

Treasury Management in Indian Private Sector Banks - A Case of HDFC Bank

Prof. Uma Ghosh

Assistant Professor, Institute for Technology and Management, Navi Mumbai, Maharashtra, India

Abstract:

The case deals with the importance of the treasury management in the banking system. The main task of the treasury department of any bank is to assure that the bank's assets equivalent its liabilities as much as possible. Making various financial models that aid in forecasting the amount of net interest income that the bank stands to make under different economic conditions is the responsibility of the treasury department. It also provides a detailed view of the treasury management of the HDFC Bank for the selected years, and the breakup of investments. In accordance with the RBI guidelines, investments are classified on the date of purchase into "Held for Trading" ('HFT'), "Available for Sale" ('AFS') and "Held to Maturity" ('HTM') categories. Under each of these categories, investments are further classified under six groups – Government Securities, Other Approved Securities, Shares, Debentures and Bonds, Investments in Subsidiaries / Joint Ventures, and Other Investments. Further, the case critically evaluates a comparison of details of category-wise investments of the HDFC Bank and the ICICI Bank for the selected years. The analysis supports the declaration that RBI announced the HDFC Bank and the ICICI Bank as Domestic Systematically Important Bank (D-SIB), which are the Safest Banks in India where your money is safe in March 2023. The case can serve as a tool for investors and stakeholders for analysing stocks in the banking sector.

Type of Case: Decisional and Applied.

Keywords: Treasury management, banking system, net profit, Held for Trading(HFT), Available for Sale(AFS) and Held to Maturity (HTM), India.

Introduction of the banking sector

The banking sector contributes significantly to economic growth not just by directing money towards investments but also by increasing the efficiency with which resources are allocated. Recent empirical data support the idea that the banking system contributes to economic growth more through increased resource allocation efficiency than through the transfer of resources from savers to investors. Nowadays, it is believed that a strong banking system is a crucial prerequisite for development.

The Reserve Bank of India (RBI), commercial banks, cooperative banks, and development banks (development finance institutions) make up India's banking system. The foundation of India's financial sector is made up of these institutions, which serve as a meeting ground for investors and savers. Banks are crucial to the development of underdeveloped nations because they help to mobilise resources and effectively allocate them.

Safest Bank in India: nation's most trusted banks

Recently (THESE banks are 'too big to fail', RBI list revealed, Jan 08, 2023), the RBI published a list of the safest banks in India. These banks are HDFC, ICICI, and SBI, respectively. These banks are too called as D-SIBs. Additionally, the RBI has specified where your money is secure. Domestic Systematically Important Bank is referred to as D-SIB. Every year, RBI releases their list. These are the kinds of banks whose failure might have a significant impact on a nation's economy. In brief, they cannot be permitted to drown.

In 2008's global recession, rather than managing the economy, large banks also failed. Large nations got stuck in trouble in such situation. Then it was felt that certain banks would need to be chosen to support the nation's economy through such trouble. The government would work to save these banks,

if there are any problem, and D-SIB began in this manner. The RBI established a framework for this in the year 2014, released the first list of D-SIB starting in 2015. SBI and ICICI Bank came in first and second, respectively, on the list. In response, HDFC Bank joined in 2017.

These banks are listed among the D-SIB banks, whose combined assets are greater than 2% of the GDP of the nation. The top two banks are currently ICICI Bank and HDFC Bank, with SBI in third place (Maurya, March 8, 2023). Certain regulations also apply to these banks. They must, for instance, invest a portion of their risk-weighted assets in Tier-1 capital. Tier-1 capital is mostly consisting of liquid assets like cash and stocks.

Treasury management

Treasury management is very much important in the banking system and treasury department is the most important amongst the various departments present at banks. Treasury management incorporates management of financial assets of an organisation with the significant objective of maximising the firm's liquidity and moderating its operational, and financial risk. The term treasury management is for all the activities and processes included in administrating a company's or organization's money, which includes such as cash flow predicting, investing, risk estimation, and regular operations related to banking and invoicing.

The management of cash flows, banking, money-market, and capital-market transactions are all included in the scope of Treasury management, along with the effective control of the risks connected to those operations and the pursuit of optimum performance in line with those risks. The main task of the treasury department of any banks is to assure that the bank's assets equivalent its liabilities as much as possible. Making various financial models that aid in forecasting the amount of net interest income that the bank stands to make under different economic conditions is the responsibility of the treasury department.

The treasury department's responsibility also extends to foreseeing the precise degree to which outside shocks, such as changes in interest rates, will have an impact on this non-interest revenue. The treasury department compiles this crucial data and then provides it to decision-makers, who then choose the kind of assets they wish to show on the bank's balance sheet. Following that, these choices are further turned into loan goals that bank employees must achieve. In addition, the bank avoids using specific types of deposit liabilities depending on the information it receives from the treasury. As a result, the Treasury Department has a significant impact on the bank's ability to approve loans as well as accept deposits.

HDFC Bank –

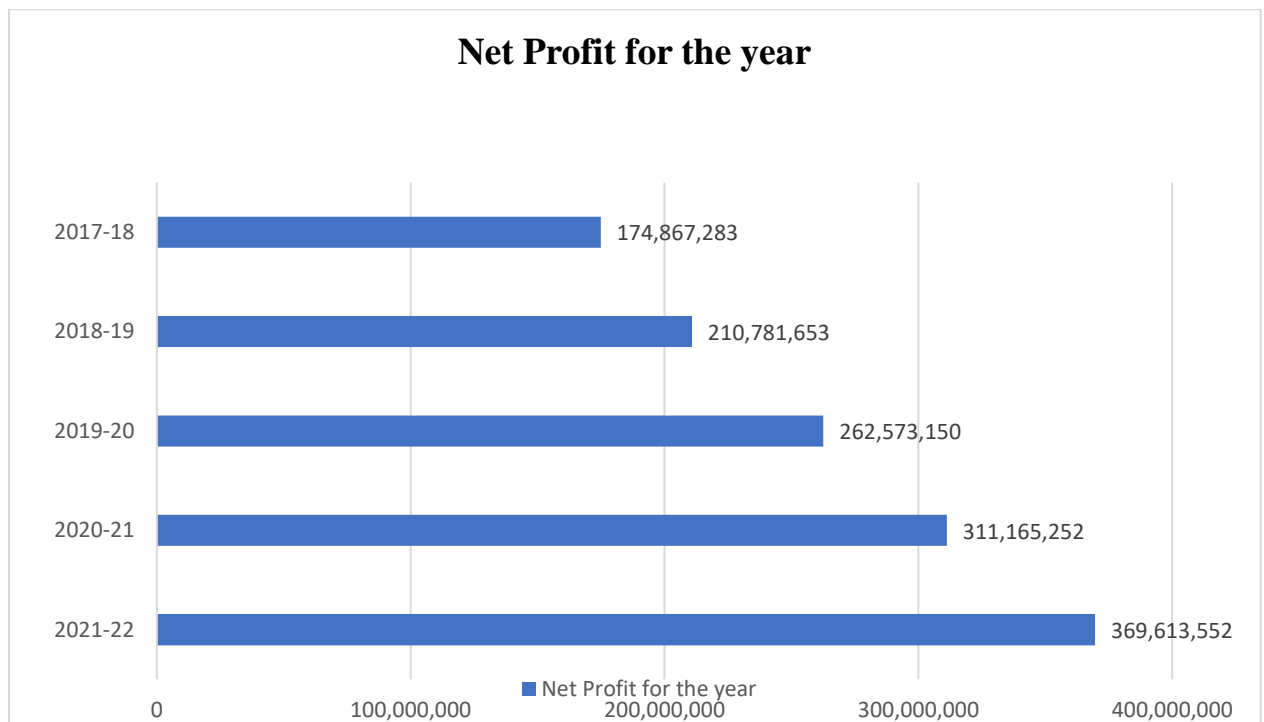
The HDFC bank started operations as a Scheduled Commercial Bank in January 1995, and was incorporated in August 1994 in the name of HDFC Bank Limited, with its registered office in Mumbai, India. The bank commenced operations as a Scheduled Commercial Bank in January 1995. The HDFC Bank had a nationwide distribution network of 7,821 branches and 19,727 ATMs, Cash Deposit & Withdrawal Machines (CDMs) across 3,811 cities, as of March 31, 2023, (About HDFC Bank, 2023).

HDFC Bank –Review of Treasury measurement.

I. Treasury operation:

- 1. Net Profit** -Analysis of Net Profit for the last 5 years – 2017-18, 2018-19, 2019-20, 2020-21 and 2021-22.

	Rs. in '000	Rs. in '000	Rs. in '000	Rs. in '000	Rs. in '000
Year	2021-22	2020-21	2019-20	2018-19	2017-18
Net Profit for the year	36,96,13,552	31,11,65,252	26,25,73,150	21,07,81,653	17,48,67,283



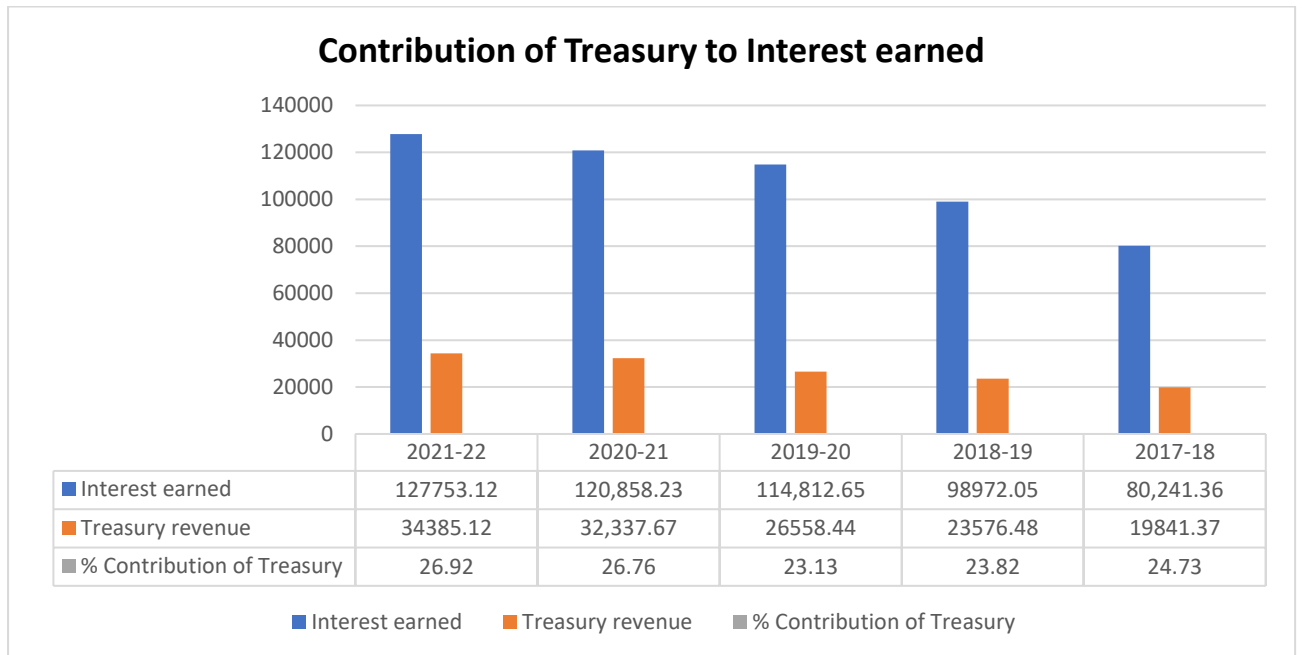
Analysis: The Net Profit of HDFC Bank has been increased from Rs. 17,486.73 crores to 36,961.36 crores from the year 2017-18 to 2021-22, which indicates that there is an increase in Net profit of Rs. 19,474.63 crores, which is 52.69% increase over the 5 years.

2. Treasury–

The Treasury is the custodian of the Bank’s cash/liquid assets and manages its investments in securities and other market instruments. It manages the liquidity and interest rate risks on the balance sheet and is also responsible for meeting statutory reserve requirements. It manages the treasury needs of customers and earns a fee income generated from transactions customers undertake with the Bank, while managing their foreign exchange and interest rate risks. The treasury segment primarily consists of net interest earnings from the Bank’s investment portfolio, money market borrowing and lending, gains or losses on investment operations and on account of trading in foreign exchange and derivative contracts.

➤ **Contribution of Treasury to Interest earned –**
(Rs. in crores)

Year	2021-22	2020-21	2019-20	2018-19	2017-18
Interest earned	127753.12	1,20,858.23	1,14,812.65	98972.05	80,241.36
Treasury revenue	34385.12	32,337.67	26558.44	23576.48	19841.37
% Contribution of Treasury	26.92%	26.76%	23.13%	23.82%	24.73%

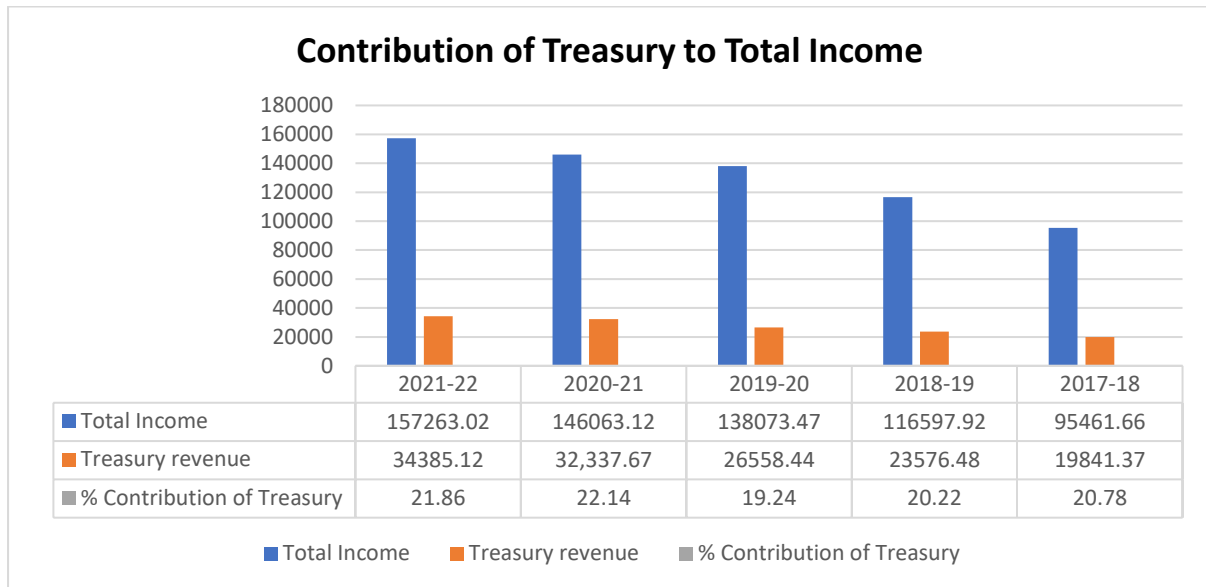


Analysis:Contribution of Treasury to Interest earned of HDFC Bank has increased from 24.73% in 2017-18 to 26.92% during 2021-22, but it got reduced to 23.82% and 23.13% during 2018-19 and 2019-20respectively and has again started increasing in 2020-21 by 26.76%.

➤ **Contribution of Treasury to Total Income–**

(Rs. in crores)

Year	2021-22	2020-21	2019-20	2018-19	2017-18
Total Income	157263.02	146063.12	138073.47	116597.92	95461.66
Treasury revenue	34385.12	32,337.67	26558.44	23576.48	19841.37
% Contribution of Treasury	21.86%	22.14%	19.24%	20.22%	20.78%



Analysis: Contribution of Treasury to Total income of HDFC Bank has been increased from 20.78% in 2017-18 to 22.14% during 2020-21, but it has been reduced to 21.86% in the year 2021-22. In addition, during 2018-19 and 2019-20 it has been reduced to 20.22% and 19.24% respectively.

II. Breakup of Investments:

HDFC Bank maintains a portfolio of Government Securities inline with the regulatory norms governing the Statutory Liquidity Ratio (SLR). A significant portion of these SLR securities are in ‘Held-to- Maturity’ (HTM) category, while some are ‘Available for Sale’ (AFS). The Bank is also a primary dealer for Government Securities. As a part of this business, the Bank holds fixed income securities as ‘Held for Trading’ (HFT).

In accordance with the RBI guidelines, investments are classified on the date of purchase into “Held for Trading”(‘HFT’), “Available for Sale” (‘AFS’) and “Held to Maturity” (‘HTM’) categories. Under each of these categories, investments are further classified under six groups – Government Securities, Other Approved Securities, Shares, Debentures and Bonds, Investments in Subsidiaries / Joint Ventures, and Other Investments.

Investments that are held for resale within 90 days from the date of purchase are classified under HFT category. Investments which the Bank intends to hold till maturity are classified under HTM category. Investments in the equity of subsidiaries / joint ventures are categorised as HTM. Investments which are not classified in either of the above categories are classified under AFS category.

The Bank undertakes short sale transactions in Central Government dated securities. The short position is categorised under HFT category and netted off from investments. The short position is marked to market and loss, if any, is charged to the Profit and Loss Account while gain, if any, is ignored. Profit / Loss on short sale is recognised on settlement date. Investments classified under AFS and HFT categories are marked to market individually. Investments classified under HTM category are carried at their acquisition cost and not marked to market.

Details of investments category-wise -

The details of investments held under the three categories namely, Held for Trading (HFT), Available for Sale (AFS) and Held to Maturity (HTM), analysis for the years –2019-20 and 2020-21 are as under:

(Rs. in crores)

Particulars	As at March 31, 2021				As at March 31, 2020			
	HFT	AFS	HTM	Total	HFT	AFS	HTM	Total
Government securities	953.72	99,001.28	2,51,779.64	3,51,734.64	38,335.31	91,847.40	1,93,698.14	3,23,880.85
Other approved securities	—	—	—	—	—	—	—	—
Shares	—	436.80	—	436.80	—	407.91	—	407.91
Debentures and bonds	3,465.68	52,060.26	8,034.79	63,560.73	447.04	25,920.99	1,420.66	27,788.69
Subsidiary / Joint ventures	—	—	3,826.49	3,826.49	—	—	3,826.49	3,826.49
Others	4,158.91	19,998.53	12.19	24,169.63	8,517.08	27,395.44	10.20	35,922.72
Total	8,578.31	1,71,496.87	2,63,653.11	4,43,728.29	47,299.43	1,45,571.74	1,98,955.49	3,91,826.66
% Of Total	1.93%	38.65%	59.42%	100.00	12.07%	37.15%	50.78%	100.00

Analysis: According to the RBI guidelines, investments are classified into “Held for Trading” (‘HFT’), “Available for Sale” (‘AFS’) and “Held to Maturity” (‘HTM’) categories. During 2020-21 the breakup of total investments of Rs. 4,43,728.29 crores were HFT – Rs. 8,578.31 crores, AFS – Rs. 1,71,496.87 crores, and HTM - 2,63,653.11 crores, which are 1.93%, 38.65% and 59.42% respectively, which indicate that the 59.42% of the investments have been invested in HTM, followed by AFS - 38.65% and the least investments in HFT – only 1.93%.

Whereas during 2019-20, the breakup of total investments of Rs. 3,91,826.66 crores were HFT – Rs. 47,299.43 crores, AFS – Rs. 1,45,571.74 crores, and HTM - 1,98,955.49 crores, which are 12.07%, 37.15% and 50.78% respectively, which indicate that the 50.78% of the investments have been invested in HTM, followed by AFS - 37.15% and the least investments in HFT – 12.07%.

The above analysis states that investments in HTM have increased substantially from 50.78% to 59.42%, AFS has increased marginally from 37.15% to 38.65% and HFT has reduced considerably from 12.07% in 2019-20 to 1.93% during 2020-21.

III. Peer Comparison with ICICI Bank in terms of Portfolio Investment:

ICICI Bank - ICICI Bank was incorporated in 1994 as a part of the ICICI group. In 1999, ICICI became the first Indian bank or financial institution from non-Japan Asia to be listed on the New York Stock Exchange. ICICI Bank has a network of 5,900 branches and 16,650 ATMs across India (ICICI Bank, 2023).

Details of category-wise investments on March 31, 2021.

HDFC Bank (Rs. in crores)

	As at March 31, 2021			
Particulars	HFT	AFS	HTM	Total
Government securities	953.72	99,001.28	2,51,779.64	3,51,734.64
Other approved securities	—	—	—	—
Shares	—	436.80	—	436.80
Debentures and bonds	3,465.68	52,060.26	8,034.79	63,560.73
Subsidiary / Joint ventures	—	—	3,826.49	3,826.49
Others	4,158.91	19,998.53	12.19	24,169.63
Total	8,578.31	1,71,496.87	2,63,653.11	4,43,728.29
% of Total	1.93%	38.65%	59.42%	100.00

ICICI Bank(Rs. in million)

	As at March 31, 2021			
Particulars	HTM	AFS	HFT	Total
Government securities	17,05,635.9	4,19,831.4	1,62,362.9	22,87,830.3
Other approved securities	—	—	—	—
Shares	—	29,467.3	319.2	29,786.4
Debentures and bonds	14,262.0	2,08,376.3	5,475.6	2,28,113.9
Subsidiary / Joint ventures	85,764.5	11,801.2	—	97,565.7
Others	4,320.4	1,55,985.3	9,263.5	1,69,569.2
Total	18,09,982.8	8,25,461.5	1,77,421.2	28,12,865.4
% of Total	64.35%	29.35%	6.31%	100.00

Analysis:

HDFC Bank- During 2020-21 the breakup of total investments of Rs. 4,43,728.29 crores were HFT – Rs. 8,578.31 crores, AFS – Rs. 1,71,496.87 crores, and HTM - 2,63,653.11 crores, which are 1.93%, 38.65% and 59.42% respectively, which indicate that the 59.42% of the investments have been invested in HTM, followed by AFS - 38.65% and the least investments in HFT – only 1.93%.

ICICI Bank - During 2020-21 the breakup of total investments of Rs. 28,12,865.4 million were HTM – Rs. 18,09,982.8 million, AFS – Rs. 8,25,461.5 million, and HFT – Rs. 1,77,421.2 million, which are

64.35%, 29.35% and 6.31% respectively, which indicate that the 64.35% of the investments have been invested in HTM, followed by AFS - 29.35% and the least investments in HFT – only 6.31%.

The above analysis of HDFC Bank and ICICI Bank for the year ended 2020-21 states that ICICI has invested 64.35% of the total investments in HTM, whereas HDFC invested little lesser 59.42%, indicates that ICICI Bank intends to hold investments till maturity are more than HDFC Bank. HDFC Bank invested 38.65% in AFS while ICICI Bank invested in AFS - 29.35% implies that HDFC Bank invested in debt or equity security purchased with the intent of selling before it reaches maturity or holding it for a long period is more than ICICI Bank. And HDFC Bank invested only 1.93% in HFT while ICICI Bank invested 6.31%, suggests that the HDFC Bank holds fixed income securities as 'Held for Trading' (HFT) is quite less of their total investments.

IV. Discussion

Profitability of a bank can be increased by adopting different strategies including by reducing risks and increasing return. All risk can't be eliminated, but banks can control how tightly they manage it. Protections taken to the highest degree could have diminished returns and result in lost opportunities. Innovation, experimentation, and repositioning can move the needle on risk, but the bank's tolerances should accommodate necessary organizational growth. Maximizing profits involves a delicate balance to optimize each relationship while balancing its inherent risk. Credit risk is an obvious factor that's more critical in the recent COVID-19 environment or anytime a particular industry faces increased credit risk. Any relationship should include a risk analysis to limit institution loss exposure. The most successful banks understand the interplay between pricing and risk, structuring deals that balance customers' best interests with projected institutional returns. Pricing decisions must be based on the empirical profitability of each relationship and include adjustments for client risk profile. Perhaps a bank can offer a more attractive rate on a 12-month CD that will be offset by a slightly higher interest rate on a commercial loan to maintain profits across the client relationship.

Banks' margins depend on Net Interest Income ((Yield on Advances - Cost of Funds). If a bank's cost of funds is low, they tend to make good profits since the percentage of Yield on Advances is more or less constant among all banks with severe competition in interest rates on Advances. The cost of acquisition of funds is of crucial importance. With market dynamics in place, the one which sells at a lower rate tends to get more loan borrowers and hence more profits. In view of this low-cost funds and mix of deposits play a vital role for a bank's profitability.

HDFC among private banks enjoy high CASA. To sum up a bank with a deposit mix of CASA (low-cost funds) of 60% and Term (Demand) Deposits of 40% is likely to make good profits than the one with 40% CASA and 60% TD.

HDFC Bank continued to be a significant participant in the domestic exchange and interest rate markets. It also capitalised on falling bond yields to book profits and is now looking at tapping opportunities arising out of the liberalisation in the foreign exchange and interest rate markets. Investments classified under AFS and HFT categories are marked to market as per the RBI guidelines. Traded investments are valued based on the trades on the recognised stock exchanges. The valuation of other unquoted fixed income securities such as other approved securities and bonds and debentures, and preference shares, is done with appropriate mark-up over the Yield to Maturity (YTM) rates for government of India securities. Investments classified under HTM category are carried at their acquisition cost and not marked to market. Any premium on acquisition is amortised over the remaining maturity period of the security on a constant Yield to Maturity (YTM) basis. Such amortisation of premium is adjusted against interest income under the head income from investments as per the RBI guidelines. Any diminution, other than temporary, in the value of investments in subsidiaries / joint ventures is provided for.

We have analysed that during 2020-21 the breakup of total investments of Rs. 4,43,728.29 crores were HFT – Rs. 8,578.31 crores, AFS – Rs. 1,71,496.87 crores, and HTM - 2,63,653.11 crores, which are 1.93%, 38.65% and 59.42% respectively, which indicates that 59.42% of the investments have been invested in HTM, followed by AFS - 38.65% and the least investments in HFT – only 1.93%. Whereas during 2019-20, the breakup of total investments of Rs. 3,91,826.66 crores were HFT – Rs. 47,299.43 crores, AFS – Rs. 1,45,571.74 crores, and HTM - 1,98,955.49 crores, which are 12.07%, 37.15% and 50.78% respectively, which indicate that 50.78% of the investments have been invested in HTM, followed by AFS - 37.15% and the least investments in HFT – 12.07%.

The above analysis states that investments in HFT have reduced considerably from 12.07% to 1.93% during 2020-21 from 2019-20, mainly due to the reduction of amount invested in Government securities from Rs. 38,335.31 crores to Rs. 953.72 crores and increased in Debentures and bonds from Rs. 447.04 crores to Rs. 3,465.68 crores. In addition, total investments in HFT, AFS and HTM of Government securities have also increased from Rs. 3,23,880.85 crores to Rs. 3,51,734.64 crores. Hence, the HDFC Bank may formulate the strategy to reduce the investment in Government securities by considering appropriate risk and yield factors and increase investments in Corporate Bonds, Commercial Papers for receiving more returns, and may increase investments in “Held for Trading” (‘HFT’), which eventually may lead to improve the profitability of the HDFC Bank.

The analysis suggested above states that HDFC Bank may frame the strategy to reduce the investment in Government securities by considering appropriate risk and yield factors and increase investments in Corporate Bonds, Commercial Papers for receiving more returns, and may increase investments in “Held for Trading” (‘HFT’), which eventually may lead to improve the profitability of the HDFC Bank. Because HDFC Bank invested very less investments in HFT, as we know that the individual scrips in the HFT category will be marked to market at monthly or at more frequent intervals and provided for as in the case of those in the AFS category. Thus, the book value of the individual securities in this category would also not undergo any change after marking to market. AFS and HFT categories together form the trading book of banks. Banks are permitted to decide on the extent of holdings under AFS and HFT based on their trading strategy, risk appetite, capital position, etc. Securities held under both these books are required to be marked to market. HFT book is required to be marked to market on a more frequent basis than AFS. Valuation frequency of investment is typically a determinant in the composition of investment book of banks. Thus, the overall profitability of HDFC bank may impact by adopting the above strategies.

Conclusion

However, the HDFC Bank stated a 19.8 percent year-on-year (YoY) increase in standalone net profit at Rs 12,047.5 crore for the fourth quarter that ended March 31, 2023, (Times of India, 2023), and standalone net profit for the year ended March 31, 2023 was Rs 44,108.7 crore, up 19.3% over the year ended March 31, 2022 (HDFC Bank Limited, 2023). Whereas the ICICI Bank stated a standalone net profit of Rs 9,121.87 crore for the quarter ended March 31 2023, up 30% year-on-year (YoY) from the corresponding quarter of the previous financial year 2021-22 of Rs 7018.71 crore (The Economic Times, 2023), and standalone net profit grew by 36.7% year-on-year to 31,896.5 crore for the year ended March 31, 2023 (Market Screener, 2023). The analysis supports the declaration that RBI announced the HDFC Bank and the ICICI Bank as Domestic Systemically Important Bank (D-SIB), which are the Safest Banks in India where your money is safe (Maurya, March 8, 2023).

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