Conclusion
Finance is indispensable for economic growth. Economists propounded various theories emphasizing that financial development leads to economic development and economic growth. Their views were supported as well as criticized with various arguments. Even, Nobel laureates and other influential economists disagree sharply about the role of the financial sector in economic growth. Robert Lucas dismisses finance as a major determinant of economic growth also called its role overstressed, whereas Joan Robinson argued that where enterprise leads finance automatically follows. From this perspective, finance does not cause growth and Merton Miller also argued that the idea that financial markets contribute to economic growth is a proposition too obvious for serious discussion. Economic growth depends on the accumulation of input factors in the production process, technical progress and traditionally finance has been linked primarily with the first of these sources of growth, regarding capital as an important input factor and its accumulation as a condition for sustainable economic growth. This view was supported by Joseph Schumpeter that financial intermediaries indeed lead to technological innovation which leads to economic development by mobilizing savings, evaluating projects, managing risks, monitoring managers and facilitating transactions.

Various economists discuss whether economic growth and development is promoted by Bank-based or Market-based financial system. Supporters of bank-based system argued that such system foster faster long run growth by reducing informational asymmetries; they also argued that markets are ineffective devices for exerting device for exerting corporate control that enhances resource allocation and promotes economic growth. Bank-based supporters also argued that banks are in a better position to form long-run relationships with firms that facilitate the flow of information about firms, resultanty enhances resource allocation. On the other hand, proponents of market-based financial system argued and criticized bank-based system that powerful banks under this system can exploit firms by extracting high rents, since they acquire inside information about firms, resultanty firms have to pay high for their access to capital. This may also hinder the efforts extended by firms to undertake innovative, profitable ventures. It also give rise to lopsided trend while credit distribution since, firms with close connections to a ‘main bank’ have greater access to capital than firms without a ‘main bank’ connection. Banks are a major subset of financial intermediaries that help in mobilising savings and capital for the economic development and also lend different credits and offering demand.
deposits, but since few decades banking industry is subject to substantial structural and operational change.

In contemporary era, banking industry has come under pressure of increasing competition, become more contestable, more globalised, declined exit and entry barrier, highly deregulated, presence of asymmetric information lead banks to take more stringent focus on risk management. Traditional theories laid emphasize on information issues, imperfect markets, delegated monitoring and controlling the insurance role of banks, while modern theory emphasis banks as trading oriented or transaction oriented institutions. While lending, a bank takes, manages and absorbs risk namely credit, operational, interest rate, foreign exchange risk by issuing claims on its total assets with different characteristics from those encountered in its loan portfolio. Credit risk is extremely old and the most devastated risk that can lead to systemic banking crisis. Root causes which give rise to the problem of credit risk in loan portfolio are compromise of credit principles—that is, granting loans carrying undue risks or unsatisfactory terms with full knowledge of the violation of sound credit principles, extension of credit on an unsound basis to directors or large shareholders, earnings factor permitted to outweigh that of soundness, incomplete credit information, loans granted without a clear agreement governing repayment, loans wherein the bank advances an excessive proportion of the required capital relative to the equity investment of the borrowers, timidity in dealing with individuals having dominating personalities or influential connections or friendships, or personal conflicts of interest involved, being influenced by salary incentives and bonuses based on loan portfolio growth, credits representing undue risks or unsatisfactory repayment terms are granted, failure to obtain or enforce repayment agreements, lack of adequate supervision of old and familiar borrowers, optimistic interpretation of known credit weakness based on past survival of recurrent hazards and distress, dependence on oral information furnished by borrowers in lieu of reliable financial data, ignoring warning signs pertaining to the borrower, economy, region, industry, or other related factors, poor selection of risks, loans for speculative purchase of securities or goods, technical incompetence and collateral loans carried without adequate margins of security.

‘Credit Risk’, has been one of the major variable in banking crisis, as in most recently and before the onset of banking crisis, its magnitude was very high and is the largest element of risk that exists in the books of most banks. It is witnessed a numerous times in past that failure in credit risk management not only weakens the individual banks
but also contributes to financial instability on the whole. Major components of credit risk are: the risk that a counter party will default and the risk associated with the recovery rate after default. Banks nowadays are increasingly facing credit risk or counter-party risk in various financial instruments other than loans, in the form of acceptances, inter-bank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in extension of commitments and guarantees, as well as settlement of transactions. Resultantly credit risk management has become all the more popular in the banking industry.

Research Findings

The present research work which dealt with the theoretical understanding of banking risks especially the ‘credit risk’ and ‘credit risk management’ in the banking sectors of Russia and India is based on the following research questions and efforts are made to find suitable answers for the same.

• How non-performing assets leads to creating the credit risks problem in the banking sectors of Russia and India?

Non-performing assets are those loans, which cease to earn income, full payment of principal and interest is no longer anticipated, principal or interest is 90 days or more delinquent and the maturity date has passed and payment in full has not been made. The issue of non-performing assets has gained increasing attention in last few decades due to various bank failures in which high percentage of NPLs acts as a major cause for the bank failure. It is also found by a number of economists that failing banks tend to be located far from the most-efficient frontier because banks don’t optimise their portfolio decisions by lending less than demanded. Since NPLs is one of the major indicators of credit risk resultantly high percentage of NPLs reflects high credit risk. The hang over percentage of NPLs in Russian and Indian banks during 1990s was quite high which indicates the presence of credit risk problem in their banking sector.

• What are the main causes for the emergence of credit risks problems in Russia and India?

Both Russia and India went for economic reforms in early 1990s, of which banking reform was one among them. Banking reforms include opening up the sector also deregulating the interest rates lead to a rise of the problem of credit risks in banking sector. Despite of the phenomenal rise of the commercial banks in Russia, banking
industry remained small, underdeveloped, remained merely as financiers of big industrial groups. It also lacked legal and institutional infrastructure, better management strategy including information hubs like credit rating agencies, bankruptcy provisions and inadequate creditor’s laws. On the other hand, firms illegally and frequently pledged same asset as collateral to secure loan simultaneously from multiple unsuspected banks and contractual obligation were shirked easily, resultantly it led to the problem of credit risk which was acute during 1990s, but since 2000, the magnitude of non-performing loans (Overdue loans) is declining due to introduction of better laws and institutional infrastructure proposed by Central Bank of Russia.

Indian banking sector initiated financial sector reforms in early 1990s. Before financial sector reforms, banks were under government’s dominance and complex structure of administered interest rates distorted not only the interest rate mechanism but also adversely affected the viability and profitability of banks by the end of 1980s. The wave of financial liberalization took place in the second half of the 1980s, which deregulated the interest rate, a reduction of the Cash Reserve Ratio and Statutory Liquidity Ratio, entry and exit deregulation and the adoption of prudential norms. Although banking reforms were present, still banks faced various risks like liquidity, operational, foreign exchange, interest rate but the main problem was the credit risk. Credit was given in almost all sectors i.e. agricultural sector, small-scale industry, medium and large-scale industry, export sector and priority sector for development and growth. Credit risk rose when the credit taken and interest payments were not paid back to banks in time and in India it is highly concentrated in public sector and scheduled commercial banks in the form of non-performing assets. Main reasons accountable for the rise of credit risk and its parameter non-performing assets were misutilization, no proper follow up action of recovery procedures i.e. one time settlement scheme by asset reconstruction companies, lok-adalats, SARFAESI Act, intentional defaulters, natural causes and calamities, political pressures, large branch expansion, under and over financing and competition in the marketing of the products. Problem of credit risk also rose because credit risk management was based on Basel I during 1980s and early 1990s that laid emphasis on Capital Adequacy Standards and neglect Internal Supervision and Market Discipline that also led to rise of non-performing loans that were around 23% of total loans in 1992.
• What is the significance of credit risk management in increasing economic efficiency of both the countries through banking sector?

Russia and India remained and will remain influential powers in the world in the coming time. To achieve higher growth rate, finance especially banking industry should be strong and resilient with various parameter of efficiency to be positively related. For such growth risk management particularly credit risk management is essential, since banking industry is in the business of risk, and to analyse that optimal amount of risk is being taken by the banking industry, credit risk management plays a major role. It is the proper and accurate credit risk management which in place helps in bringing down the magnitude of non-performing asset problem from the balance sheets of the bank.

• What are the similarities and differences of credit system in Indian and Russian banks and how their credit risk management approaches applicable in banking sector?

During first decade of transition, majority of banks in Russia and India suffered from the problem of non-performing assets, which is also a major indicator of credit risk. Banks in both countries suffered from various other risks like operational risk, legal risk, interest rate risk, and foreign exchange risk to some extent in this decade also. Since 2000, total loans, deposits increased, but banks also show declining trend so far as non-performing assets or overdue loans are concerned, sufficient capital adequacy ratio and bank capital and assets kept Russia and India in middle position so far as NPA and CRAR is concerned. There is another trend, which is haunting more is the increasing trend of credit risk in this ongoing economic crisis in the world. Both countries accumulated credit risk to some extent and may increase sharply by the end of 2009 and in 2010, still the magnitude of credit risk is not a great threat but alarming.

In Russia, banks acts only as passive players, giving credit towards real sector quite less and prefer too much of speculation. Economy was quite simple in Russia hence credit was mainly taken for payments of wages and arrears and credit risk arose from financially distressed firms and even lenders didn’t took it seriously, whereas in India credit was given to various sectors but the problem of credit risk was due to directed credit lending policy towards priority sector concentrating in agriculture and scheduled commercial banks.
It was also found that Soviet economy was a simple economy hence, not much role was provided for credit risk management. Since Russia got disintegrated in late 1980s, hence necessary required institutions and infrastructure was lacking and if they were they lacked efficiency and profitability. Credit risk was managed by the methods of individual credit and as a portfolio credit, using few banking laws and asset reconstruction companies. Currently, Russia's banking industry is strong and resilient due to enacting and execution of various laws on banking industry, and upgradation of banking industry with latest technologies that can help to move towards Basel II easily. Whereas in India, credit risk is managed through credit default swap, credit linked notes, organizational restructuring, reducing dependence on interest, curative management including debt recovery tribunals, lok-adalats, SARFAESI Law 2002, credit information bureau, corporate and asset reconstruction companies. Credit risk management framework is all the more need to be strengthened to move toward full capital account convertibility, as reduction of NPA is crucial for efficient banking industry.

**Hypotheses Testing:**

This study makes an effort to test the following hypotheses which are taken in the initial stage of our research work

This study was based on hypothesis that an archaic credit system lacking in asset management, rating institutions and bankruptcy regulations, soft credit policy for state enterprises and financial institutions have been responsible for creation of large non-performing assets in the banking system of Russia. The study found that undoubtedly, credit system in Soviet time was old fashioned and outmoded, resultantly after disintegration efforts were made to open economy by adopting economic reforms but all that was undertaken was in an abrupt manner, hence banking industry lacked asset management companies, rating institutions and bankruptcy regulations and soft credit policies instead of dear credit policy lead to the rise of problem of credit risk.

Another hypothesis was that lack of diversified portfolio assets management strategies and weak legal and institutional framework led to the rise of non-performing assets in Indian banking sector. This study found that rising non-performing assets is an obstacle in the path of full capital account convertibility. This study proved that lack of diversified portfolio asset management strategies and weak legal institutional framework led to the rise in non-performing assets, but directed credit lending policies towards priority sector and guarantees or letter of credit contains the highest credit risk in India.
Another major hypothesis was that proper use of credit risk management helps in resolving the problem of credit risk and increases profitability of banking sector. Well-developed capital market, contextual decision-making, securitization and tightening of capital norms reduce non-performing assets. Use of comprehensive credit risk modelling (full use of Z score Model and KMV Models) in the banking sector of Russia and India leads to improvement in internal risk management and helps in measuring the problem of credit risk by separating the defaulting firms from non-defaulting ones by using the information on stock prices and the capital structure of the firm to estimate its default probability. This study proved that NPA, which is a major indicator of credit risk and can adversely affect the efficiency of the banking industry. If NPA raise high that can be lead to systemic banking crisis. Resultantly, proper credit risk management followed by basic principles proposed by bank of international settlement also found that in India, 61.1% of public sector banks and 37.5% of private banks view that securitization ordinance is very important in credit risk management in banks. It was also found that board of directors is responsible for approval of credit risk policy and authority for credit risk policy depends on the ownership pattern of the banks resultanty senior management is not given responsibility for credit risk management. It was also found that risk rating techniques, followed by credit approval authority; prudential limits and loan review policy are found in use by the maximum banks in India. It was also found that most of the banks favoured CRISIL's (Credit Rating) model and internally designed models and 85% of the banks favoured standardized approach of credit risk. Our calculated regression results also show that systemic credit risk of Russian banks depends on GDP, inflation rates, real rate of interest and unemployment rate significantly whereas in India, lower levels of GDP and inflation rate causes higher the credit risk in Indian banking industry.

Due to ongoing scenario of economic crisis, working group of G-20 recognized that financial market will remain global and interconnected, while financial innovation will continue to play an important role to foster economic efficiency and the protectionist moves must be strongly resisted, yet financial institutions especially banks should be made resilient to meet global challenges to come. In order to address the underlying causes and weaknesses identified above, the working group also envisaged the need for a reform of the regulatory framework to avoid the emergence of similar crises and to mitigate the consequence of any future episode of financial stress. Russia and India being part of this global world, hence in order to absorb shock of such crisis, the regulatory
framework will need to keep pace with the associated risks in a more rapid and effective manner. Large complex financial institutions will continue to operate in multiple jurisdictions in order to meet the needs of their large global clients, and supervision will need to be better coordinated internationally with a robust global resolution framework. In order to avoid regulatory arbitrage, there is a need for greater consistency in the regulation of similar instruments and of institutions performing similar activities, both within and across borders.

Credit Risk Management in today’s deregulated market is a big challenge. Increased market volatility has brought with it the need for smart analysis and specialized applications in managing credit risk. A well-defined policy framework is needed to help the operating staff identify the risk-event, assign a probability to each, quantify the likely loss, assess the acceptability of the exposure, price the risk and monitor them right to the point where they are paid off. The management of banks should strive to embrace the notion of ‘uncertainty and risk’ in their balance sheet and still the need for approaching credit administration from a ‘risk-perspective’ across the system by placing well drafted strategies in the hands of the operating staff with due material support for its successful implementation. Therefore, it is imperative to adopt the advanced Basel-II methodology for credit risk. The Basel Committee has acknowledged that the current uniform capital standards are not sensitive and suggested a risk based capital approach. Reserve Bank of India’s risk based supervision reforms are a forerunner to the Basel Capital Accord-II. For banks in India and Russia with the ‘emerging markets’ tag attached to them going down the Basel-II path could be an effective strategy to compete in very complex global banking environment. Indian banks need to prepare themselves to be competed among the world’s largest banks. As our large banks consolidate their balance sheets size and peruse aspirations of large international presence, it is only expected that they adopt the international best practices in credit risk management.

Russia and India in order to reduce the problem of NPA and rising credit risk, has to move with comprehensive reforms with basic principles of credit risk management given by bank of international settlement report in particular and in-depth resilient legal and institutional framework in general that can help both the countries to withstand robustly in any crisis to come. It is all the more important for bankers to have a close vigil on economy’s vital statistics like inflation rate, real interest rate, unemployment rate and GDP growth rate, since there is a close relation between rising NPA and these vital statistics.