CHAPTER 1

INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

The term financial crisis applied broadly to variety of situations in which some financial institutions or assets suddenly loss a large part of their value. The global financial crisis really started to show its effect in the middle of 2007 and into 2008. It was derived initially by problems in the U.S credit and housing markets. It quickly spread worldwide given the interconnectedness of the global economy in trade, finance and investments. Around the world the stock markets have fallen, larger financial institutions have collapsed or been bought out and govt. in even the wealthiest nations have led to come up with rescue packages to save their financial system. The periodic crises resulting from the capitalist business cycle now unfolds at the global level. The current crisis of the world economy is an outcome of the consolidation of economic power that the globalization of capital has secured for the transnational corporations. This has led to a string of problems associated with the financial, banking, real estate, and productive sectors of the economy that have triggered the current economic crisis.

From 1820 to 1970, every decade U.S. workers experienced a rising level of wages. In the 1970s this came to an end; real wages stopped rising and they have never resumed since. U.S. workers became more productive, but got paid the same; wages began to stagnate and decline. The gap between labor and capital grew bigger. They bought other corporations (mergers and acquisitions) and they put their money into banks. The banks loaned that money (with interest) to workers who didn't have money to consume. This was done to raise their purchasing power because their wages weren't enough to buy things. Since employers no longer raised workers' wages, the workers had to go into debt to survive. Debt went up and up and things got out of control. The banks continued to loan money through new loans (secondary mortgages) at high interest rates, and this was a profit bonanza for the banks. As corporations increasingly began to invest abroad (outsourcing production and services), U.S. workers lost their jobs, and this led to greater unemployment and underemployment. Unemployed workers with a lot of debt were unable to make their mortgage and credit card payments, and this led to foreclosures and bankruptcies. This, in turn, led to the collapse of the banking system, necessitating a government bailout of the banks. It is only through the nearly trillion dollar stimulus funds that the U.S. government poured into the economy to save the banks from default that a financial collapse was averted.

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1.2 STATEMENT OF THE PROBLEM

The United States market default that leads to the global economic crisis around the world in 2007 will change the entire financial system drastically. It is necessary to study about how the impact of such crisis can be reduced to the minimum. It is necessary to know whether the effects are likely to be significant but manageable and how the impact of the global economic crisis will affect the banks should be highlighted.

1.3 INTERDISCIPLINARY RELEVANCE

The project work is related to banking, insurance, economics, industry and investment.

1.4 REVIEW OF RESEARCH AND DEVELOPMENT IN THE SUBJECT

International Status

The entire world economy is panic stricken since the burst of housing bubble in 2008.On the basis of subprime loans, massive structures of loans and debts were created using financial engineering, which led to an uncontrolled, astonishing growth of the financial sector in the western world. That whole superstructure has now collapsed and the whole world is reeling from the shock of the meltdown. The crisis that had its roots in the financial sector in the West, has now affected the real economy in almost all countries.

National Status

During the current financial crisis the government seems to be following the similar conventional approach of market management, without addressing the source of the problem. Traditionally during the financial crisis, the Central Banks act as a lender of last resort, lending liquidity to the banks.RBI returning some of the liquidities of the bank system that it held as reserves. But injection of rupee by the RBI in to the system will not necessarily increase bank lending unless borrowers have the confidence in the sustainability of our economy to induce them to increase their investment and the banks have the confidence that these borrowers will be able to pay back.

1.5 OBJECTIVES OF THE STUDY

- 1. To study about the impact of global financial crisis on Kerala based banks in Thrissur Dist, Kerala
- 2. To study about the impact of global financial crisis on pre-recession, post recession and during the period of recession on Kerala based banks in Thrissur District.
- 3. To study about the management efficiency of the Kerala based banks during the period of Global Financial Crisis.
- 4. To make a comparative study on the impact of global financial crisis on Kerala based banks in Thrissur District.

1.6 METHODOLOGY

1.6.1 Data and Sources of Data

The data used for the study are secondary in nature. A convenient sample of three banks headquarters at Thrissur District has taken for the purpose of the study. The required data were collected from journals, magazines, articles and websites.

1.6.2 Period of the Study

The study covers a period of five years from 2006-07 to 2010-11. The financial year starts from 1st April to 31st March every year.

1.6.3 Sampling Design

The sample banks are selected on the basis of convenient sampling. A sample of 3 banks has been selected on the basis of

- ➤ Availability of data for 5 years
- > Selected banks are situated (headquarters) in Thrissur District.

The following banks have been selected for the study.

- 1. Dhnalaxmi Bank Ltd.
- 2. Catholic Syrian Bank ltd
- 3. South Indian Bank Ltd.

1.6.4 Tools for Analysis

For the purpose of the analysis various accounting and statistical techniques have been used. The statistical techniques used are index numbers, arithmetic mean, standard deviation and co-efficient of variation. Chi-square test is used to test whether there is any impact of global financial crisis on EPS. Analysis of variance is used to test the significant difference on the performance of banks in the period of crisis. ANOVA is also used to test the efficiency of the banks in the period of crisis.

1.6.5 Hypothesis of the study

- 1. There is no any impact of global financial crisis on the Kerala based banks in Thrissur Dist, Kerala.
- 2. The management of Kerala based banks is highly efficient in the period of Global Financial Crisis.

1.7 SIGNIFICANCE OF THE STUDY

Global financial crisis resulted in the collapse of large financial institutions, the bailout of banks by national governments, and downturns in stock markets around the world, etc. Government and central banks responded with various measures such as monetary policy expansion, fiscal policies and institutional bailout. The financial crisis is likely to yield the highest banking failure since the savings and loan meltdown.

1.8 LIMITATIONS OF THE STUDY

- 1. The study is restricted to banks only over a five year period.
- 2. The availability of information and data is limited by the time and cost factor.
- 3. The information collected for the study is entirely secondary in nature.
- 4. Analysis is made only for the past data. So the future variation in all aspects may be affecting the study.

1.8 CHAPTER SCHEME

The present study is organized into seven chapters.

First chapter covers introduction, statement of the problem, objectives of the study, methodology, scope and significance of the study.

Second chapter contains review of literature and third chapter deals with global financial crisis.

Fourth chapter covers the profiles of the banks.

Fifth chapter provides an analysis on impact of global financial crisis on banking sector.

Sixth Chapter deals with the management efficiency of banks during the crisis period.

Seventh chapter contains findings, recommendations and conclusion of the study.

CHAPTER II

REVIEW OF LITERATURE

Paradigm shift in the banking and financial environment of the country has created an emergent need for a new genre of management professionals to meet the emerging challenges in managing Banks, Financial Institutions (FIs), Non-banking Financial Companies (NBFCs) and Corporates. Indian banking sector too is better placed to cope with the adverse consequences of the ongoing financial turmoil in the west. This chapter deals with the review of studies about the impact of global financial crisis on Indian economy and banking sector.

Ghosh (2006) argues that India's success in responding to global financial crisis can be attributed to four sets of decision making: devaluation, involvement of IMF, partial liberalization and gradual opening up of the external sector. The study concluded that the political interventions have helped in emergency stabilization measures of economy.

R. Mohan, Deputy Governor, RBI (2008) in his speech during IMF-FSF meeting analyzed the impact of financial turmoil on emerging and Asian economies. Observations given by him were that India's growth process is mostly domestic demand driven and country is having comfortable foreign exchange reserves. Further the financial stability in the country has been achieved by prudent policies which prevents from excessive risk trading.

A report in **The Hindu Business Line** (2008) stated that Kerala being historically more integrated with the rest of the world is more susceptible to any external shocks compared to the rest of the states in India. In the long run there is a need to generate more employment and income within the state to minimise the impact of potential crisis in future.

Crotty (2009) locates the deep cause, on the financial side, of the current crisis, in the New Financial Architecture (NFA) and the radical financial deregulation process associated with its institutions and practices. He argues that the current crisis is but the latest stage in a series of financial boom and bust cycles, stretching back to the late 1970s, in which financial deregulation and innovation alternated with government bailouts to allow renewed expansion after each crisis. Crotty provides an enlightening account of disaster gradually spreading and eventually hitting

through a careful point-by-point refutation of the main hypothesis and claims of the proponents of the NFA.

Kumar and Vashisht (2009) in their study have analyzed the global financial integration and transmission of global financial crisis to the Indian economy. The study shows that the global downturn affected India through distinct channels like; financial markets, trade flows and exchange rates. GDP reduced to almost two percent in fiscal year 2008-2009 due to deterioration in exports. Areas that require attention are removal of entry barriers on corporate for investing in education and vocational training, expanding physical infrastructure and delivery of urban utilities, law and order.

Rajiv and Pankaj (2009) conducted a study on the 'Global Economic Crisis: Impact on India and Policy Responses and concluded that the Govt. will do well to review all the policies that have an impact on doing business in India with the clear objective of improving the investment climate.

Anand Sinha (2009) conducted a study on the 'Impact on the International Banking Crisis on the Indian Financial System and concluded that in contrast to domestic banks, some foreign banks resorted to resizing their headcount and expense base.

Research unit of Rajyasabha Secretariat (2009) conducted a study on Global Economic Crisis and its impact on India and concluded that financial stability in India has been achieved through perseverance of prudential policies which prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent. A series of fiscal and monetary measures have been taken by the government and the RBI to minimize the impact of the slowdown as also to restore the economic buoyancy.

N. Santhosh Ranganath and Dr. G Thulasi Rao (2010) conducted a study on 'Global and Economic Recession; Impact on Banking Sector in India' and concluded that the financial crash of 2007-08 was the result of the interaction of several different sectors, some of which had been building for many years. It is not universally agreed that one result of the financial crisis has been to generate a paradigm shift in the way the banking business model is structured. However there is no doubt that banks will need to modify their strategies and structures in response to the events of 2007-08.

Gurpartap Singh (2010) conducted a study on Global Financial Crisis, Its Impact on Indian Economy and concluded that Indian economy is already under the impact of global financial crisis. Govt. had taken various steps but as of now there are no signs of recovery.

Dr. D. Amritha (2011) conducted a study on Global Financial Crisis: Reflections on its Impact on India and concluded that India has buy-and-large been spared of global financial contagion due to the subprime turmoil for a variety of reasons. India's growth process has been largely domestic demand driven and its reliance on foreign savings has remained about 1.5% in recent period

Jacob John (2011) conducted a study on the impact of Global Financial Crisis on employment, income and poverty in Kerala and concluded that the RBI pumped more liquidity into the banking system to enable bank credit to meet the expanded necessities of the economy through a series of cuts in the CRR and additional flexibility in meeting the SLR requirement.

M. Parameswaran (2011) conducted a study on Financial Crisis and Kerala Economy and concluded that the growth rate in 2008-09 was well below the growth rate recorded in the previous year in Kerala. The evidence on credit availability shows that there was a slight decline in the growth rate of credit in Kerala 2008-09. However there is no firm evidence to believe that the decline was due to the liquidity shortage or more cautious lending policy of the banks. It can also be due to the sluggish demand for credit owning to overall recession in the economy.

Nirupam Bajpai (2011) conducted a study on Global Financial Crisis and concluded that the measures undertaken by Government of India to counter the effects of the global meltdown on the Indian economy have resulted in shortfall in revenues and substantial increase in government expenditures, leading to deviation from the fiscal consolidation path mandated under the Fiscal Responsibility and Budget Management Act.

Barry Eichengreen and Poonam Gupta (2012) conducted a study on the 'Impact of The Global Financial Crisis On Indian Banks: Survival And Fittest' and concluded that public banks increased lending during the crisis ,partly because of the support and policies.

Suraj Walia (2012) conducted a study on the 'Impact Of Global Economic Crisis On Indian Economy; An Analysis' and concluded that more transparency is required in the process of setting

bank rate repo rate ,reverse repo rate ,CRR,SLR etc. The RBI must cover the policy rates further to bring down the cost of funds and boost the growth momentum.

T. Muthukumar, **M.Sirajudeen and S. Tamilenthi** (2012) conducted a study on 'Global Financial Crisis and Its Impact on Indian Economy-An Analysis and Perception' and concluded that RBI has announced a series of measures to facilitate orderly operation of financial markets and to ensure financial stability which predominantly includes extension of additional liquidity supports to banks.

State Committee of Kerala (2012) conducted a study Global Financial Crisis and Implications for India and concluded that self-reliance is the key to insulate India from the global financial crisis on a long term basis and therefore the requirement to strengthen the public sector is an urgent need. The Indian people have been directly hit by these policies in particular by increasing unemployment and by the relentless rise in price of essential commodities.

Dr. Jomon Mathew (2012) conducted a study on Global Financial Crisis and its Impact on India-External Sector and concluded that in order to counter the negative fallout of the global slowdown on the Indian economy, the federal govt. responded by providing certain fiscal stimulus packages in the form of tax relief to boost demand and increased expenditures on public projects to create employment and public assets. India's central bank- RBI took a number of monetary easing and liquidity enhancing measures to facilitate flow of funds from the financial system to meet the needs of productivity sectors.

A study conducted by **Students Economic Forum of South Indian Bank** on Global financial Crisis found that RBI has reduced the CRR from 9% to 7.5% and again by another two percentages to 5.50%. The total CRR reduction by 3.5% will release Rs 1, 40,000 crores into liquidity starved economy. SLR has been reduced from 25% to 24%. RBI has also allowed a temporary relaxation in SLR to the extent of 1.50 percent. This facility was granted to enable banks to borrow Rs 60,000 crores of additional facility, on lending to mutual funds. RBI also decided to cut repo rate by 1% to 8% and again by 0.50% to 7.5%.

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CHAPTER III

GLOBAL FINANCIAL CRISIS

3.1 Origin of Global Financial Crisis

The periodic crisis resulting from the capitalist business cycle now unfolds at the global level. The current crisis of the world economy is an outcome of the consolidation of economic power that the globalization of capital has secured for the transactional corporations. This has led to a string of problems associated with the financial, banking, real estate, and productive sectors of the economy that have triggered the current economic crisis.

From 1820 to 1970, every decade U.S. workers experienced a rising level of wages. In the 1970s this came to an end, real wages stopped rising and they have nearer resumed since. U.S workers became more productive, but got paid the same, wages began to stagnate and decline.

The main element that is missing in the system is enough confidence of our economic actors in our ability to get over the crisis within a short period. In its absence there is hardly in any way that either the demand for credit and finance for investment or the banker's willingness to meet that demand can increase. This is a classic case similar to the Keneynesia liquidity trap when a substantial increase in liquidity supply is only accumulated as cash or near cash instruments with little effect on investment expenditure

They also have substantial reserves to be able to finance some of these investments. But when they do not, the government may provide them with funds through deficit financing. We should try to increase in such investment compensated by reducing government expenditures in other areas. But if in spite of all that an increase in deficit is necessary, they should be financed openly by money creation that is by government borrowing directly from the Reserve Bank. The effect of that will be an increase in liquidity, exactly in the same way liquidity is increased through the reduction of CRR. In one case the RBIs liability will increase in other case its assets will decline, with similar effect on money creation and inflation. But while liquidity provided to the banks may not be translated into increased lending or investment expenditure, promoting investment of the PSUs in infrastructure will directly impact on our growth potential.

3.2 Global Financial Crisis

The financial crisis of 2007-08 also known as the global financial crisis and 2008 financial crisis is considered by many economists the worst financial crisis since the great depression of the 1930s. It resulted in the threat of total collapse of large financial institutions, the bailout of banks by national governments, and downturns in the stock markets around the world. In many areas, the housing market also suffered, resulting in evictions, foreclosures and prolonged unemployment.

The bad financial situation was made more difficult by a sharp increase in oil and food prices. The emergence of sub-prime loan losses in 2007 began the crisis and exposed other risky loans and over inflated asset prices. With loan losses mounting and the fall of Lehman Brothers on 15 September 2008, a major panic broke out on the interbank loan market. As share and housing prices declined, many large and commercial banks in the United States and Europe suffered huge losses and even faced bankruptcy, resulting in massive public financial assistance. The global recession resulted in a sharp drop in international trade, rising unemployment and slumping commodity prices.

3.3 Impact of Global Financial Crisis on Indian Economy

A slowdown in the US economy is a bad news for India. Indian companies have major outsourcing deals from the U.S. India's exports to the U.S. have also grown substantially over the years. Indian IT companies with big tickets deals in the U.S. would see their profit margins shrinking. The whole of Asia would be hit by a recession as it depends on the U.S. Economy.

When the financial crisis erupted in a comprehensive manner on Wall Street, there was some premature triumphalism among Indian policy makers and media persons. It was argued that India would be relatively immune to this crisis, because of the strong fundamentals of the economy and supposedly well-regulated banking system. This argument was emphasized by the Finance Minister and others even when other developing countries in Asia clearly experiencing significant negative impact through transmission of stock market turbulence and domestic credit stringency. We are slightly protected from financial meltdown, largely because of the nationalized banks and other controls on domestic finance; there is certainly little room for complacency.

After a long spell of growth, the Indian economy is experiencing a downturn. Industrial growth is faltering, inflation remains at double digit levels, the current account deficit is widening, foreign

exchange reserves are depleting and rupee is depreciating. Despite that Indian economy sustained an impressive growth rate of 9.2 per cent in 2007-08. This was the second highest growth rate next only to China in the whole world. And this is in contrast to the shrinking of the real economies of many western economies. However, the Indian economy could not withstand the impact of global meltdown beyond 2007-08. In 2008-09 there was an all round decline in the growth rates of GDP from almost all sectors except from community, personal and social services. Consequently, the GDP of the country could grow only at 6.7 per cent in 2008-09, a decline of 2.5 per cent over the previous year. But the Indian economy started recovering from the slowdown towards the end of the fiscal year 2009-10. This is evident from the 7.2 per cent growth rate of GDP. Except agriculture which suffered a negative growth rate of 0.2 per cent and transport, real estate, finance and community and social services, all other sectors have shown recovery. Notably, mining, manufacturing, construction and electricity generation have shown remarkable recovery. Apart from GDP, the bigger concern is the employment implications of economic crisis. The Ministry of Labour and Employment conducted a survey on a fairly large sample size across sectors such as Textiles, Automobiles, Gems & Jewellery, Metals, Mining, Construction, Transport and BPO/IT sectors and states that five lakh workers lost jobs in the last quarter of 2008. The employment in these sectors went down from 16.2 million during September 2008 to 15.7 million during December 2008. However, in the manual contract category of workers, the employment has declined in all the sectors/ industries covered in the survey. Employment had declined in the Automobiles and Transport sectors by 12.45 per cent and 10.18 per cent respectively. The overall decline in employment in the manual contract category was 5.83 per cent. In the direct category of manual workers, the major employment loss reached to 9.97 per cent in case of Gems & Jewellery, followed by 1.33 per cent in Metals. The continuous process of job losses in exports and manufacturing, particularly the engineering sector and even the services sector was a big challenge for the government. International trade declined as a result of the financial and economic crisis. Between July, 2008 and May, 2009 the value of world trade declined by 37 per cent, of which 16 per cent was due to the fall in prices. The WTO estimates projected that global trade is likely to decline by 9 per cent in volume terms and the IMF estimates projected a decline of over 11 per cent for 2009. Though India has not been affected to the same extent as other economies of the world during this phase, yet the declining trend in the growth rate of our exports and imports, have started in second and third quarter of the year 2008-09 respectively.

3.4 Banking Sector in India

In a country like India, where the sheer volume of people, the expanse of regions and the diversity of languages exists, this new medium of learning holds immense promise. The banking industry is a vertical segment, where timely adoption of technology plays a critical role in deciding the leader and the laggard. With an employee base from different streams of education and walks of life, it becomes imperative to enhance the awareness and transfer of technology in an easy and efficient manner. If we look at the traditional way of imparting education in this industry, the role of the staff training colleges and similar academic institutions has been vital and significant. While these have largely met our requirements, the changing face of technology being used in our operations necessitates the need to reflect these changes in our human capital on par. The need to transform into a learning organization is more apparent in today's dynamic environment.

Paradigm shift in the banking and financial environment of the country has created an emergent need for a new genre of management professionals to meet the emerging challenges in managing Banks, Financial Institutions (FIs), Non-banking Financial Companies (NBFCs) and Corporates. The intense competitive pressure on the financial system has generated a variety of products and services to meet the specialized needs of millions of customers. The impact of these changes in the international financial system was felt in India in the early nineties when she initiated the process of integrating her economy with the global economic order. This ushered in the phase of financial sector reform in our country. Reforms, which are primarily aimed at aligning the Indian banking system to the international best practices, are having lasting effects on the entire fabric of the Indian financial system, which is presently undergoing a major phase of metamorphosis.

Exposure of Banks

So far the RBI has claimed that the exposure of Indian banks to assets impaired by the financial crisis is small. According to reports, the RBI had estimated that as a result of exposure to collateralised debt obligations and credit default swaps, the combined mark-to-market losses of Indian banks at the end of July was around \$450 million. Given the aggressive strategies adopted by the private sector banks, the MTM losses incurred by public sector banks were estimated at \$90 million, while that for private banks was around \$360 million. As yet these losses are on paper, but the RBI believes that even if they are to be provided for, these banks are well capitalised and can easily take the hit.

Such assurances have neither reduced fears of those exposed to these banks or to investors holding shares in these banks. These fears are compounded by those of the minority in metropolitan areas dealing with foreign banks that have expanded their presence in India, whose global exposure to toxic assets must be substantial. What is disconcerting is the limited information available on the risks to which depositors and investors are subject. Only time will tell how significant this factor will be in making India vulnerable to the global crisis.

A third indirect fallout of the global crisis and its ripples in India is in the form of the losses sustained by non-bank financial institutions (especially mutual funds) and corporate, as a result of their exposure to domestic stock and currency markets. Such losses are expected to be large, as signaled by the decision of the RBI to allow banks to provide loans to mutual funds against certificates of deposit (CDs) or buyback their own CDs before maturity. These losses are bound to render some institutions fragile, with implications that would become clear only in the coming months.

3.5 Impact of Global Financial Crisis on Indian Banking Sector

Indian banking sector too is better placed to cope with the adverse consequences of the ongoing financial turmoil in the west. First of all, our banking industry is subject to stricter prudential regulations with respect to capital and liquidity.

For instance, while restricting the overnight unsecured market for funds to banks and primary dealers, the RBI has imposed limits on their borrowing and lending operations in the overnight inter-bank call money market. In order to encourage greater reliance on stable sources of funding, the RBI has imposed prudential limits on banks' purchased inter-bank liabilities and these limits are linked to their net worth. Also, the incremental credit-deposit ratio of the banking industry is continuously monitored by the RBI. The ALM guidelines in India take into account both on and off balance sheet items. In order to strengthen capital requirements, the credit conversions factors, risk weights and provisioning requirements for specific off-balance sheet items (including derivatives) have been reviewed in the last few years. Moreover, in India, complex structures like synthetic securitization have not been permitted so far.

The Indian banks with overseas presence and foreign banks operating in India have successfully migrated to Basel II Framework by March 2008 and all other scheduled commercial banks are encouraged to migrate to Basel II not later than March 2009. Indian banking industry is quite

healthy. As much as 34.0% of its deposits are in government securities and cash with the RBI. Its "Consumer Loans to GDP" ratio is just 10.0%, whereas this ratio is as high as 100.0% for the U.S.

As per information with the RBI, Indian banks do not have any direct exposure to sub-prime mortgages. The banking sector, through its overseas branches, has some exposure to distressed financial instruments and troubled financial institutions. But this exposure is part of the normal course of their business and is quite small relative to the size of their overall business.

As stated earlier, what Indian markets have been witnessing today is an indirect, knock-on effect of the global financial situation. This is only a reflection of the uncertainty and anxiety in the global financial markets. However, Indian policymakers have responded to these untoward circumstances extremely swiftly. To re-establish orderly conditions in the money, equity and forex markets and to improve the overall liquidity in the system, the RBI has cut the CRR to 6.5% from the earlier 9.0% in less than two weeks this month. To help mutual funds, as a temporary measure, the RBI has allowed banks to avail of additional liquidity support of up to 0.5% of their net demand and time deposits. This is in addition to the ad hoc reduction in the statutory liquidity ratio to 24%. The central bank has also allowed banks to raise interest rates on NRI deposits so that more money would flow to India. The policymakers have come out with a plan to raise the capital adequacy ratio of Indian banks to 12.0% by a suitable date in future. Even at present, no Indian bank has a capital adequacy of less than 10.0%. The limit on FII investment in corporate bonds has also been doubled. In short, India's government as well its central bank has been promptly responding to global developments so as to ensure financial stability through active and flexible liquidity management.

Central bank instruments to deal with the crisis

Following the intensification of the global financial crisis in September 2008, the Reserve Bank implemented both conventional and unconventional policy measures in order to proactively mitigate the adverse impact of the global financial crisis on the Indian economy. The thrust of the various policy initiatives by the Reserve Bank since September 2008 has been on providing ample rupee liquidity, ensuring comfortable dollar liquidity and maintaining a market environment conducive to the continued flow of credit to productive sectors. For this purpose, the Reserve Bank used a variety of instruments at its command such as the repo and reverse repo rates, the cash reserve ratio (CRR), the statutory liquidity ratio (SLR), open market operations, including the liquidity adjustment facility (LAF), special market operations and sector-specific liquidity facilities. In addition, the Reserve Bank used prudential tools to modulate the flow of credit to certain sectors

consistent with financial stability. The availability of multiple instruments and the flexible use of those instruments in the implementation of monetary policy enabled the Reserve Bank to modulate the liquidity and interest rate conditions amid uncertain global macroeconomic conditions.

When the global markets became dysfunctional in September 2008, the macro financial conditions remained exceptionally challenging from the standpoint of the implementation of the Reserve Bank's policies, as it had to respond to multiple challenges, from containing inflation in the second half of 2008 to containing the deceleration in growth, preserving the soundness of banks and financial institutions, ensuring the normal functioning of the credit market and maintaining orderly conditions in the financial markets in the first half of 2009. The Reserve Bank was able to restore normalcy in the financial markets over a short period of time through its liquidity operations in both domestic and foreign currency. The evolving policy stance was increasingly conditioned by the need to preserve financial stability while arresting the moderation in the growth momentum. The Reserve Bank acted aggressively and pre-emotively on monetary policy accommodation, both through interest rate cuts and a reduction in reserve requirements in terms of both magnitude and pace.

The policy repo rate under the liquidity adjustment facility (LAF) was reduced from 9.0% to 4.75%. The policy reverse repo rate under the LAF was reduced from 6.0% to 3.25%. With receding inflationary pressures and the possibility of the global crisis affecting India's growth prospects looming on the horizon, the Reserve Bank switched to an accommodative stance in mid-October 2008 when it reduced the CRR by 250 basis points from 9% to 6.5%. Between 11 October 2008 and 5 March 2009, the CRR was reduced by a cumulative 400 basis points to 5.0%. The statutory liquidity ratio (SLR), a legal obligation on banks to invest a certain proportion of their liabilities in specified financial assets including cash, gold and government securities (under Section 24 of the Banking Regulation Act 1949), was one of the instruments used during the crisis to modulate the liquidity conditions in the economy. Variation of the SLR has an impact on the growth of money and credit in the economy through the government debt market. Accordingly, on 1 November 2008, the SLR was reduced to 24% of net demand and time liabilities (NDTL) with effect from the fortnight beginning 8 November 2008. The liquidity situation remained comfortable from mid-November 2008 onwards, as reflected in the daily surplus being placed by banks in the LAF window of the Reserve Bank. In view of this, the SLR was restored to 25% of NDTL with effect from the fortnight beginning 7 November 2009.

The key policy initiatives taken by the Reserve Bank in response to the developments after September 2008 to improve the availability of FX liquidity included the selling of US dollars in the market by the Reserve Bank, the opening of a new FX swap facility for banks and the raising of interest rate ceilings on nonresident reportable deposits to attract larger inflows. A cumulative increase of 175 basis points in the interest rate ceilings on each of the aforesaid term deposits was affected between mid-September and November 2008.

Banks were permitted to borrow funds from their overseas branches and correspondent banks to a maximum of 50% of their unimpaired Tier 1 capital or US\$ 10 million, whichever was higher. The systemically important non deposit taking non-banking financial companies (NBFC-ND-SI) and housing finance companies (HFCs) were permitted to raise short-term foreign currency borrowings. The ceiling rate on export credit in foreign currency was raised by 250 basis points to Libor+350 basis points on 5 February 2009. Correspondingly, the ceiling interest rate on the lines of credit from overseas banks was also increased by 75 basis points to six-month Libor/euro Libor/Euribor+150 basis points.

The policy on the premature buyback of foreign currency convertible bonds (FCCBs) was liberalised in December 2008, recognising the benefits accruing to Indian companies as well as to the economy on account of the depressed global markets. Under this scheme, the buyback of FCCBs by Indian companies was allowed under both the approval and the automatic routes, provided that the buyback was financed by foreign currency resources held in India or abroad and/or by fresh external commercial borrowings (ECBs) raised in conformity with the extant ECB norms and by internal accruals.

Considering the continuing tightness of credit spreads in the international markets, the all-in-cost ceilings for different maturities were increased in respect of ECBs (150 to 250 basis points) as well as trade credit (75 to 150 basis points). Furthermore, the all-in-cost ceiling for ECBs under the approval route was dispensed with, initially until 30 June 2009, and later extended until 31 December 2009.

☐ Measures were also initiated to safeguard the interests of India's export sector which was affected by the global economic recession. The period of realisation and repatriation to India of the amount representing the full export value of goods or software exported was enhanced from six months to 12 months from the date of export, subject to review after one year. Similarly, as a relief measure to importers, the limit for the direct receipt of import bills/documents from overseas

suppliers was enhanced from US\$ 100,000 to US\$ 300,000 in the case of imports of rough diamonds and rough precious and semi-precious stones by non-status holder exporters, enabling them to reduce transaction costs.

Other measures taken were:

- The institution of a special 14-day term repo facility for commercial banks up to 1.5% of NDTL.
- The establishment of a special refinance facility for scheduled commercial banks (excluding RRBs) up to 1.0% of each bank's NDTL as of 24 October 2008.
- The introduction of special refinance facilities for financial institutions (SIDBI, NHB and the Exim Bank).
- The introduction of a mechanism to buy back dated securities issued under the MSS so as to provide another avenue for injecting liquidity of a more durable nature into the system.
- The subsequent de-sequestering of balances under the MSS during March and May 2009.
 The MSS outstanding balance which stood at INR 880.77 billion at end-March 2008 had decreased to INR 187.73 billion at end-October 2009.
- For more effective liquidity management, the Reserve Bank widened the scope of open market operations (OMO) by including purchases of government securities through an auction-based mechanism.
- Keeping in mind the overall assessment of the liquidity situation in the economy, the Reserve Bank decided to keep the policy reportate unchanged at 4.75%, the reverse reportate unchanged at 3.25% and the CRR of banks unchanged at 5% of their NDTL.

However, the following measures constitute the first "exit" phase:

- The SLR, which was reduced from 25% of NDTL to 24% in September 2008, is being restored to 25%.
- The limit for the export credit refinance facility, which was raised to 50% of eligible outstanding export credit, is being returned to the pre-crisis level of 15%.

• The two unconventional refinance facilities: (i) the special refinance facility for scheduled commercial banks; and (ii) the special term repo facility for scheduled commercial banks (for funding to mutual funds (MFs), non-banking financial companies (NBFCs) and housing finance companies (HFCs)) were discontinued with immediate effect (27 October 2009).

The Reserve Bank's exchange rate policy has been guided by the broad principles of careful monitoring and management of exchange rates with flexibility, without a fixed target or a preannounced target or band, while allowing the underlying demand and supply conditions to determine exchange rate movements over time in an orderly way. This is coupled with the ability to intervene, if and when necessary. Subject to this predominant objective, the exchange rate management policy has been guided by the need to reduce excess volatility, prevent the emergence of destabilizing speculative activities, help maintain adequate levels of reserves and develop an orderly FX market. This policy has withstood the test of time, including the current global financial crisis. It is worth mentioning that daily INR volatility was lower than that of major cross currencies and has remained largely in the range of other Asian economies since the onset of the current global financial crisis.

CHAPTER IV

PROFILE OF BANKS

This chapter covers the profile of three banks. Thrissur District has taken for the purpose of the study. The headquarters of the selected banks are situated in Thrissur District. The selected banks for the study are Dhnalaxmi Bank Ltd., Catholic Syrian Bank Ltd. and South Indian Bank Ltd.

4.1 DHANALAKSHMI BANK

Dhanalakshmi Bank was incorporated in 1927 by group of entrepreneurs at Thrissur located in Kerala. The bank started with a seed capital of Rs.11, 000 and with workforce of 7 employees. Much later in 1977, the bank was converted into Scheduled Commercial Bank. Presently it has a network of 181 branches and 26 extension counters spread across in states like Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Delhi and West Bengal. The Bank's Corporate Office located at Thrissur and Industrial Finance Branch at Kochi has received ISO 9001-2000 certification. The Bank is managed by a Board of Directors comprising professionals drawn from various walks of life with Shri.G.N.Bajpai as Chairman and Shri Amitabh Chaturvedi as the Managing Director and CEO.In August 2010, the bank has conveyed the approval of Registrar of Companies, Kerala and Lakshadweep (RoC) for change of name of the Bank from the present 'The Dhanalakshmi Bank' to 'Dhanlaxmi Bank'

Facilities

The bank has launched Centralised Banking Solution (CBS) on the Flexcube Platform facilitating anywhere/anytime banking to its clients. CBS has been installed in all branches. The bank also has established a data centre in Bangalore, to keep the networked system operational 24x7.Dhanalakshmi Bank has installed Real Time Gross Settlement (RTGS) and National Electronic Fund Transfer (NEFT) Systems in order to avail facilities for large value payments and settlements in real time on-line mode on a transaction-by-transaction basis.

The bank has a tie up with Visa International for International Debit Card. As part of this overall effort, the Bank has joined CASHNET, the first independent nation-wide shared ATM network in India, the National Financial Switch (ATM network) of the IDRBT, promoted by Reserve Bank of India and Cash Tree promoted by a group of public sector banks. Due to this the bank has access to 25,000 ATMs in the country. It is among those banks that offer free cash withdrawal facilities for its ATM debit card holders at other Bank ATMs.

Dhanalakshmi Bank has also forayed into both life and non-life insurance segment. For this it has tie up with MetLife India for life insurance and for non-life it has tie up with Oriental Insurance Company. The bank also markets mutual fund products and for this it has tie up with SBI Mutual Fund, Birla Sunlife Mutual Fund and Principal PNB Asset Management Company. In February 2010, the bank entered into a MoU with Destimoney Financial Services, for extending online trading and investment services to its customers and later on invested Rs 13 crores in Destimoney Securities forming 15% of the equity capital of the company. In March 2010, the bank marked its

foray into the retail assets business with the launch of two credit cards -- platinum and gold. The bank entered into an agreement in June 2010 with HDFC Mutual Fund for distributing the latter's financial products through its branches across the country. In December 2010, Dhanlaxmi Bank has entered into a pact with Qatar's largest bank -- Doha Bank -- for online transfer of funds. In January 2011, it ventured into the gift card space, which can be used at over 4.5 lakh merchant outlets. The gift card is a rupee-denominated, pre-paid, non-reloadable card.

Products and services

Personal Banking-Under this, bank offers wide range of personal banking products and services such as deposit, saving, loans, internet banking, mobile banking, demat services, credit card, debit card, etc.

NRI Banking- Dhanalakshmi Bank also caters its banking products and services to NRI customers such as deposit, car loans, remittances, investment schemes, and insurance are amongst others.

Corporate Banking- It provides a range of products and services to corporates.

Priority and SME- It also caters its products and services to priority and SME segment such as providing various kinds of products to meet their various business requirements. This involvement is part of the Bank's objective to act as catalysts for the economic prosperity of the country. The Bank has recognized micro finance intervention as an effective tool for poverty alleviation and has streamlined the linkage between the Bank and Self Help Groups through 100 branches.

Milestones:

2010

- Dhalaxmi Bank Launches Mobile Banking.
- Company has changed its name from Dhanalakshmi Bank Ltd. to Dhanlaxmi Bank Ltd.

2011

- Dhanlaxmi Bank launches gift card.
- Dhanlaxmi Bank introduces 300-day deposit.
- Dhalaxmi Bank Launched a Forex Card A Foreign Currency Denominated, Re Loadable, Prepaid Card.
- Dhanlaxmi Bank launches the second series of gold coins.

2012

- Dhanlaxmi Bank starts silver retail business.'

4.2 CATHOLIC CYRIAN BANK

The Catholic Syrian Bank (CSB) was established in the year 1920 in the region of Thrissur in the state of Kerala. The main headquarters of the bank is located in the city of Thrissur. The bank started its operations from the first of January in the year 1921 and since then, it has spread its branches and become a reputed name in the banking industry. When the bank started its operations, it had an initial authorized capital of Rs.5 lakh while the paid up capital amount was around Rs. 45,270. Since then, the bank has significantly increased its operations and today it has around 334 branches and around 125 ATMs. The net profit of the bank now amounts to around 36.56 crore. Around 80% of the branches of the bank are located in the rural and semi urban areas of the country.

Growth of Catholic Cyrian Bank

In the year 1969, the Catholic Syrian Bank was granted the status of a Scheduled Bank while in the year 1975; it was adjusted as the 'A' Class Scheduled Bank after the deposits became more than 25 crore. In addition to the domestic branches, there are around 5 NRI branches of the bank as well as 5 Industrial Branches, 5 SSI Branches and 4 Service Branches. All these branches work in coordination with each other and offer the high class facilities and services. Ranking among the well-known private banks in India, the Catholic Syrian Bank is an organization that is preferred by lots of customers across the country. It offers a number of customized solutions and services of high standards to fulfill the needs and preferences of the customers and help them to enjoy financial stability. The Catholic Syrian Bank has a strong presence in the rural areas in India and is a well-known financial organization related to the agricultural sector.

Products and services of Catholic Syrian Bank

The products and services of the Catholic Syrian Bank are meant to provide utmost customer satisfaction. By being a customer of the bank, one can be assured of financial stability and high returns. Some of the well-known segments under which the services of the bank are based are:

- Insurance
- Personal Banking
- Loan and financial services
- Advances
- NRI services

All these segments take care of the needs and preferences of the customers and also keep pace with the changing trends of the market. Insurance is a major part of the products and services of Catholic Syrian Bank. There are long term insurance benefits as well as short term insurance benefits. One can avail car insurance, health insurance, housing insurance and lots more from the bank. Some of the popular insurance products that are offered:

- Classic Life Premier
- Simply Life
- Supreme Life
- Children's Dream Plan
- CSB Health Care Support
- CSB Travel Support Scheme

To increase its overseas presence, the Catholic Syrian Bank offers a number of high class services and financial solutions to the Non Resident Indians. Most of the banking transactions are carried online which makes it more hassle free, easy and convenient. Some of the well-known accounts which are offered by the bank are:

- FCNR Account
- RFC Account
- NRO Account
- NRE Account

In addition to these, the bank also offers loans and advances for NRIs who wish to set up business and commercial bases in India. Some of them are:

- Both short term and long term loans in lieu of the term deposits for purposes other than undertaking any types of investments in the country.
- One can also get loans for taking flats or houses in any part of the country.
- Loans are also provided against the shares and other forms of securities and various categories of immovable properties However, agricultural land or farm houses should not be included.
- Loans are provided in lieu of the Resurgent India Bonds (RIBs). The loans are provided for business purposes or personal requirements
- Housing loans are provided for the acquisition and modernization, repairs and renovation purposes.

Personal loans

Under the category of Catholic Syrian Bank Ltd personal loans, there are NRI loan services. Here loans are issued to NRIs against NRIs term deposits held with the Catholic Syrian Bank. These loans used for acquiring residential accommodation in India. may be Catholic Syrian Bank Ltd also issues loans to NRIs against immovable property (of specified category), shares and securities. These loans can be used for purposes specified by the bank. NRI loans from Catholic Syrian Bank are also issued against Resurgent India Bonds. Housing loans granted to NRIs by Catholic Syrian Bank Ltd may be used for the purpose of of acquisition, modernization, repair and renovation houses. 'Casy Mithra' also falls under the category of Catholic Syrian Bank Ltd personal loans. The maximum loan amount sanctioned under this project is `25.00 lakh and the minimum loan amount is `0.50 lakh. Salaried individuals are eligible for this loan, however there are a host of conditions governing the loan. Catholic Syrian Bank Ltd Car Loans are available under the VIP Car Loan scheme and the ordinary Car Loan scheme. VIP Car Loans from Catholic Syrian Bank Ltd are extended to clients having funded limits greater than or equal to `25 lakhs. Car loans in this category are also extended to clients having term deposits greater than or equal to `25 lakhs. A host of other conditions also govern the terms and condition of loans extended under this category. Under the general car loan scheme of Catholic Syrian Bank Ltd, vehicles like car, jeep or van can be procured for personal use. Loans here are extended to persons with requisite amount of income or assets, which guarantee the regular loan repayment capacity of the borrower. It may be noted that, Gold Loans from Catholic Syrian Bank Ltd belong to the general category. Finances are available for gold purchases up to `750.00 for each gram. Special rates are available for Hallmarked scheme gold. This Gold Loan is also known as Kanakashree. Catholic Syrian Bank Education loans are available for financing studies in India and abroad. Catholic Syrian Bank Home Loans are also available for Indian residents. The Catholic Syrian Bank Ltd loans are, thus, available for a number of categories and carry attractive terms and conditions.

4.3 SOUTH INDIAN BANK

One of the earliest banks in South India, South Indian Bank came into being during the Swadeshi movement. The establishment of the bank was the fulfillment of the dreams of a group of enterprising men who joined together at Thrissur, a major town (now known as the Cultural Capital of Kerala), in the erstwhile State of Cochin.

South Indian Bank was registered as a private Limited Company under the Companies Act of 1913 and commenced business on 29-01-1929 at round South, Thrissur. The South Indian Bank was formed by a group of 44 enterprising men of Thrissur who contributed Rs. 500/- each to the initial paid capital of Rs.22,000/-. Their main objective was to serve the merchant community of Thrissur by freeing them from the clutches of the money lenders who charged exorbitant rates of interest. The bank received very good support from the public at large. Initially the growth was slow but steady. The number of branches opened each year testfied its stability and popularity. It was included in the second schedule of the RBI and became a scheduled bank on 07/08/1976.SIB was the first scheduled bank in the private sector in Kerala to get the liscence under section 22 of the Banking Regulation Act 1949 from RBI on 17/06/1957.In the 86 years of its service the Bank had survived many crisis. It could survive the Kerala Banking crisis of 1960 when the Palai Central Bank was closed down. A turbulent environment was experienced by banks in Kerala.

Milestones

The first among the private sector banks in Kerala to become a scheduled bank in 1946 under the RBI Act.

The first bank in the private sector in India to open a currency Chest on behalf of the RBI in April 1992.

The first private sector bank to open a NRI branch in November 1992.

The first bank in the private sector to start an Industrial Finance Branch in March 1993.

The first among the private sector banks in Kerala to open an Overseas Branch to cater exclusively to the export and import business in June 1993.

The first Kerala based bank to implement Core Banking System

This chapter deals with profiles of Dhanalakshmi Bank Ltd., Catholic Syrian Bank Ltd and South Indian Bank Ltd. Next chapter makes an analysis on the impact of global financial crisis on the banking sector.

CHAPTER V

IMPACT OF GLOBAL FINANCIAL CRISIS

This chapter consists the analysis of performance of the banks during the period of financial crisis on the basis of earning per share, net profit, deposits and loans. Various tables and diagrams are used for analyzing the impact of global financial crisis on banks. The following table shows the performance of Kerala based banks during the period of global financial crisis.

TABLE 5.1

PERFORMANCE OF BANKS

	EPS			NE	ET PROF	TIT	DEPOSITS L			LOANS	LOANS	
Banks→ Year↓	DNB	CSB	SIB	DNB	CSB	SIB	DNB	CSB	SIB	DNB	CSB	SIB
2006-07	5	18	15	16	19	104	3088	4749	12239	1840	3013	7919
2007-08	10	29	17	32	37	152	3608	5318	15156	2102	3314	10454
2008-09	9	12	17	57	37	195	4969	6333	18092	3196	3684	11852
2009-10	4	1	21	23	2	234	7098	6978	23011	5006	4467	15823
2010-11	3	4	3	26	12	293	12530	8726	29721	9065	6220	20489

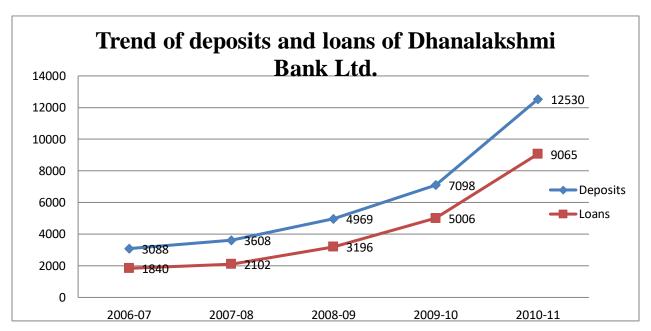
From the above table it is clear that net profit, deposits and loans of Kerala based banks shows an increasing trend from 2006-07 to 2010-11. But EPS shows a declining trend except in the case of South Indian Bank. The following table is showing the trend of deposits and loans of Dhanalakshmi Bank Ltd. for the period from 2006-07 to 2010-11.

TABLE 5.2
DEPOSITS AND LOANS OF DHANALAKSHMI BANK LTD.

Year	Deposits	Loans	Loans to deposits
	(Rs.)	(Rs.)	ratio(%)
2006-07	3088	1840	60
2007-08	3608	2102	58
2008-09	4969	3196	64
2009-10	7098	5006	71
2010-11	12530	9065	72

From the above table it is clear that deposits and loans are the highest in the year 2010-11with Rs12350 and Rs.9065. The following figure is showing the trend of deposits and loans of Dhanalakshmi Bank Ltd. for the period from 2006-07 to 2010-11.

FIGURE 5.1
DEPOSITS AND LOANS OF DHANALAKSHMI BANK Ltd.



From the above, it is clear that global financial crisis in the year of 2008-09 has not affect the deposits and loans of Dhanalakshmi Bank. It shows an increasing trend from 2006-07 to 2010-11. The following table is showing the trend of deposits and loans of Catholic Syrian Bank Ltd. for the period from 2006-07 to 2010-11.

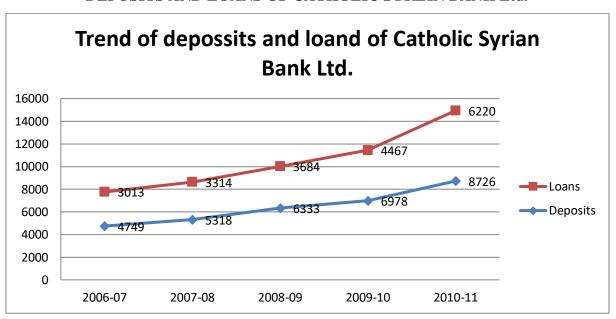
TABLE 5.3
DEPOSITS AND LOANS OF CATHOLIC SYRIAN BANK Ltd.

Year	Deposits	Loans	Loans to Deposits
	(Rs.)	(Rs.)	Ratio(%)
2006-07	4749	3013	63
2007-08	5318	3314	62
2008-09	6333	3684	59
2009-10	6978	4467	64

2010-11	8726	6220	71

From the above it is clear that deposits and loans are the highest in the year 2010-11 with Rs.8726 and Rs.6220. The following figure is showing the trend of deposits and loans of Catholic Syrian Bank Ltd. for the period from 2006-07 to 2010-11.

FIGURE 5.2
DEPOSITS AND LOANS OF CATHOLIC SYRIAN BANK Ltd.



From the above, it is clear that global financial crisis in the year of 2008-09 has not affect the deposits and loans of Catholic Syrian Bank. It shows an increasing trend from 2006-07 to 2010-11. The following table is showing the trend of deposits and loans of South Indian Bank for the period from 2006-07 to 2010-11.

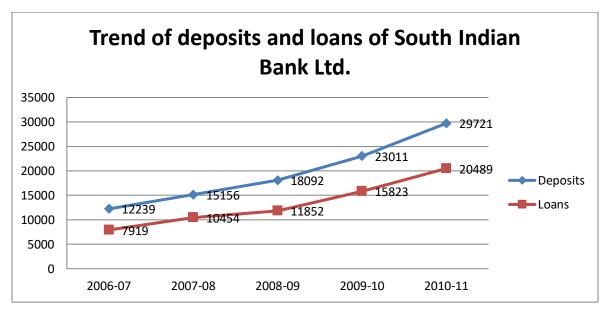
TABLE 5.4
DEPOSITS AND LOANS OF SOUTH INDIAN BANK LTD.

Year	Deposits	Loans	Loans to Deposits	
	(Rs.)	(Rs.)	Ratio(%)	
2006-07	12239	7919	65	
2007-08	15156	10454	69	
2008-09	18092	11852	66	

2009-10	23011	15823	69
2010-11	29721	20489	69

From the above it is clear that deposits and loans are the highest in the year 2010-11 with Rs.29721 and Rs.20489. The following figure is showing the trend of deposits and loans of South Indian Bank for the period from 2006-07 to 2010-11.

FIGURE 5.3
DEPOSITS AND LOANS OF SOUTH INDIAN BANK Ltd.



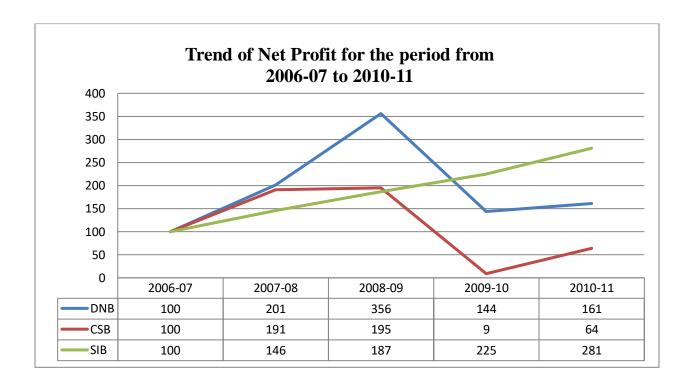
From the above, it is clear that global financial crisis in the year of 2008-09 has not affect the deposits and loans of Catholic Syrian Bank. It shows an increasing trend from 2006-07 to 2010-11. The following table is showing the trend of net profit for the period from 2006-07 to 2010-11.

TABLE 5.5
TREND OF NET PROFIT

Year	Dhanalakshmi Bank		Catholic Syrian Bank		South Indian Bank	
	Net Profit P1\P0*100		Net Profit	P1\P0*100	Net Profit	P1\P0*100
2006-07	16	100	19	100	104	100
2007-08	32	201	37	191	152	146
2008-09	57	356	37	195	195	187

2009-10	23	144	2	9	234	225
2010-11	26	161	12	64	293	281

FIGURE 5.4
TREND OF NET PROFIT



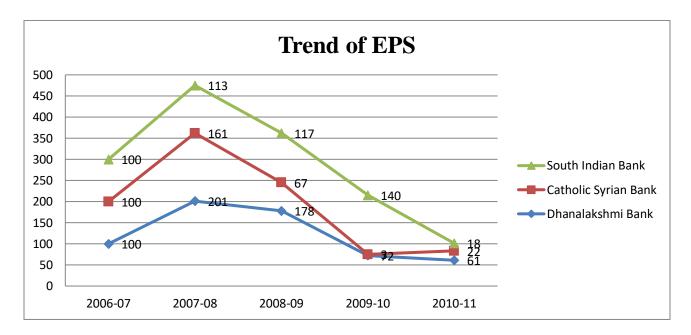
From the above it is also clear that net profit index of the banks shows a decreasing trend except South Indian Bank. It shows the decreasing trend in the year of 2009-10 not in the year of 2008-09. The following table is showing the trend of EPS for the period from 2006-07 to 2010-11.

TABLE 5.6
TREND OF EPS

Year	Dhanalakshmi Bank		Catholic Syrian Bank		South Indian Bank	
	EPS	P1\P0*100	EPS	P1\P0*100	EPS	P1\P0*100
2006-07	5	100	18	100	15	100

2007-08	10	201	29	161	17	113
2008-09	9	178	12	67	17	117
2009-10	4	72	.52	3	21	140
2010-11	3	61	4	22	3	18

From the above table it is clear that the EPS shows a fluctuating trend for the Caatholic Syrian Bank and South Indian Bank. In the year 2008-09 EPS index shows low compared to the previous years for the Dhanalakshmi Bank and Catholic Syrian Bank. But for the South Indian Bank it is increasing in the year 2008-09 and 2009-10.



From the above figure it is clear that the trend of EPS index is the highest in the year 2007-08 for the Dhanalakshmi bank and Catholic Syrian Bank. But it is the highest in the year 2009-10 for the South Indian Bank.

Base Shifting

One of the most frequent operations necessary in the use of index numbers is changing the base of an index. Such a change is referred to as shifting the base. Base shifting means changing the base of a series of index numbers to another and recalculating the index numbers with the new base .The reasons for shifting the base are,

- 1. The base year is too far away from current year so that it becomes unsuitable. Comparisons with that base, becomes meaningless.
- 2. Suppose we want to compare two series of index numbers, the comparison would be meaningful only if the two index numbers have a common base. If not the base of one them is to be shifted so as to be same as that of the other. The formula for shifting the base is,

Index number of a year *100

Index number of base year

TABLE 5.7
IMPACT OF GLOBAL FINANCIAL CRISIS ON NET PROFIT

Year	Dhanalakshmi Bank		Catholic Syrian Bank		South Indian Bank	
	Net Profit	P1\P0*100	Net Profit	P1\P0*100	Net Profit	P1\P0*100
	Index		Index		Index	

2006-07	100	28	100	51	100	53
2007-08	201	56	191	98	146	78
2008-09	356	100	195	100	187	100
2009-10	144	40	9	4	225	120
2010-11	161	45	64	33	281	150

From the above table it is clear that net profit index (calculated on the basis of base shifting) shows an increasing trend for the South Indian Bank. Net profit index shows a fluctuating trend for the other two banks. The following figure is showing impact of global financial crisis on net profit

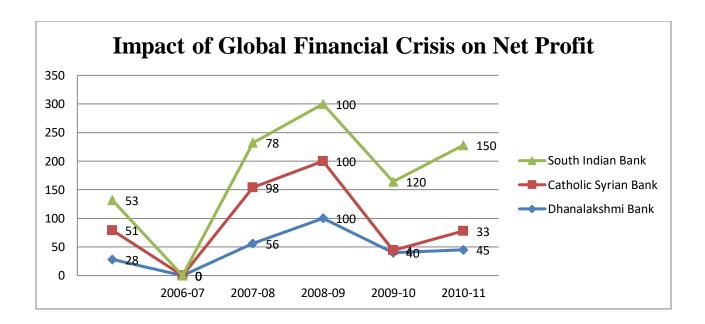
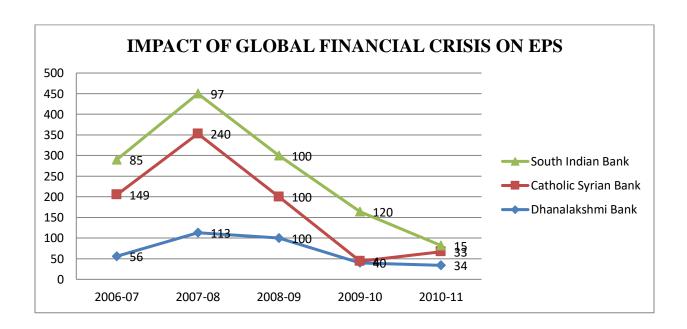


TABLE 5.8
IMPACT OF GLOBAL FINANCIAL CRISIS ON EPS

Year	Dhanalakshmi Bank		Catholic Syrian Bank		South Indian Bank	
	EPS Index	P1\P0*100	EPS Index	P1\P0*100	EPS Index	P1\P0*100

2006-07	100	56	100	149	100	85
2007-08	201	113	161	240	113	97
2008-09	178	100	67	100	117	100
2009-10	72	40	3	4	140	120
2010-11	61	34	22	33	18	15

From the above table it is clear that EPS index (calculated on the basis of base shifting) shows an increasing trend for the South Indian Bank except in the year 2010-11. EPS index shows a fluctuating trend for the other two banks. The figure is showing the impact of global financial crisis on EPS.



CHAPTERVI

MANAGEMENT EFFICIENCY OF BANKS

This chapter deals with the management efficiency of the Kerala based banks during the period of Global Financial Crisis.

1. Interest to total fund ratio

Interest Income /Total Funds

TABLE 6.1
INTEREST TO TOTAL FUND RATIO

Year	Dhanalakshmi Bank	Catholic Syrian	South Indian Bank
		bank	
2006-07	8.02	8.31	8.34
2007-08	8.76	11.98	8.82
2008-09	8.90	9.58	9.36
2009-10	8.17	7.5	9.18
2010-11	8.27	7.75	8.7

From the above table it is clear that management is highly efficient during the period of global financial crisis in the year 2008-09 except Catholic Syrian Bank.

2. Total income to capital employed ratio

Total Income/Capital Employed

TABLE 6.2
TOTAL INCOME TO CAPITAL EMPLOYED RATIO

Year	Dhanalakshmi Bank	Catholic Syrian	South Indian Bank
		bank	
2006-07	8.77	8.31	8.75
2007-08	9.42	11.98	9.26
2008-09	10.10	9.58	9.76
2009-10	9.09	8.48	9.53
2010-11	9.36	8.51	9.06

From the above table it is clear that management is highly efficient during the period of global financial crisis in the year 2008-09 except Catholic Syrian Bank.

3. Operating Expenses to total funds ratio

Operating expenses /Total funds

TABLE 6.2

OPERATING EXPENSES TO TOTAL FUNDS RATIO

Year	Dhanalakshmi Bank	Catholic Syrian	South Indian Bank
		bank	
2006-07	2.76	2.51	2.35
2007-08	2.31	2.40	2.80
2008-09	2.22	2.10	2.27
2009-10	2.69	1.95	1.69
2010-11	3.00	1.75	1.61

From the above table it is clear that operating expenses of Kerala based banks decreased from year to year. In the period of global financial crisis also (2008-09) it shows a declining trend.

11. Total Assets Turnover Ratio

TABLE 6.3
TOTAL ASSETS TURNOVER RATIO

Year	Dhanalakshmi Bank	Catholic Syrian	South Indian Bank
		bank	
2006-07	0.08	0.08	0.08
2007-08	0.09	0.08	0.09
2008-09	0.09	0.09	0.09
2009-10	0.08	0.09	0.09
2010-11	0.08	0.08	0.09

From the above table it is also clear that the management is highly efficient in maintaining the total assets of their banks.

ESTIMATION OF COEFFICIENT OF VARIATION

When the standard deviation is expressed as percentage ratio to the mean, it shows the coefficient of variation.

Coefficient of variation = $S \cdot D/Mean *100$

Coefficient of variation is a relative measure of dispersion. So it is free from the unit in which the values in the series are measured. This measure has great practical utility. It can be used to determine the variability of two or more series, irrespective of the fact that whether they are expressed in the same or different units. The coefficient of variation is also useful for comparing the variability in two series when their means are different. The series, for which the coefficient of variation is less, is considered to be more stable or consistent.

TABLE 6.4
COEFFICIENT OF VARIATION OF BANKS

X	X^2	Y	Y ²	Z	\mathbf{Z}^2
16	256	19	361	104	10816
32	1024	37	1369	152	23104
57	3249	37	1369	195	38025
23	529	2	4	234	54756
26	676	12	144	293	85849
154	5734	107	3247	978	212550

Variables	X	Y	${f Z}$
Mean	30.8	21.4	195.6
STDEV	14.07	13.85	65.05
COVAR	45.68	65	33.29

X variable denotes the net profit of Dhanalakshmi Bank. Y variable denotes net profit of Catholic Syrian Bank and Z variable denotes the net profit of South Indian Bank. Coefficient of variation is the highest for Catholic Syrian Bank. For the other two banks it is less than 50%. So it is clear that there is no any huge variation between the net profits of the banks in the years from 2006-07 to 2010-11 including the year of global financial crisis except for the Catholic Syrian Bank.

Application of Chi-Square test

The statistical test in which the test statistic follows X^2 -distribution is called the X^2 -test. Therefore X^2 test is a statistical test ,which tests the significance of difference between observed frequencies and the corresponding theoretical frequencies of a distribution, without any assumption about the

distribution of the population. X² test is one of the simplified and the most widely used non-parametric tests in statistical work. This test was developed by Prof. Karl Pearson in 1900.

Testing the impact of Global Financial Crisis on EPS of Dhanalakshmi Bank

H0: There is no any significant difference between the expected and observed frequencies.

H1: There is a significant difference between the expected and observed frequencies.

TABLE 6.5
DHANALAKSHMI BANK LTD

0	E	О-Е	(O-E) ²	(O-E) ² /E
5.03	6.16	-1.13	1.2769	0.207289
10.13	6.16	3.97	15.7609	2.558588
8.96	6.16	2.8	7.84	1.272727
3.63	6.16	-2.53	6.4009	1.039107
3.06	6.16	-3.1	9.61	1.560065

 $X^2=6.64$

Degree of freedom=4

Level of significance=1%

Table value=13.28

Calculated value is less than the table value. So there is no any significant difference between the observed and expected frequencies.

There is no any impact of Global Financial Crisis on EPS of Dhanalakshmi Bank

Testing the impact of Global Financial Crisis on EPS of South Indian Bank

H0: There is no any significant difference between the expected and observed frequencies.

H1: There is a significant difference between the expected and observed frequencies

TABLE 6.6 SOUTH INDIAN BANK LTD

0	E	О-Е	(O-E) ²	(O-E) ² /E
15	14.6	0.4	0.16	0.010959
17	14.6	2.4	5.76	0.204521
17	14.6	2.4	5.76	0.394521
17	14.6	2.4	5.76	0.394521
21	14.6	6.4	40.96	2.805479
3	14.6	-11.6	134.56	9.216438

 $X^2=12.82$

Degree of freedom=4

Level of significance=1%

Table value=13.28

Calculated value is less than the table value. So there is no any significant difference between the observed and expected frequencies.

There is no any impact of Global Financial Crisis on EPS of South Indian Bank

Testing the impact of Global Financial Crisis on EPS of Catholic Syrian Bank

H0: There is no any significant difference between the expected and observed frequencies.

H1: There is a significant difference between the expected and observed frequencies

CATHOLIC SYRIAN BANK

0	E	О-Е	(O-E) ²	(O-E) ² /E
18	12.7	5.3	28.09	2.211811
29	12.7	16.3	265.69	20.92047
12	12.7	-0.7	0.49	0.038583
0.52	12.7	-12.18	148.3524	11.68129
4	12.7	-8.7	75.69	5.959843

 $X^2=40.81$

Degree of freedom=4

Level of significance=1%

Table value=13.28

Calculated value is greater than the table value. So there is a significant difference between the observed and expected frequencies.

There is an impact of Global Financial Crisis on EPS of Catholic Syrian Bank

ANOVA

Analysis of variance may be defined as a technique which analysis the variances of two or more comparable series for determining the significance of differences in their Arithmetic means, and for determining whether different samples under study are drawn from same population or not, with the help of the statistical technique called F-test.

(a) Assume means of all columns are equal

(b) Assume means of all rows are equal

TABLE 6.8

	EPS							
Banks→ Year↓	DNB	CSB	SIB					
2006-07	5	18	15					
2007-08	10	29	17					
2008-09	9	12	17					
2009-10	4	1	21					
2010-11	3	4	3					

ANOVA TABLE-EPS

Sources of Variation	Sum of	Degree of	Mean	F
	squares	freedom	Squares	
Between Columns	195	2	98	
				Fc=2.22
Between Rows	385	4	96	
				Fr=2.18
Residual	348	8	44	
Total	928	14		

Between columns (Kerala based banks)

Degree of freedom (2, 8)

Table value of F=4.46

Calculated value of F=2.22 which is less than the table value.

We accept the hypothesis that EPS of Kerala based banks is not differing significantly.

Between rows (between years)

Degree of freedom (4, 8)

Table value of F=3.84

Calculated value of F=2.18 which is less than the table value.

We accept the hypothesis that Global Financial crisis does not have any impact on the performance of the banks. The performance of the banks is equal in all the years including 2008-09.

H0: Means of all the samples are equal.

Year	2006-07	2007-08	2008-09	2009-10	2010-11
DNB	8.02	8.76	8.9	8.17	8.27
CSB	8.31	11.98	9.58	7.5	7.75
SIB	8.34	8.82	9.36	9.18	8.7

ANOVA-Management Efficiency

Sources of Variation	Sum of	Degree of	Mean	F
	squares	freedom	Squares	
Between Samples	SSC=6.75	4	1.69	
				Fc=1.88
Within Samples	SSE=8.97	10	.89	
Total	15.72	14		

F=1.88

Degree of freedom= (4, 10)

Table value=3.48

As the calculated value is less than the table value. We can accept the null hypothesis. That is the management of all the banks are highly efficient. Global financial crisis on 2008-09 has no any effect on the performance of the banks.

TABLE 6.9

ADVANCES ,INVESTMENTS, BORROWINGS AND DEPOSITS OF KERALA BASED BANKS OUTSIDE INDIA

	Advanc	es outsi	ide India	Investments outside		Borrowings outside			Deposits outside			
				India		India			India			
Banks→												
Year↓	DNB	CSB	SIB	DNB	CSB	SIB	DNB	CSB	SIB	DNB	CSB	SIB
2006-07	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2007-08	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2008-09	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	57672	Nil	Nil	Nil
2009-10	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2010-11	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	246276	Nil	Nil	Nil

From the above table it is clear that Kerala based banks have no any advances, investments and deposits outside India. But South Indian Bank has borrowings from outside India in the two years that is 2008-09 and 2010-11

Since Kerala based banks have no any advances, investments and deposits outside India, Global Financial Crisis has no any impact on Kerala Based banks. During the period of Global Financial Crisis also the Kerala based banks continuing their increase in net profit, deposits and earning per share. From the calculated ratios it is clear that the management of such banks are very efficient in controlling the global financial crisis from outside. From the chi-square test, it is also clear that global financial crisis has no any impact on the EPS of the Kerala based banks except Catholic Syrian Bank

CHPTER VII

FINDINGS, RECOMMENDATIONS AND CONCLUSION

Indian economy is under the impact of global financial crisis. A series of fiscal and monetary measures have been taken by the government and RBI to minimize the impact of the slowdown as also to restore the economic buoyancy. The study on financial crisis in banking sector with special reference to Thrissur District, Kerala shows that there is no great impact on the management efficiency of the banks during the global financial crisis period. All the three banks have an increasing trend of loans and deposits during the period. Only the net profit and earning per share show a fluctuating trend because of financial crisis.

FINDINGS

- The net profit, deposits and loans of Kerala based banks shows an increasing trend from 2006-07 to 2010-11. But EPS shows a declining trend except in the case of South Indian Bank.
- 2. Global financial crisis in the year of 2008-09 has not affected the deposits and loans of Dhanalakshmi Bank. It shows an increasing trend from 2006-07 to 2010-11.
- 3. Global financial crisis in the year of 2008-09 has not affected the deposits and loans of South Indian Bank. It shows an increasing trend from 2006-07 to 2010-11.
- 4. Global financial crisis in the year of 2008-09 has not affected the deposits and loans of Catholic Syrian Bank. It shows an increasing trend from 2006-07 to 2010-11.
- 5. Net profit index of the banks shows a decreasing trend except South Indian Bank. It shows the decreasing trend in the year of 2009-10 except in the year of 2008-09.
- 6. EPS shows a fluctuating trend for the Catholic Syrian Bank and South Indian Bank. In the year 2008-09 EPS index shows low compared to the previous years for the Dhanalakshmi Bank and Catholic Syrian Bank. But for the South Indian Bank it is increasing in the year 2008-09 and 2009-10.
- 7. EPS index is the highest in the year 2007-08 for the Dhanalakshmi bank and Catholic Syrian Bank. But it is the highest in the year 2009-10 for the South Indian Bank.
- 8. Net profit index (calculated on the basis of base shifting) shows an increasing trend for the South Indian Bank. Net profit index shows a fluctuating trend for the other two banks.

- 9. EPS index (calculated on the basis of base shifting) shows an increasing trend for the South Indian Bank except in the year 2010-11. EPS index shows a fluctuating trend for the other two banks.
- 10. Management of all banks is highly efficient during the period of global financial crisis in the year 2008-09 except Catholic Syrian Bank.
- 11. Operating expenses of Kerala based banks decreased from year to year. In the period of global financial crisis also (2008-09) it shows a declining trend.
- 12. The management is highly efficient in maintaining the total assets of their banks.
- 13. There is no any huge variation between the net profits of the banks in the years from 2006-07 to 2010-11 including the year of global financial crisis except for the Catholic Syrian Bank.
- 14. There is no any impact of Global Financial Crisis on EPS of all the three banks.
- 15. That is the management of all the banks are highly efficient. Global financial crisis on 2008-09 has no any effect on the performance of the banks.

RECOMMENDATIONS

- 1. Make banks less attractive to some stockholders, and limiting their ability to take advantage of debt. When it is attractive, could make them less eager to lend, rising interest rates.
- 2. To raise more capital, banks wouldn't hold back lending. Rather they would tap their shareholders either by issuing new stock or just by cutting the dividends they pay out of earnings, letting profits build up of the balance sheet.
- 3. The bank should borrow less, relative to their assets. After all what turned a bubble in real estate prices into a full-on financial panic was not just the toxic loans banks gambled on, but the fact that they too were playing with borrowed money.
- 4. The banks should impose strict limits on financial leverage.
- 5. Record and report more realistic statistics and produce a more accurate dashboard for the health of the economy. Inflation measures such as the Consumer Price Index should actually reflect the true rate of inflation.

CONCLUSION

In 2008, the United States experienced a major financial crisis which led to the most serious recession since the second world war. Both the financial crisis and the downturn in the U.S. economy spread to many foreign nations, resulting in a global economic crisis. Indian banks have escaped the financial crisis mainly because of the excellent regulations by RBI and the decision not to allow investment banking on the US model. RBI has also enforced the prudential and capital adequacy norms without fear or favour. RBI regulations are equally applicable to all the Indian banks, both in the public and private sector. They are professionally managed and proper risk management systems are put in place. The study on global financial crisis in banking sector with special reference to Thrissur district, Kerala shows that as in the case of Indian banks there is no great impact of financial crisis on banks which are situated (headquarters) in Thrissur District.

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