation between risk weighted assets and capital fund(r=0.94)

Table 1 : Table showing capital adequacy of Axis bank (Rs in billions)

Year	Capital fund (TierI and TierII)	Risk Weighted Assets	Ratio %
2007-08	118.91	849.96	13.99
2008-09	150.28	1097.71	13.69
2009-2010	223.08	1411.90	15.80
2010-2011	248.71	1966.60	12.65

Source: Compiled from Annual Reports of Axis Bank

Table 2 :

X	Y	dx =x -x -	dy=y-y	dx2	dy2	dx x dy
119	850	-66.25	-481.7	4389.06	232034.89	31912.62
150	1098	-35.25	-233.7	1242.56	54615.69	8237.92
223	1412	37.75	80.3	1425.06	6448.09	3031.32
249	1967	63.75	635.3	4064.06	403606.09	40500.37

Here $\sum x = 741$

$\sum y = 5327$

$\bar{x} = \sum x / N = 741/4 = 185.25$

$\bar{y} = \sum y / N = 5327/4 = 1331.7$

also $\sum dx^2 = 11120.74$ & $\sum dy^2 = 696704.76$

$\sum dx \times dy = 83682.635$

$$r = \sum dx \times dy / \sqrt{\sum dx^2 + \sum dy^2}$$

therefore r = +0.94

Testing our hypothesis with t – test:

Null Hypothesis: There is no significant difference between variables x and y

Alternative Hypothesis: we may therefore conclude that in general risk weighted assets have increased with an increase in capital fund. Bank has maintained the CAR ratio far above the regulatory requirement.

Calculation of t- test

$$t = r / \sqrt{1 - r^2} \times \sqrt{n - 2} = 0.94 / \sqrt{1 - (0.94)^2} \times \sqrt{4 - 2}$$

t = 5.51

Tabulated value of t for 2 degree of freedom at 5% level of significance is 4.303. since it is greater than the tabulated value, it is highly significant. Hence the null hypothesis is rejected and we conclude that risk weighted assets have increased with an increase in capital fund.

Interpretation:

CRAR is a ratio of Capital Fund to Risk Weighted Assets. Reserve Bank of India prescribes Banks to maintain a minimum Capital to risk-weighted Assets Ratio (CRAR) of 9 % with regard to credit risk, market risk and operational risk on an ongoing basis, as against 8 % prescribed in Basel documents. Capital adequacy ratio of the AXIS Bank was well with 13.69% for the year 2008 – 09, above prescribed by RBI. Higher the ratio the banks are in a comfortable position to absorb losses. In 2006 capital has been increased approx.40% to capital of 2005and total risk weighted asset increased by approximately 60%. So, CRAR for the year decreased. During 4 years (2007 – 2011) capital increased by approx. 3 times and risk weighted assets increased by approx. 2 times. So ratio of the year 2011 is increased. The reason of increase the ratio for the AXIS Bank in the last year is, the bank has raised capital of 1700 crore, by way of subordinated bonds (unsecured redeemable non-convertible debentures) qualifying as Tier II capital. The raising of this non-equity capital has helped the Bank continue its growth strategy and has strengthened its capital adequacy ratio.

B. Debt- equity ratio

This ratio indicates the degree of leverage of a bank. It indicates how much of the bank business is financed through debt and how much through equity. This is calculated as the proportion of total asset liability to net worth. 'Outside liability' includes total borrowing, deposits and other liabilities. 'Net worth' includes equity capital and reserve and surplus. Higher the ratio indicates less protection for the creditors and depositors in the banking system. Borrowings/ (Share Capital + reserves)

This ratio is arrived at by dividing the total borrowings and deposits by shareholders net worth, which includes equity capital and reserves and surplus. For the chosen period it stands as under-

Year	Debt- Equity ratio
2007-08	18.81
2008-09	10.63
2009-10	12.49
2010-11	10.70

Interpretation:

This ratio measures how much money a bank should safely be able to borrow over a long periods of time. Generally any bank that has debt to equity ratio over 40% to 50% should be looked at more carefully to see there are no liquidity issues. The Debt

to Equity Ratio measures how much money a bank should safely be able to borrow over long periods of time. Generally, any bank that has a debt to equity ratio of over 40% to 50% should be looked at more carefully to make sure there are no liquidity problems. In AXIS Bank, this ratio is more than the expected ratio from 2007 to 2011 .In2008 Axis Bank is showing very less ratio as compared to 2007 because their profit has been increasing and they have paid their liabilities during the year and vice versa in the year 2011.

C. Advances to assets ratio-

This is the ratio of total advances to total assets. Total advances also include receivables and total assets exclude revaluation of all the assets. The ratio and its interpretation is as under-

Year	Ratio
2007-08	0.50
2008-09	0.54
2000-10	0.55
2010-11	0.57

Interpretation:

An advance to assets ratio reflects a banks position and risk taking ability in lending funds. A higher ratio shows that the bank is aggressively lending funds and vice-versa. The general perception is that the private sector banks are more aggressive lenders as compared to their public sector counterparts. From 2006 to 2010 this ratio has increased for Axis bank which shows growth in investments.

VI. Conclusion

As per RBI's capital adequacy norms capital funds are classified into Tier-1 and Tier-2 capital. Tier-1 capital of the Bank consists of equity capital, statutory reserves, other disclosed free reserves, capital reserves and innovative perpetual debt instruments eligible for inclusion in Tier-1 capital that complies with requirement specified by RBI. The Tier-2capital consists of general provision and loss reserves, upper Tier-2 instruments and subordinate debt instruments eligible for inclusion in Tier-2 capital. Axis Bank has issued debt nstruments that form a part of Tier-1 and Tier-2 capital. The terms and conditions that are applicable for these instruments comply with the stipulated regulatory requirements.

Tier-1 bonds are non-cumulative and perpetual in nature with a call option after 10 years. Interest on Tier-1 bonds is payable either annually or semi-annually. Some of the Tier-1bonds have a step-up clause on interest payment ranging up to 100 bps. The Upper Tier-2 bonds have an original maturity of 15 years with a call option after 10 years. The interest on Upper Tier-2 bonds is payable either annually or semi-annually. Some of the Upper Tier-2 debt instruments have a step-up clause on interest payment ranging up to 100 bps. The Lower Tier-2 bonds have an original maturity between 5 to 10 years. The interest on lowerTier-2 capital instruments is payable either semi-annually or annually. Axis Bank is subject to the capital adequacy guidelines stipulated by RBI, which are based on the framework of the Basel Committee on Banking Supervision. As per the capital adequacy guidelines under Basel I, the Bank is required to maintain a minimum ratio of total capital to risk weighted assets (CRAR) of 9.0%, at least half of which is required to be Tier 1 Capital. In June 2008, RBI issued the Master Circular – Prudential Guidelines on Capital Adequacy and Market Discipline on Basel II. As per Basel II guidelines, Axis Bank is required to maintain a minimum CRAR of 9.0%, with minimum Tier 1 Capital ratio of 6.0%. In terms of RBI guidelines for implementation of Basel II, capital charge for credit and market risk for the financial year ended 31st March 2010 will be required to be maintained at the higher levels implied by Basel II or 80% of the minimum capital requirement computed as per the Basel I framework. For the year ended 31st March 2010, the minimum capital required to be maintained by Axis Bank as per Basel II guidelines is higher than that under Basel I guidelines. An assessment of the capital requirement of the Bank is carried out through a comprehensive projection of future businesses that takes cognizance of the strategic intent of the Bank, profitability of particular businesses and opportunities for growth. The proper mapping of credit, operational and market risks to this projected business growth enables assignment of capital that not only adequately covers the minimum regulatory capital requirement but also provides headroom for growth. The calibration of risk to business is enabled by a strong risk culture in the Bank aided by effective, technology-based risk management systems.

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