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THE IMPACT OF INTEREST RATES ON THE PERFORMANCE OF BANKS: A CASE STUDY OF CANARA BANK AND HDFC BANK

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ABSTRACT
This study analyzed the impact of Interest rate hike on the performance of Banks and Canara Bank and HDFC Bank in particular. In order to achieve the objectives, the study employed a comparative case study approach to address the particular phenomena in particular settings. The banks were selected purposefully to assess the impact of Interest rate on the performance of the commercial banks. Secondary source of data were used particularly, from RBI reports, Canara Bank and HDFC Bank annual reports as well as other published and unpublished reports and online materials has been used for the past three financial years (2010 to 2012). The impact of interest rates on the performance of the bank has been assessed on the basis of the bank's asset quality, profitability, liquidity and capital adequacy. Various types of data like interest rates which are applicable in India has been collected and analyzed in terms of its impact on the performance of bank. Percentage growth and Ratio analysis were employed to analyse the data. Accordingly, suggestions and conclusion have been drown in order to see the banks' competitiveness in the competitive banking industry.

JEL CODE
E5, E4, G1, G28, G32, G33

KEYWORDS
Asset quality ratio, Profitability ratio, Liquidity ratio, Capital adequacy.

INTRODUCTION
The economic progress of a country is sensitive to the monetary policy. Interest rate is a tool used by the RBI to monitor the money flow in the market. RBI has increased Repo Rate and Reverse Repo rate fourteen times within three financial years (2009-2012) to combat inflation. This has risen up the interest rates. This ultimately had impact on the deposit rate, base rate, bench mark prime lending rates and other lending rates of banks. Everything has cost and the cost of money is the interest rate. Hence, the cost of money due to the interest hike increased and the circulation of money have been slowed down. The bank performance is associated with the circulation of money in the market. Therefore, the performance of banks has been affected by the interest rate fluctuations.

It is apparent that banks are sensitive to minor change in interest rates. The continuous increment of interest rates was affected by the overall conditions of economic environment particularly inflation. The rise of interest rates, in turn, affect the condition of the economy in our case the performance of banks by escalating the price of money that results tightening the circulation of money, high spending on borrowing, and reducing the net income of the banks.

LITERATURE REVIEW
A study by John H. Boyd and Bruce Champ (2006), on Inflation, Banking, and Economic Growth and they found higher inflation can decrease the real rate of return on assets. Lower real rates of return discourage saving but encourage borrowing. CRISIL (2011) noted on the High interest rates to impact bank's asset quality. CRISIL believes that the significant increase in interest rates over the past three years can adversely impact the asset quality and profitability of India's banks. Ho and Saunders (1981) stated that a banking firm that maximizes the utility of shareholder wealth selects an optimum loans and deposits that minimize the risks.

Bodie, Kane and Marcus (1996) made it clear that the demand for loans is importantly affected when interest rates increase since this implies higher interest payments. Consequently; the cost of capital is seen to be more expensive. Bank interest rate spreads are an adequate measure of bank intermediation efficiency (Sologoub 2006). Such spreads reflect the costs of intermediation that banks incur, inclusive of their normal profits (Robinson 2002). Mishkin (1977) also proved that lower interest rates increase stock prices which in turn reduce the probability of financial distress.

Ehrmann and Fratscher (2004) analyzed that monetary policy affects individual stocks in a strongly diversified manner. Rizwan and Khan (2007) also examined role of macroeconomic variables and global factors as a consequence of interest rate, exchange rate, industrial production, and money supply to investigate the effect of changes in interest rates on the stock returns and volatility in Karachi stock exchange and the study revealed that conditional market returns and variance parameters are very close to each other.

STATEMENT OF THE PROBLEM
The Reserve Bank of India (RBI) increased the repo and reverse repo and reverse repo rates for fourteen times with in three years to reduce inflation. Though, the involvement of regulatory bodies is essential to help to monitor free movement of market to the preferred direction (RBI home page). However, the interest rates hike causes immense challenge to the national economy in general and in the banking sector in particular. As finance is the blood line of the business, a

tight monetary policy with high and rising interest rates causes high pressure in the circulation of money in the market which adversely impacts the banks performance.

OBJECTIVE OF THE STUDY

The objective of the study was to analyze the impact of Interest rate hike on the performance of Banks.

SCOPE OF THE STUDY

To study the impact of interest rates on bank performance is all-embracing and complex since most bank parameters change with changes in the economic environment and interest rate is just one. Hence, the impact of interest rate on bank performance only covers those aspects concerning to Canara Bank and HDFC (Housing Development Funding Corporation) Bank performance in relation to interest rate hike.

MATERIALS AND METHODS

The study employed a comparative case study approach to address the particular phenomena in particular settings. The banks were selected purposefully to assess the impact of Interest rate on the performance of the commercial banks. The study employed secondary source of data particularly from RBI reports, Canara annual reports and HDFC annual reports as well as other published and unpublished reports including online materials for three financial years (2010 to 2012) in order to assess the impact of interest rates in asset quality, profitability, liquidity and capital adequacy. The data collected were those various types of interest rates applicable in India and analyzed in terms of its impact on the performance of bank. Accordingly, a three years data were measured the impact in the performance of Canara and HDFC banks. Finally, percentage growth and ratio analysis has been employed.

DISCUSSION AND FINDINGS OF THE STUDY

TABLE 1: FINANCIAL PERFORMANCE INDICATORS RATIOS OF THE BANKS (2010-2012)

	Canara Bank			HDFC Bank		
	FY 2010	FY 2011	FY 2012	FY 2010	FY 2011	FY 2012
Repo rate	5	6.75	8.5	5	6.75	8.5
Asset Quality Ratios						
NPA/gross loans & advances	1.53	1.48	1.73	1.05	1	1.42
NPA/total asset	0.97	0.93	1.06	0.61	0.59	0.82
Net NPAs / Net Loans	1.08	1.11	1.47	0.18	0.18	0.31
Total provisions/ total loans & advances	1.22	0.99	1.16	2.39	1.94	2.76
Profitability Ratios						
Net Interest Income(NII)/Total income	65.93	73.26	71.15	66.71	69.83	69.63
Noninterest income/ Total Income	34.07	26.74	28.85	4.14	30.37	33.29
NII /Net loans and advances	3.40	3.71	3.33	6.60	6.29	6.69
G. total income/total loans & Advances	5.08	5.01	4.62	68.55	9	9.87
Liquidity Ratios						
Liquid asset /total asset	7.40	9.07	7.45	10.74	6.21	13.49
Liquid asset/customer deposits	8.41	10.47	8.64	14.33	8.59	17.98
Total loans and advances/customer deposits	72.26	71.97	71.19	77.58	80.92	76.57
Capital Adequacy Ratios						
Tier I capital ratio	8.54	10.87	10.35	13.26	12.23	11.60
Tier II capital ratio	4.89	4.51	3.41	4.18	3.99	4.92

Note: figures in the tables are percentage, FY indicates financial year

Source: Annual report of Canara Bank and HDFC Bank

ASSET QUALITY RATIOS

The ratio of total provisions to total loans and advances grew from 1.22% to 1.16 % within three years in Canara Bank whereas, 2.39 % to 2.76% in HFDC bank from the year 2010 to 2012. While, the Net NPA to net loans and advances increased from 1.08 to 1.44 percent and from 0.18 to 0.31 percent in Canara bank and HDFC Bank respectively. These ratios reveal small increase in NPA ratios which results in bad Bank performance.

When the NPA ratio increases the asset quality also becomes more standard and substandard and assets become changing to loss assets. Hence, the bank has to make more provisions which are not expected to bear income. The increases in the provisions show the amount profit frozen to cover the loss in bad loans. The data from the table reveals that, there is a considerable increase in the non performing assets from the year 2010 to 2012. This is mainly because, the increase in the bad loans both in the form of interests and the principle amounts which is not paid back by the customers.

The asset performance of the HDFC bank from the past three years (2010 to 2012) was not the same as in case of Canara bank. In HDFC bank there is a considerable increase in the nonperforming assets which is less when compared to Canara bank. This problem could be mainly due to the increase in the interest rates. Comparing all the above ratios the Non performing asset has increased in the accounting year ended in 2012. Hence, this can bring to a close that the year 2012 has more bad debts compared to the preceding two years.

An increase in NPA account not only reduces profitability of banks by provisioning in the profit and loss account, but also their carrying cost is also increased which results in excess & avoidable management attention. With rising in interest rates the banks' interest incomes have declined considerably which would result in the poor asset performance of the bank. With rising in interest rates the banks' interest incomes has been declined considerably though, banks may not have enough profits to make provisions for NPAs.

PROFITABILITY RATIO

In Canara Bank the ratio of Net Interest Income (NII) to total income has slightly grown from 65.93% to 71.15% as the NII and total Income have equally grown at CAGR 16.15%. On the other hand, the ratio of noninterest income to total income also decreased from 34.85% to 28.07 % at the same time the total income grew a bit better. The Ratio of NII to Net loans and advances and the gross total income to total loans and advances have also decreased from 5.08 % to 4.62 % and from 3.40 % to 3.33 % respectively. This is because of the loans has been increased higher than the NII and gross total income. Whereas, in HDFC Bank the ratio of NII to Total Income increased from 66.71% to 69.63% and the ratio of Noninterest income to total income decreased from 33.29% to 30.36%. Similarly, the ratio of NII to Net loans and advances slightly decreased from 6.69% to 6.20%. The ratio of gross income to total loans and advances has declined substantially from 9.87% to 9%. It has made it clear that the income has declined from its proportion in 2010.

The effort made by the bank to increase selling more advances did not yield enough income. Hence, the impact of interest rate is clearly marked on the deterioration of profitability in Canara Bank. This clearly shows that there was an increase in both interest and noninterest income while total income was much below than its proportion in 2010 and the interest and noninterest income has grown substantially. With rising in interest rates, the banks gross interest income increased but the net interest incomes declined considerably. Hence, the interest rate hike can be the reason. From the table it is clear that there is decrease in the percentage of gross income over loans and advances same as in Canara bank due to decisions taken by the bankers to maximize profits. In this case, a purely competitive bank issues loans such that the marginal cost of an additional loan equals the marginal revenue from such loans. The marginal revenue from an additional loan is simply the market determined interest rate. Profits are maximized when marginal cost equals interest rate. Therefore, it is evident that profits

can be maximized if more and more loans are extended at a given rate of interest. This may result in poor assessment of the borrower leading to new generation of NPAs. The increase in NPAs finally leads to decrease in profits and performance of the banks. There is increase in the noninterest income and net interest income. In the profitability ratio parameter the performance of HDFC bank accounts better than the performance of Canara bank but both banks were affected by the interest hike.

LIQUIDITY RATIOS

In Canara Bank the ratio of liquid asset to total asset and liquid asset to costumers' deposits grew especially in the financial year 2011 hence, higher liquidity is sign of bad performance Whereas, the ratio of total loans and advances to the customers' deposits decreased gradually as the interest rates increases from 72.26% to 71.19%.

While, in HDFC Bank the ratio of liquid assets to total assets increased from10.74% to 13.49% from year 2010 to 2012 while, the ratio of liquid asset to customer deposit increased from 14.33% to 17.98%.The ratio of total loans and advances to Customers deposits decreased from 77.58% to 76.57% from year 2010 to 2012. This is suggesting that the customers' deposits also grew slower than asset.

An increase in liquid assets is mainly because of the increase in the idle money with the bank which is not borrowed by the customers due to high interest rates. With the increase in the interest rates the customers should pay the more amounts in the form of interest to the banks. Because of the high interest, there is decline in the borrowings from the banks as well as there is liquid cash with the banks which is in greater proportion when compared with the deposits .Thus, the liquidity is un-invested money accumulated at the bank because of the cost of leverage money can't easily be lent to customers. The increase in the interest rates will leads to the declining trends in the loans taken by the customers which leads to the decrease in the proportion of loans and advances with deposits. Because of increase in interest rates customers may not willing to take loans from banks as they should have to pay the more interest to the banks.

CAPITAL ADEQUACY RATIOS

The Tier II capital in Canara Bank, which can absorb losses in the event of a winding-up decreased from 4.89% to 3.41% which is not desirable because, it provides a lesser degree of protection to depositors. While, in HDFC bank Tier II capital has improved from 4.18% to 4.92% which indicates that the bank is stronger in case it faced with the case of weathering away all the funds can be called back to save the business hence the funds are invested in safer projects. This increase can be attributed to the success of HDFC which has scored in noninterest income.

Hence, with the increase in interest rates the bank's financial strength seems to be weakened. The Reserve Bank of India (RBI), currently prescribes a minimum capital of 9% of risk-weighted assets, which is higher than the internationally prescribed eight percent.. Most banks in India have a capital adequacy of more than 12 %. A bank with a higher capital adequacy is considered safer because if its loans go bad, it can cover up from its capital. However, in the case of Canara bank most likely due to the interest rate hike, it is much less than industry average in terms of Tier I capital adequacy ratio. This indicates that the bank had really bad time that consumed or reduced the assets in both Teir I and Teir II capital. This shows the reduction in owned capital from 2011 to 2012.

SUGGESTIONS

The increase in the Interest rates was a mixed blessing while reducing the inflation which affected the performance of the banks and blocked the flow of fund in the market. Which has very bitter effect in the economic environment specially; in the recent times the impact has become clear when the industrial growth rate, GDP and exchange value of Rupee has been negatively impacted. It has also fuelled the sustainability of inflation due to loss in production capacities of industries. Although, money is pulled out of market, demand pulled inflation has been enhanced. Therefore, the increase of repo rate and reverse repo rate was not the best measure hence it has to be reversed back to the lowest possible to support the production capacity of the economy because, strong and well supported production can only heal inflation. The financial system has to establish an efficient and effective interest hedging mechanism that would enables the financial intermediations to be secure.

Additionally, it is suggestible area to be addressed for undertaking further studies on the impact of GDP, inflation and the devaluation of Value of domestic currency on the performance of banks and the impact of interest rate hike on Industrial growth, employment, entrepreneurial growth and foreign exchange.

CONCLUSION

In the context of escalated inflationary scenario increasing interest rate was introduced by RBI as a standardized strategy to fight inflation. Interest rate is major macroeconomic factor (like GDP, inflation and exchange rates) that affects the performance of banks in various ways. In Canara bank the spread percent of asset, the ROA, capital adequacy, and profitability declined while the NPA, interest expended and liquidity soared that led the bank to manifests the disadvantages of interest rate hike in the banks.

The effect of interest rates can be reduced by protecting the profit of the banks through other sources of income like in the case in HDFC bank which excelled in the investment income and other non-interest income. The strategy of maintaining the lending rates stable and as low as possible in volatile and interest rates hike scenario benefited HDFC bank. To conclude the elevated interest rates adversely affects the profitability, asset quality, and return on asset, liquidity, and capital adequacy of the banks.

LIMITATIONS OF THE STUDY

This is a Case Study for Canara and HDFC banks and some essential data were used from the annual reports of public sector banks. Further, the study largely depended on secondary data. Access to some data was not possible as it is considered confidential information; as a result the researchers could not perform certain analyses. For instance, data for computation of capital Adequacy Ratio of Tier I and Tier II were not accessible to the public.

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