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9B17N005

FEDERAL BANK: DIVIDEND DISCOUNT VALUATION

Debasish Maitra and Varun Dawar wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In mid-2014, Snehlata Malhotra sat in her home office and pondered her personal investment strategy. In order to fund her children’s educational savings for the future, she was looking to invest in high growth stocks that were trading below their fair value (undervalued). Based on her understanding of the market and publicly available equity reports, she had narrowed her search to Federal Bank Limited (Federal Bank), a Kerala-based, old generation private sector bank with a balance sheet of nearly ₹700 billion.[[1]](#footnote-1) Federal Bank stock had fallen from a price of ₹54 in December 2012 to ₹46 on May 9, 2014 (see Exhibit 1). While the decrease was a part of market-wide volatility due to global economic uncertainties at the time, the Federal Bank stock had been affected more by large investments from foreign institutional investors—a total of 41 per cent of shares as of March 30, 2014.[[2]](#footnote-2) Malhotra wondered whether such a fall in price was warranted given Federal Bank’s strong fundamentals. Could Federal Bank be the undervalued investment Malhotra was looking for? What would be the fair fundamental value of Federal Bank? During her student days, Malhotra learned how to use the dividend discount model, a technique to identify and value potential undervalued stocks. She decided to use that traditional model to value the Federal Bank.

THE INDIAN BANKING SYSTEM

The Indian banking system was regulated by the Reserve Bank of India (RBI), an apex monetary authority set up in 1934 to regulate the functioning of banks operating within India. RBI’s main functions comprised ensuring monetary stability and operating the currency and credit system of the country to its advantage.[[3]](#footnote-3)

Under the *Reserve Bank of India Act, 1934*, banks in India were either scheduled or non-scheduled. Scheduled banks had a paid-up capital and reserves of an aggregate real and exchangeable value of not less than ₹0.5 million and were listed under the Second Schedule of the act.[[4]](#footnote-4) Scheduled banks could borrow money from the RBI at bank rate. Non-scheduled banks, also known as local area banks, were not listed under the Second Schedule. Non-scheduled banks could borrow from the RBI only in case of emergency.

Scheduled banks were further divided into five categories on the basis of ownership or nature of operation: (1) the State Bank of India and its subsidiaries, (2) nationalized banks, (3) regional rural banks, (4) foreign banks, and (5) Indian scheduled commercial banks in the private sector (see Exhibit 2). Finally, the private sector commercial banks were then divided into two categories: old generation and new generation. The old generation private banks existed before the banks were nationalized in 1969 but were too small or specialized for nationalization. New generation private banks emerged after the government banking policy was liberalized in the 1990s.

The aggregate deposits in the Indian banking system were ₹67 trillion at the end of March 2013 and had grown at a compound annual growth rate (CAGR) of nearly 16 per cent over the previous five years. Likewise, the total bank credit of the Indian banking system had grown at a CAGR of 17 per cent since 2009 and, as of 2016, stood at ₹52 trillion (see Exhibit 3). Public sector banks held the largest market share, controlling almost 73 per cent of the total banking assets. Private banks controlled 20 per cent and foreign banks controlled 7 per cent.[[5]](#footnote-5)

However, private banks surpassed public banks in financial performance, with better profitability and asset quality. While profit per employee for public sector banks had grown between 2010 and 2013 at a CAGR of 10.2, growth in the private banks had been much higher, at 20 per cent. Private banks were also performing better with credit: net non-performing loans as a percentage of total assets for public banks was double that of private banks, suggesting a deteriorating financial position in the public banks (see Exhibit 4). Because of these differences in financial performance, the valuation gap between public and private banks had been widening. The faster pace of growth was increasing the stock price for private banks, while valuations for most of the public banks were low.[[6]](#footnote-6)

FEDERAL BANK

Federal Bank, an old generation private sector bank based in the state of Kerala, was incorporated in 1931 in central Travancore with an authorized capital of ₹5,000. The bank operated with a large network of 1,103 branches and 1,172 automated teller machines (ATMs), making it the largest bank in Kerala and the fourth largest among private banks in India.[[7]](#footnote-7) The Federal Bank’s business mix consisted of a diversified loan book, well distributed between retail (32 per cent), small and medium enterprises (25 per cent), agriculture (11.6 per cent), and corporate (31.4 per cent).[[8]](#footnote-8)

To grow its loan book, the bank had been focusing on its traditional lending to the retail sector and to small and medium enterprises (SME) by introducing innovative products and services. The bank had also opened branches in regions both within and outside Kerala. Within the retail portfolio, the bank had primarily focused on housing and mortgage segments, which constituted almost 53 per cent of the total loans disbursed in the category.[[9]](#footnote-9) In fiscal year (FY) 2013/14, the Federal Bank’s overall loan book showed a decline of 2.3 per cent over the previous year, but the SMEs and retail segments registered positive growth of 6 per cent and 36 per cent respectively.[[10]](#footnote-10)

To improve its deposit mix, the bank had been striving to increase its current and savings account (CASA) balances to bring down the cost of funds and improve profitability. During FY 2013/14, CASA balances for the bank increased to ₹155.19 billion, representing an increase of 19 per cent over the previous year. Within the CASA balances, savings deposits constituted 83 per cent of the total balances and increased by 20 per cent in FY 2013/14; current deposits accounted for 17 per cent of the total balances and grew 16 per cent during the same period.[[11]](#footnote-11)

The bank was also performing well with asset quality, decreasing its non-performing assets. The bank’s net non-performing assets as a percentage of net advances declined from 0.98 per cent in FY 2012/13 to 0.74 per cent in FY 2013/14 (see Exhibit 5).

FINANCIAL PERFORMANCE AND MANAGEMENT OUTLOOK

To understand the current state of financial affairs and the management outlook for the future, Malhotra looked at the director’s report and the management discussion and analysis section of the Federal Bank’s annual report for FY 2013/14. The bank recorded a net profit of ₹8,380 million in FY 2013/14, a growth of almost 25 per cent over the previous year, driven mainly by improvement in net interest income and reduced credit cost.

The bank had also kept its focus on strengthening the fee-based income streams, resulting in robust growth in non-interest income by 4.3 per cent in FY 2013/14. Overall, the bank’s return on assets and return on equity that year stood at 1.2 per cent and 12.8 per cent respectively. The bank’s provision coverage against non-performing advances, expressed as a percentage of gross non-performing assets, amounted to 84.16 per cent in FY 2013/14, well above the RBI mandated minimum of 70 per cent. Lastly, the bank operated with a comfortable equity capital position; the bank’s capital adequacy ratio, computed according to Basel III guidelines, was 15.14 per cent as of March 2014.[[12]](#footnote-12)

Going forward, management identified the bank’s key challenges as improving operational efficiencies and implementing prudent risk management practices. Over the previous two years, the Indian banking sector had witnessed high price inflation, rupee depreciation, global industrial slowdown, and rising asset delinquencies. Nonetheless, Federal Bank’s management believed that the future outlook was stable due to the bank’s strong financial position, visible improvement in the macroeconomic environment, and easier external financing conditions.[[13]](#footnote-13)

VALUING FEDERAL BANK: DIVIDEND DISCOUNT VALUATION METHOD

The dividend discount valuation approach involved finding the present value of all of the bank’s future dividends during the forecasted period, and then discounting that value at the computed cost of equity. The result was the intrinsic value of the stock.

Forecasting Future Data for Dividend Discount Valuation

To forecast the future dividends for the valuation exercise, Malhotra needed to forecast the Federal Bank’s financial statements (see Exhibits 6 and 7 and the student spreadsheet, Ivey product no. 7B17N005). Given management’s future outlook and the bank’s strong financial position, Malhotra was confident that the Federal Bank would be able to grow its loan book at approximately 15 per cent per year for the next five years, until 2019. To forecast the deposits, Malhotra assumed a constant advances–deposit ratio in line with FY 2013/14. Fee growth and provisions were assumed to increase in line with the loan growth in the future. Malhotra further assumed that net interest margins, cost–income ratio, cash and bank balances, and CASAs would be stable and in line with the FY 2013/14 levels. A tax rate of 30 per cent was a reasonable assumption to work with. The notable change Malhotra expected was a growth in the dividend payout ratio to about 30 per cent—the higher figure reflecting the bank’s strong financial position.

The final consideration for Malhotra was determining the cost of equity that would be used as the discounting factor. To sort out the cost of equity, Malhotra estimated that the one-year beta for Federal Bank would be 1.1 and the average equity risk premium for India was 5 per cent. She visited the RBI’s website to get information about the risk-free rate. She learned that the yield on India’s 10-year government treasury securities was 8.84 per cent on March 31, 2014.[[14]](#footnote-14)

Before proceeding to the dividend discount valuation, Malhotra also collected data on the price to earnings (P/E) ratios and price to book (P/B) ratios for comparable banks, so she could assess the Federal Bank’s relative valuation (see Exhibit 8). The P/E ratio tended to indicate how much investors were willing to pay for each Indian rupee earned. The P/B ratio, on the other hand, compared the bank’s stock price to the reported book value for shares. Both ratios were widely used to compare the metrics of a particular company to its peer set or industry competitors.

With all this information in hand, Malhotra set out to value Federal Bank using the dividend discount model. She wondered whether her calculated fair value would be higher or lower than the market price, and whether Federal Bank would, in fact, be the stock she was looking for.

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EXHIBIT 1: FEDERAL BANK STOCK PRICE (2010–2014)

Source: “Federal Bank Ltd.,” Yahoo Finance, accessed May 20, 2016, http://in.finance.yahoo.com.

EXHIBIT 2: LIST OF BANKS by Category

State Bank of India and Subsidiaries

State Bank of India

State Bank of Bikaner & Jaipur

State Bank of Hyderabad

State Bank of Mysore

State Bank of Patiala

State Bank of Travancore

Nationalized Banks

Allahabad Bank

Andhra Bank

Bank of Baroda

Bank of India

Bank of Maharashtra

Canara Bank

Central Bank of India

Corporation Bank

Dena Bank

IDBI Bank Ltd.

Indian Bank

Indian Overseas Bank

Oriental Bank of Commerce

Punjab and Sind Bank

Punjab National Bank

Syndicate Bank

UCO Bank

Union Bank of India

United Bank of India

Vijaya Bank

Old Private Sector Banks

Catholic Syrian Bank

City Union Bank

Dhanlaxmi Bank

Federal Bank

ING Vysya Bank

Jammu & Kashmir Bank

Karnataka Bank

Karur Vysya Bank

Lakshmi Vilas Bank

Nainital Bank

Ratnakar Bank

South Indian Bank

Tamilnad Mercantile Bank

New Private Sector Banks

Axis Bank

Development Credit Bank

HDFC Bank

ICICI Bank

IndusInd Bank

Kotak Mahindra Bank

Yes Bank

Foreign Banks

AB Bank

Abu Dhabi Commercial Bank

American Express Banking Corp.

Antwerp Diamond Bank

Australia and New Zealand Banking Group

Bank Internasional Indonesia

Bank of America

Bank of Bahrain & Kuwait

Bank of Ceylon

Bank of Nova Scotia

Bank of Tokyo-Mitsubishi UFJ

Barclays Bank

BNP Paribas

Chinatrust Commercial Bank

Citibank

Commonwealth Bank of Australia

Credit Agricole

Credit Suisse AG

DBS Bank

Deutsche Bank

FirstRand Bank

Hong Kong & Shanghai Banking Corporation

HSBC Bank Oman S.A.O.G.

Industrial and Commercial Bank of China

JP Morgan Chase Bank

JSC VTB Bank

Krung Thai Bank

Mashreqbank

Mizuho Corporate Bank

National Australia Bank

Rabobank International

Royal Bank of Scotland

Sberbank

Shinhan Bank

Societe Generale

Sonali Bank

Standard Chartered Bank

State Bank of Mauritius

Sumitomo Mitsui Banking Corporation

UBS AG

United Overseas Bank

Westpac Banking Corporation

Woori Bank

Source: “Table of Contents,” in Reserve Bank of India*, A Profile of Banks 2012–13*, accessed May 20, 2016, https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/APB30091213F.pdf.

EXHIBIT 3: COMMERCIAL BANKS STATISTICS (₹ billions)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **FY** | **2008/09** | **2009/10** | **2010/11** | **2011/12** | **2012/13** |
| Aggregate deposits of scheduled commercial banks in India | 38,341 | 44,928 | 52,080 | 59,091 | 67,505 |
| Bank credit of scheduled commercial banks in India | 27,755 | 32,448 | 39,421 | 46,119 | 52,605 |

Note: FY = fiscal year, ending March 31st annually

Source: Reserve Bank of India, *Statistical Tables Relating to Banks in India 2012–13*, accessed May 20, 2016, https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0STR191113FL.pdf, XI.

EXHIBIT 4: KEY FINANCIAL PARAMETERS OF PUBLIC AND PRIVATE BANKS IN INDIA

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Public Sector Banks** | | | | **Private Sector Banks** | | | |
| **FY** | Profit per Employee (₹ million) | Return on Assets | Capital Adequacy Ratio | Net NPA Ratio | Profit per Employee (₹ million) | Return on Assets | Capital Adequacy Ratio | Net NPA Ratio |
| **2008/09** | 0.47 | 1.03 | 13.49 | 0.94 | 0.62 | 1.13 | 15.23 | 1.29 |
| **2009/10** | 0.53 | 0.97 | 13.27 | 1.10 | 0.72 | 1.28 | 17.43 | 1.04 |
| **2010/11** | 0.59 | 0.96 | 13.08 | 1.09 | 0.94 | 1.43 | 16.46 | 0.56 |
| **2011/12** | 0.64 | 0.88 | 13.23 | 1.53 | 0.92 | 1.53 | 16.21 | 0.46 |
| **2012/13** | 0.63 | 0.78 | 12.38 | 2.02 | 1.07 | 1.63 | 16.84 | 0.52 |

Note: FY = fiscal year, ending March 31st annually; NPA = non-performing asset

Source: “Database on Indian Economy,” Reserve Bank of India, accessed June 8, 2014, http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications.

EXHIBIT 5: FINANCIAL PARAMETERS OF FEDERAL BANK

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **FY** | **2009/10** | **2010/11** | **2011/12** | **2012/13** | **2013/14** |
| Advances (₹ million) | 269,500 | 319,530 | 377,560 | 451,950 | 441,570 |
| Deposits (₹ million) | 360,580 | 430,150 | 489,370 | 576,150 | 597,310 |
| Net Interest Income (₹ million) | 14,110 | 17,470 | 19,530 | 19,750 | 22,290 |
| Current Account, Savings Account (%) | 26 | 27 | 27 | 27 | 31 |
| Return on Assets (%) | 1.15 | 1.34 | 1.41 | 1.35 | 1.20 |
| Return on Equity (%) | 10.30 | 11.98 | 14.37 | 14.03 | 12.80 |
| Net Non-Performing Assets (%) | 0.48 | 0.60 | 0.53 | 0.98 | 0.74 |
| Number of Automated Teller Machines | 732 | 803 | 1,005 | 1,172 | 1,359 |
| Number of Branches | 672 | 743 | 950 | 1,103 | 1,174 |

Note: FY = fiscal year, ending March 31st annually

Source: “Financial Results,” Federal Bank Limited, accessed May 20, 2016, www.federalbank.co.in/financial-result.

EXHIBIT 6: FEDERAL BANK INCOME STATEMENT (₹ million, except share Data)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **FY** | **2009/10** | **2010/11** | **2011/12** | **2012/13** | **2013/14** |
| **INCOME** |  |  |  |  |  |
| Interest Earned | 36,732 | 40,520 | 55,584 | 61,676 | 69,461 |
| Interest/discount on advances/bills | 28,497 | 31,688 | 41,898 | 46,357 | 50,111 |
| Interest on balances with RBI and other interbank funds | 299 | 106 | 349 | 564 | 524 |
| Income on investments | 7,834 | 8,680 | 13,157 | 14,646 | 17,768 |
| Others | 102 | 46 | 180 | 109 | 1,058 |
| Other Income | 5,309 | 5,168 | 5,323 | 6,644 | 6,938 |
| Commission, exchange and brokerage | 1,053 | 2,502 | 2,516 | 3,047 | 3,338 |
| Profit/(loss) on sale of investments (net) | 1,077 | 458 | 821 | 2,058 | 1,562 |
| Profit on sale of fixed assets | 4 | 3 | 3 | 2 | 13 |
| Foreign exchange gains | 446 | 572 | 842 | 794 | 1,251 |
| Dividend received | 47 | 35 | 51 | 59 | 147 |
| Provisions written back | 1,277 | 1,461 | 857 | 481 | 415 |
| Service fee | 877 | 0 | 0 | 0 | 0 |
| Miscellaneous income | 528 | 137 | 233 | 204 | 212 |
| **TOTAL INCOME** | **42,041** | **45,688** | **60,907** | **68,320** | **76,399** |
|  |  |  |  |  |  |
| **EXPENDITURE** |  |  |  |  |  |
| Interest Expended | 22,624 | 23,054 | 36,050 | 41,929 | 47,175 |
| Interest on deposits | 21,683 | 21,620 | 33,313 | 38,375 | 42,095 |
| Interest on RBI/interbank borrowings | 1 | 99 | 485 | 779 | 1,121 |
| Other interest | 941 | 1,336 | 2,252 | 2,774 | 3,959 |
| Operating Expenses and Administrative Expenses | 6,769 | 8,361 | 9,793 | 11,845 | 14,421 |
| Payments to and provisions for employees | 3,661 | 4,804 | 5,439 | 6,315 | 7,715 |
| Rent, taxes, and lighting | 711 | 796 | 948 | 1,327 | 1,612 |
| Printing and stationery | 89 | 102 | 104 | 126 | 154 |
| Advertisement and sales promotion | 105 | 181 | 161 | 127 | 206 |
| Depreciation on bank’s property | 502 | 543 | 567 | 787 | 937 |
| Director's fees, allowances, and expenses | 10 | 7 | 7 | 8 | 11 |
| Auditor's fees and expenses | 69 | 28 | 45 | 53 | 58 |
| Legal fees | 48 | 54 | 50 | 58 | 43 |
| Communication expenses | 150 | 189 | 276 | 323 | 435 |
| Repairs and maintenance | 193 | 230 | 373 | 439 | 413 |
| Insurance | 320 | 358 | 435 | 473 | 579 |
| Other expenses | 911 | 1,069 | 1,389 | 1,810 | 2,255 |
| Provisions and Contingencies | 4,053 | 5,254 | 3,370 | 2,608 | 2,684 |
| Provision for investments | (977) | 111 | 349 | (368) | 1,116 |
| Others provisions | 5,030 | 5,143 | 3,021 | 2,976 | 1,568 |
| **Profit Before Tax** | **8,595** | **9,018** | **11,695** | **11,938** | **12,120** |
| Taxes | 3,950 | 3,147 | 3,927 | 3,556 | 3,731 |
| **Profit After Tax** | **4,645** | **5,871** | **7,768** | **8,382** | **8,389** |
|  |  |  |  |  |  |
| Number of outstanding shares | 855 | 855 | 855 | 855 | 855 |
| Adjusted earnings per share (₹) | 5.43 | 6.86 | 9.08 | 9.80 | 9.81 |
| Dividend per share (₹) | 1.00 | 1.70 | 1.80 | 1.80 | 2.00 |

Note: FY = fiscal year, ending March 31st annually; RBI = Reserve Bank of India; figures in last three rows reflect adjusting for share split from ₹10 each to ₹2 each, done by the company with effect from October 2013

Source: “Federal Bank Financials,” Ace Analyser, accessed May 20, 2016, www.aceanalyser.com.

EXHIBIT 7: FEDERAL BANK BALANCE SHEET (₹ million)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **FY** | **2009/10** | **2010/11** | **2011/12** | **2012/13** | **2013/14** |
| **SOURCES OF FUNDS** |  |  |  |  |  |
| Share capital | 1,710 | 1,710 | 1,710 | 1,711 | 1,711 |
| Total reserves | 45,194 | 49,376 | 55,353 | 61,936 | 67,795 |
|  |  |  |  |  |  |
| **Deposits** | **360,580** | **430,148** | **489,371** | **576,149** | **597,313** |
| Demand deposits | 18,313 | 24,058 | 25,459 | 29,089 | 33,796 |
| Savings deposit | 76,111 | 91,483 | 109,299 | 127,432 | 152,843 |
| Term deposits/fixed deposits | 266,156 | 314,607 | 354,613 | 419,627 | 410,674 |
| **Borrowings** | **15,468** | **18,884** | **42,410** | **51,870** | **56,880** |
| Borrowings from Reserve Bank of India | 0 | 1,000 | 900 | 3,300 | 4,450 |
| Borrowings from other banks | 5,000 | 0 | 582 | 322 | 322 |
| Borrowings from other financial institutions | 6,881 | 14,173 | 27,640 | 34,339 | 39,033 |
| Borrowings in the form of bonds/debentures | 3,200 | 3,060 | 0 | 0 | 1,978 |
| Borrowings from out of India | 387 | 651 | 13,289 | 13,909 | 11,096 |
| **Other Liabilities and Provisions** | **13,804** | **14,446** | **17,423** | **18,664** | **22,243** |
| Bills payable | 362 | 243 | 205 | 302 | 228 |
| Interoffice adjustment liabilities | 1,926 | 1,824 | 1,637 | 1,857 | 1,928 |
| Interest accrued | 1,452 | 1,492 | 2,659 | 688 | 1,726 |
| Deferred tax liabilities | 840 | 0 | 642 | 0 | 2,857 |
| Provision for standard assets | 1,452 | 1,596 | 1,960 | 2,454 | 2,456 |
| Proposed dividend | 855 | 1,454 | 1,539 | 1,540 | 1,711 |
| Corporate dividend tax payable | 142 | 236 | 250 | 262 | 279 |
| Other liabilities and provisions | 6,775 | 7,601 | 8,531 | 11,563 | 11,058 |
| **Total Liabilities** | **436,756** | **514,564** | **606,268** | **710,329** | **745,941** |
|  |  |  |  |  |  |
| **APPLICATION OF FUNDS** |  |  |  |  |  |
| **Cash and Balance with Reserve Bank of India** | **23,189** | **29,351** | **24,241** | **27,425** | **31,043** |
| Cash with RBI | 20,420 | 26,024 | 20,283 | 22,136 | 25,001 |
| Cash in hand and others | 2,769 | 3,327 | 3,958 | 5,289 | 6,042 |
| **Balances with banks and money at call** | **4,045** | **8,133** | **11,084** | **9,775** | **14,251** |
| Bank balance and call money in India | 3,820 | 7,136 | 9,678 | 6,890 | 5,733 |
| Bank balance and call money outside India | 226 | 997 | 1,406 | 2,885 | 8,518 |
| **Investments in India** | **130,546** | **145,377** | **174,025** | **211,546** | **241,179** |
| Government of India/state government securities | 92,775 | 99,645 | 115,312 | 145,751 | 158,231 |
| Approved securities—others | 8 | 4 | 0 | 0 | 0 |
| Equity shares—corporate | 1,796 | 1,681 | 1,907 | 2,564 | 1,758 |
| Debentures and bonds | 6,498 | 6,053 | 9,604 | 8,017 | 11,361 |
| Subsidiaries and/or joint ventures/associates | 1,270 | 2,170 | 3,959 | 3,980 | 3,980 |
| Others (mutual fund units, priority sector deposits, pass-through certificates, certificates of deposit/commercial paper) | 28,199 | 35,824 | 43,242 | 51,234 | 65,850 |
| **Advances** | **269,501** | **319,532** | **377,560** | **440,967** | **434,361** |
| Bills purchased and discounted | 12,167 | 8,986 | 18,538 | 14,939 | 13,029 |
| Cash credit, overdraft, and loans repayable | 139,032 | 174,115 | 216,832 | 265,154 | 229,775 |
| Term loans | 118,302 | 136,431 | 142,189 | 160,874 | 191,558 |
|  |  |  |  |  |  |
| Capital work in progress | 0 | 0 | 0 | 24 | 226 |
| Net block | 2,898 | 2,898 | 3,261 | 3,975 | 4,023 |
| Other assets | 6,577 | 9,273 | 16,096 | 16,618 | 20,859 |
| **Total Assets** | **436,756** | **514,564** | **606,268** | **710,329** | **745,941** |

Note: FY = fiscal year, ending March 31st annually; RBI = Reserve Bank of India

Source: “Federal Bank Financials,” Ace Analyser, accessed May 20, 2016, www.aceanalyser.com.

EXHIBIT 8: RELATIVE VALUATION METRICS FOR COMPARABLE FIRMS, as of March 31, 2014

|  |  |  |
| --- | --- | --- |
| **Bank Name** | **P/E Ratio** | **P/B Ratio** |
| Federal Bank | 4.9x | 0.6x |
| **(Private Sector Banks)** |  |  |
| ICICI Bank | 14.8x | 2.0x |
| Axis Bank | 11.1x | 1.8x |
| HDFC Bank | 21.3x | 4.1x |
| Kotak Bank | 33.3x | 4.1x |
| **(Public Sector Banks)** |  |  |
| State Bank of India | 13.2x | 1.2x |
| Punjab National Bank | 8.3x | 0.8x |
| Canara Bank | 5.1x | 0.5x |

Note: P/E = price to earnings; P/B = price to book

Source: Created by the author with information from “Banks—Private Sector—Standalone,” CNBC TV 18 moneycontrol, accessed May 20, 2016, www.moneycontrol.com/stocks/data-bank/standalone/banks-private-sector/1/annual/name; “Banks—Public Sector—Annual,” CNBC TV 18 moneycontrol, accessed May 20, 2016, www.moneycontrol.com/stocks/data-bank/standalone/banks-public-sector/1/annual/name.

1. ₹ = INR = Indian rupee; all currency amounts are in ₹ unless otherwise specified; US$1 = ₹59.20 as of May 2014. [↑](#footnote-ref-1)
2. Federal Bank Ltd., *Investor Information Q4—FY14,* 7, accessed May 20, 2016, www.federalbank.co.in

   /documents/10180/735779/Investor+Presentation+-+Q4-+FY+2013-14/4dde17f8-f8f2-407f-8621-cf241747d10b. [↑](#footnote-ref-2)
3. Reserve Bank of India, *Reserve Bank of India: Functions and Working,* n.d., 3, accessed June 20, 2016, https://rbidocs.rbi.org.in/rdocs/Content/PDFs/FUNCWWE080910.pdf. [↑](#footnote-ref-3)
4. “Annual Account Data,” Reserve Bank of India, accessed June 15, 2016, www.rbi.org.in/scripts/Explanatory.aspx. [↑](#footnote-ref-4)
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