Chapter-02

Design of the Study
2.1 Statement of the Problem

To achieve the greatest long-term benefit, individual banks are devising their own unique approach and business case for sustainability. This is determined by how they want to align their business goals with trends in the markets and sectors in which they operate. Bank's Sustainability dimensions serves as a guide for strategic planning for banking institutions that want to improve their competitive advantage by integrating internal, external, financial, social and environmental sustainability concepts, policies, practices, management systems, products and services into their businesses.

Banking industry in India has undergone evolutionary and revolutionary changes. The role of banking has undergone phenomenal change in terms of products, services, size, length, depth, width, technology and operations. Banking sector reforms in India induced stiff competition where public sector, private sector and foreign banks are competing to capture the customers and increase the market share leading to sustainability in the long run.

Banking sector operations are regulated by micro-environment and macro-environmental factors. The customers, competitors, RBI regulations, investors and others are posing the day-to-day vibrancy to the banks financial and internal sustainability. The prudential norms, Basel-III, global recession and downswing of Indian economy and low capital formation impacted the banking sector. This is termed as the external influence and the banks which evolve and implement the policies and strategies to comply with all these external influence are called external sustainability of banks.
Bank’s Sustainability dimensions serve as a guide for strategic planning for banking institutions that want to improve their competitive advantage by integrating financial, human resources, technological, internal and external, social and environmental sustainability concepts, management systems, products and services into their banking businesses, which are operating in India. There are serious challenges and ample opportunities for banks on their path to maintain sustainability.

The present research work presents the business case for sustainable banking by drawing on responses of top level management, bank managers and banks staff in three categories of banks - public sector, private sector and foreign banks operating in India. For the study parameters are drawn from International Financial Corporation (IFC) survey reports (2005) including 14 case studies from pioneering financial institutions. The IFC survey collected and analyzed data from more than 120 financial and banking institutions in 43 emerging market countries that had participated in IFCs Competitive Business Advantage training workshops. The results reveal drivers, opportunities and trends in the banking sector’s response to sustainability. The thesis has taken concrete steps to integrate financial, internal, external, technological, social and environmental sustainability into policies, practices, products, and services.

This present research work aimed at analyzing the data of three sectors of banks to serve as a guide for strategic planning for banks that want to improve their competitive advantage. To build customer loyalty and meet new market demands to sustain their market share, banks are increasingly adopting global standards in risk management, international standards of openness in reporting and accountability and more effective strategies for product development.

This study was intended to analyze as to how the Indian public and private sector banks and foreign banks operating on the Indian soil are devising their own unique approaches and business case for sustainability to achieve the greatest long-term benefit. This is determined by how they are aligning their business goals with trends in the markets and sectors in which they operate.
The topic sustainability of banks in India – an analytical study in the Indian context is well-known but unexplored fully. Finally, this research programme was undertaken to identify bank-specific financial, internal, external, technological, human resources, social and environmental sustainability paradigms and to analyze how various dimensions in the banks that are linked to strategic and tactical goals. The impact of sustainability of banks on the performance and effectiveness is the crux of the thesis.

2.2 Research Issues covered

The present study aims to cover the following research issues.

- What are the factors which govern the internal and external sustainability of banks in the present day Indian context?
- What are the forces that determine the financial sustainability of public sector, private sector and foreign banks operating in India?
- What are the major challenges and opportunities in sustaining the sustainability of banks in relation to technological, regulatory, infrastructural, stakeholders and social and environmental risks that banks face in the present Indian context?
- How the various sustainability risks are transformed into opportunities and ways to access new markets and clients?
- What steps banks have taken to implement appropriate management procedures and systems for maintaining sustainability?
- What kind of impact under internal, external, financial, environmental and social sustainability have on their banking business under the study?
- What motivates banks in India to reassess their business practices and engage in sustainability-oriented risk management and product development?
- What is the success rate of banks sustainability measures under the study?

These and other research issues called for a thorough research programme hence the present study titled ‘Sustainability of Banks in India – An Analytical Study’.
2.3 Objectives of the Study

1. To identify the factors that influence banks sustainability in the Indian context;
2. To examine the internal and external sustainability of select public sector, private sector and foreign banks operating in India.
3. To analyse the financial, technical, human resources, regulatory, social and environmental sustainability of sample banks;
4. To analyse the impact of overall sample banks sustainability practices on their performance; and
5. To validate the data and offer constructive suggestions on the topic.

2.4 Scope of the Study

The scope of the study encompasses the internal, external, financial, technological, regulatory, infrastructure, customer, social and environmental sustainability of Indian public sector, private sector and foreign banks. The internal sustainability of sample banks includes HR sustainability, technological sustainability, infrastructure and institution building sustainability. The external sustainability includes RBI Guidelines, Prudential Norms, BASEL-III Norms and Other Regulatory Norms, technology, competition, customers and economic parameters.

The financial sustainability includes deposit schemes, Capital adequacy, Asset quality, Management efficiency, Earnings quality and Liquidity(CAMEL) compliance, governance, profitability, Non-performing asset (NPA), interest rate fluctuations, spread, short-term and long-term sustainability, Compounded Annual Growth Rate (CAGR), cost per transaction, pricing of banking products, banking frauds, retaining valued customers, banks liability and claims, statutory liquidity ratio (SLR), prime lending rate (PLR), cash reserve ratio (CRR), repurchase (REPO) rates and so on. Banking sector reforms and environment of Indian banking were also incorporated.

The Environmental and social sustainability includes financing environmental and social related projects to balance the total banks risks of public sector banks, private
sector banks and foreign banks. Top level management, branch managers and banking staff, three categories of banks form the core for the data responses and collection. The study area is confined to Karnataka and Maharashtra states.

2.5 Review of Literature

The study reviewed books, articles, reports, journals, magazines and web-resources on the topic ‘Sustainability of banks in India – An Analytical Study’ to gain deeper insight in the research problem and to find gaps exists in the earlier research studies. This review comprises of financial, technological, regulatory, internal, external, infrastructural, stakeholders sustainability literature of public sector banks, private sector banks and foreign banks. The details are as follows

(A) Review of Literature on Financial Sustainability of Banks

Table-A
List of Reviewed Articles on Financial Sustainability

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>‘Civil Service Reform (CSR) and World Bank (Working paper) No.422, Washington DC, 1990.</td>
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<tr>
<td>4</td>
<td>‘Sustainability in finance-Banking on the planet’pp1-4</td>
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<tr>
<td>7</td>
<td>‘Financial Crisis – the opportunity for sustainable value creation in banking business’ Pg.24</td>
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<tr>
<td>10</td>
<td>GRI’s - G3 guidelines on Social Responsibility and financial sustainability.</td>
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<td>11</td>
<td>Institutions on Sustainable Development – An Interpretation</td>
</tr>
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<td>12</td>
<td>Sustainable Banking – History and Current Developments</td>
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<tr>
<td>13</td>
<td>Why finance giants should bank on sustainability</td>
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<td>14</td>
<td>Sustainable Banking - Strategy and Goals</td>
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**Nunberg and Nelis (1990)**\(^1\) opine that, most bank activities have concentrated on short-term cost containment measures. More emphasis must be given to longer term management issues, if sustained improvement is to take place. Underlying the long-term approach is the recognition that shorter term measures must be supported by institutionalized systems that can sustain ongoing reforms. To achieve this, the author advocates, adequate preparation, detailed diagnosis, appropriate technology, sensitively delivered these are the building blocks of success. This article helps this study to incorporate the bottlenecks for sustained improvement in the banking activities.

**Ronald McGill (1994)**\(^2\) in the article ‘Institution Development and the Notion of Sustainability’, focuses on the implementation and sustainability of Institutional Development (ID) process. ID refers to ‘the process of improving the ability of institutions to make effective use of human and financial resources effectively to attain development objectives.

The author contends that, the flaw, even in recent practice is that, for most ID strategies, the emphasis is still on planning and appraisal but not on implementation; on investments and policies, but not on operations. This article helps this study to develop banking strategies (IDS) in such a way that the human and financial resources must effectively and efficiently used to secure sustainability in the long run. ID should be concerned with banks internal structures, processes and with its external relationships. It should be conscious of feedback as part of a learning process; a journey of exploration and is an iterative process. To be relevant, banks must be ‘Sustainable’!

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\(^1\)Civil Service Reform (CSR) and World Bank (working paper) No.422, Washington DC, 1990.
Eric Neumayer (March 2000) in the article titled ‘Resource Accounting in measures of Unsustainability: Challenging for World Banks Conclusions’ opined that, if sustainability is defined as ‘the capacity to provide non-declining future welfare, then, clearly a reliable measure of sustainability would be of great policy usefulness. In recent years, several studies have been undertaken claiming to provide an admittedly crude measure of weak sustainability or Unsustainability for single country or a group of countries. This article helps this study in assessing the need for developing a precise tool to measure not only sustainability and but also Unsustainability.

Bouma, Jeucken, and Klinkers (2001) opine that, ‘Sustainability is all about ensuring long-term business success while contributing toward economic and social development, a healthy environment, and a stable society. In an economic system, a bank fulfils an important role: it is an intermediary between borrowers and lenders of money.

Banks are the most important intermediaries in an economy. This intermediary function centers on bringing together and coordinating savings and investments. As a financial intermediary between entities on the market, a bank has four functions: transforming money by size, duration, place and/or time, and risk. One of the most significant activities of banks is the lending of credit. There are considerable environmental risks involved in the financing of clients. While these usually fail to receive enough attention, there are many methods available to estimate the environmental risks of businesses.

This article helps this study to know the essence of achieving sustainability as banks are the financial intermediaries in the economy by incorporating all the types of risks including financial and environmental.

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4 Senior Economists at Rabobank Group and Director of Finance, Netherlands ‘sustainability in finance-Banking on the planet’ pp1-4
Frank Figge and Tobias Hahn (Aug.2003)\textsuperscript{5} in their paper titled ‘Sustainable Value added (SVA) measuring banks contributions to sustainability beyond eco-efficiency’ proposed a new approach to measure monetary contributions to sustainability called ‘Sustainable Value Added (SVA)’. Value is created whenever benefits exceed costs. Current approaches only if i) The Companies contribute to sustainability only if the value created exceeds the external damage caused and ii) companies should create as much value per environmental impact as possible.

However, many of these approaches are either difficult to apply or, if they can be applied, their significance is limited (Veleva and Ellenbecker, 2000). In this article the authors propose a monetary measure of contributions to sustainability – called SVA (Sustainable Value Added). SVA takes into account both the efficiency and the absolute level (effectiveness) of resource use. SVA is the extra value created when the overall level of environmental and social impacts is kept constant. This article helps this study to know how the SVA tool helps in measuring sustainability in monetary terms.

Herwig Peters (2003)\textsuperscript{6} in his article titled ‘Sustainable Development and the Role of the Financial World’-A Survey on the state-of – the-art sustainability & Banking states that, Through the lending, investment and insurance practices and through the intermediary position in the economy, the impact of banks is potentially very high in promoting sustainable economic growth. This article helps to know the significance of promoting sustainable economic growth by achieving sustainability in all its activities.

Jean-Francois Laugel and Chris Laszlo\textsuperscript{2}(2009)\textsuperscript{7} in their article titled ‘Financial Crisis – the opportunity for sustainable value creation in banking business’ states

\textsuperscript{6}Environment, Development and Sustainability -2003 Kluwer Academic Publishers pg. 208.....
\textsuperscript{7}The journal of Corporate Citizenship, article titled ‘Financial Crisis – the opportunity for sustainable value creation in banking business’ Pg.24
that, the present financial crisis is forcing the entire banking sector to integrate sustainability into the core of its value creating activities. Under the pressure from regulators and customers, banks are discovering a virtuous cycle of creating value for their stakeholders in ways that create value to their stakeholders in ways that create additional value for their shareholders. This process will help banks to regain confidence in the survival dialogue they are currently having with economic, regulatory, social and environmental stakeholders.

This article helps to know how the banking sector can integrate sustainability into the core of its value creating activities and creating value for their stakeholders, in ways that create value to their stakeholders and in ways that create additional value for their shareholders.

Mervyn (Feb.2011)⁸ In the article titled ‘Global imbalances: the perspective of the Bank of England, focuses on the role of global imbalances played in fuelling the financial crisis and the importance of achieving a rebalancing of global demand in order to foster a sustainable recovery. The key message from this crisis is that, in today's highly interconnected global economy, a top priority for national policy makers must be to find ways to rebalance global demand. This is important to ensure that, the level of world demand is sufficient for the world recovery to continue and to avoid future crisis.

The financial crisis damaged virtually every country in the world, where India is not an exception to this. Global imbalances are a reflection of today's decentralized international monetary and financial system. All the main players (mainly US & UK) around the world are rationally pursuing their own self interest. But the financial crisis has revealed that, what makes sense for each player individually does not always make sense in aggregate. These actions had collective consequences. The main lesson from the crisis is the need to find better ways of ensuring the right

collective outcome. Improved financial regulation will help to intermediate the lows associated with global imbalances.

**KC Chakraborthy (2011)**\(^9\) in their article highlights the importance of Non-financial Reporting /Social Reporting, which is the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable and inclusive development.

This article highlights the significance of Non-financial Reporting /Social Reporting in such a way that, sustainability reporting has become more relevant and important in today’s context not only from social or environmental concerns, but because globally, the banks have realised that the goal is not just growth and profits, but they have to looking at inclusive growth. If the growth process is not equitable, it cannot be sustainable. If inclusive growth has to be a permanent agenda item in the banks growth process, then it has to be sustainable.

After 1990 most reports tend to be more comprehensive and bring together economic and social as well as environmental data or so called triple bottom line reporting as coined by John Ellington. This article helps this study to know the significance of non-financial reporting or social reporting along with financial reporting to achieve both sustainability and inclusive growth.

**Global Reporting Initiative (GRI)**\(^10\) is a global initiative to standardize Non-Financial Reporting (NFR), which the institutions adopt and has become the standard internally. GRI is a long-term, multi-stakeholder, international process whose mission is to develop and disseminate globally applicable sustainability reporting guidelines.

These guidelines are for voluntary use by organizations for reporting on the economic, social and environmental dimensions of their activities, products, and services. GRI’s - G3 guidelines are used in more than 7500 reports to report on

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\(^9\)Deputy Governor RBI, , titled ‘NFR-what, why, and how-Indian perspective’ RBI monthly bulletin July 2011, p1039-1046

\(^10\)GRI’s G3 guidelines on Social Responsibility
sustainability worldwide and more than 100 CRI reports have been published by Indian companies so far. The level of Social Responsibility in India is in its infancy and still evolving. In India, there are various drivers behind the increase in dialogue, discussion and publication of SR.

**MrSizweNxasana**, CEO, In UNEP-FI Guide to Banking & Sustainability(2011)\(^\text{11}\)First Rand Limited explains as we have seen all too recently, when banks fail, the economic stability of nations and indeed the entire global financial system are threatened. This has brought the issue of “sustainability” into sharp focus.

Sustainability has been considered somewhat of a “soft” topic until fairly recently, an addendum to the normal course of running a business and relying too heavily on anecdotal evidence rather than measurable benchmarks. This approach is now a thing of the past; sustainable economic development is not a luxury, but a requirement to strategically position our economy for this century. This article helps in quantifying the significance of achieving sustainability and its adverse effects on economic growth of a country like India.

**Olaf Weber (2013)\(^\text{12}\)**propounds that the history of sustainable banking starts in the medieval with banks that were intermediaries between capital owners and businesses and were motivated by fostering the community. Sustainable banking by conventional financial service institutions appeared with the management of environmental risks that negatively affected financial institutions especially with regard to their credit risks. After this phase of risk management the financial sector took the business opportunities that are offered by integrating environmental and social issues into consideration as well. Sustainability became a business case in the financial sector.

\(^\text{11}\)UNEP Statement of Commitment by financial institutions on Sustainable Development – An Interpretation
\(^\text{12}\)Sustainable Banking – History and Current Developments
Banks should explore ways to influence sustainable development in a positive way and developed products and services taking sustainability issues into account. Mutual retail funds, institutional products, for instance for pension plans and sustainable project finance guided by the Equator principles, are only an extract of products and services related to sustainability.

Banks and other financial institutions can learn from this development that the integration of sustainability issues into policies, strategies, products and services of the banking industry makes the banking business sense as well. Those institutions that were early adaptors of sustainable banking could avoid financial risks resulting from environmental or social impacts and were able to create business opportunities as well. This article helps this study in analyzing the effect of the integration of sustainability issues into policies, strategies, products and services of the banking industry.

HuwMaggs (2014) contend that Multinational banks can influence financial system transformation. Banks are also at the heart of the contemporary financial system, which underpins both the physiology and psychology of modern business, and that needs to evolve significantly. Multinational banks service not only millions of individuals, but also governments, civil society organizations, and of course, businesses - large and small - across every industry. Banks can therefore leverage their collective knowledge and reach to influence stakeholders to, for example, drive integration of key externalities into the financial system.

This article helps this study as to how Multinational banks can influence financial system transformation since the banks are at the heart of the contemporary financial system.

SWED Bank (2016) our goal is to promote a sound and sustainable economy by strengthening the bank’s and our customers’ long-term competitiveness. This will be

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13Why finance giants should bank on sustainability, web article www.bank.assurance.com
14Sustainable Banking - strategy and goals, web resource www.banking.org.com
done by avoiding large credit impairments and operating losses, focusing on long-term profitability, developing long-term relationships with customers and employees, and maintaining adequate buffers on a strong balance sheet. We will also work towards open, stable and honest markets.

(B) Review of Literature on Technological Sustainability of Banks

Table-B
List of Reviewed Articles on Technological Sustainability

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Banks and Information Technology: Complexity, Flexibility, and Interconnectedness</td>
</tr>
<tr>
<td>2</td>
<td>Measuring IT Effectiveness in Banks of India for Sustainable Development</td>
</tr>
<tr>
<td>3</td>
<td>Sustainability — the way ahead for banking and financial institutions</td>
</tr>
<tr>
<td>4</td>
<td>A Study on technology driven Innovative practices by Indian banking sector for future sustainability and enhanced customer service</td>
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**Matej Marinč (2010)** analyzes whether banks are special in comparison to other firms in the use of information technology (IT). IT spurs communication, digitization of business processes and establishment of internet and mobile customer access channels. IT modifies core banking technologies and facilitates automatic loan processing, electronic payments, and clearing and settlement transactions. Similar to the situation in other industries, IT increases complexity in banking by increasing product variety and conglomeration.

However, pronounced asset-substitution problems may cause banks to become excessively complex in order to disguise risk-taking. Banks may abuse the additional flexibility that IT facilitates to shift risks at short notice or even become too big to fail. Finally, developments in IT may lead to increased interconnectedness in banking with potentially adverse effects on systemic risk. This article helps this study to know the inter-relationship between the IT firms and the banking companies and the extent of systemic risk between the two firms.

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15Banks and Information Technology: Complexity, Flexibility, and Interconnectedness, www.banks.ac.in
Sanjay Dhirgra (2011)\textsuperscript{16} expressed that the Banks in India have invested heavily on deployment of information technology (IT) in the past one decade. IT over the years has become business driver rather than a business enabler. Sustainable development of banks depends heavily on effective use of IT. This calls for measuring the effectiveness of IT in these banks. This paper identifies the economic methods of measuring IT effectiveness on the basis of review of literature on the subject.

Chaitanya Kali (2011)\textsuperscript{17} is of the opinion that some multinational banks and financial institutions incorporate sustainability in their functions by supporting clean technologies and embedding the concept in their core business processes — risk management and decision making.

They also implement environmental conservation and betterment of community initiatives within their operations. Most often, a separate foundation or organization is instituted in India under the broad corporate structure of an entity, which is then entrusted with this responsibility.

Mr. Ankit Goel, Mrs. Parul Garg and Mr. Deepak Chaudhary (2016)\textsuperscript{18} iterates that Banks are one of the important professional institutions that interact with the masses and hold a unique & intermediary position in the economy. Banks influences the economic development of the country both in terms of Quality and Quantity. As in today's era needs and perception of customers are changing and other challenges too, the old way of doing banking is no more successful.

India’s banking system has seen some major financial innovations in the past decades which lead to tremendous improvements in banking services and operations such as ATM banking, NEFT, RTGS, IMPS, Online and Mobile banking. There is a further lot more scope to go forward.

\textsuperscript{16} Measuring IT Effectiveness in Banks of India for Sustainable Development
\textsuperscript{17} Sustainability — the way ahead for banking and financial institutions
\textsuperscript{18} A Study on technology driven Innovative practices by Indian banking sector for future sustainability and enhanced customer service
The objective of the paper is to find out the benefits and challenges of technology driven banking trends. Secondary data from various sources is used a research methodology. The necessitate of this millennium is to devise such a system that encourages the efficiency of investment, focus on future sustainability and can provide better customer service which leads towards satisfaction. The paper concludes by focusing on the current challenges, opportunities and future trends and scope of Innovative practices by Indian banking sector.

(C) Review of Literature on Internal Sustainability of Banks

Table-C
List of Reviewed Articles on – Internal Sustainability

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Strategic Human Resources (SHRM) and Total Quality Management (TQM) at Jordanian bank sector, European Scientific Journal November edition vol. 8, No.25 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431</td>
</tr>
<tr>
<td>3</td>
<td>‘Strong and Weak sustainability’. Neumayer, 1999 and Pearce et al., 1999)1 – theory of strong and weak sustainability and a tool of measurement</td>
</tr>
<tr>
<td>4</td>
<td>CSR &amp; Sustainability in Romanian Commercial Banks By JEL Classification pp129-143.</td>
</tr>
<tr>
<td>5</td>
<td>Six-Sigma for Sustainability in multinational organisation’ Journal of Business case studies-May/June 2011Pg.7-15 7.3 ABI/INFORM Global</td>
</tr>
<tr>
<td>7</td>
<td>‘CSR and Sustainability of Banks’ JEL classification: G21, M14 issue, PP.130-142.</td>
</tr>
<tr>
<td>8</td>
<td>Non-financial Reporting – What, Why and How – Indian Perspective</td>
</tr>
<tr>
<td>9</td>
<td>Longitudinal research into factors of high performance - The follow-up Case of Nabil Bank, Nepal. – Measuring Business Excellence-Emerald group publishing Ltd. ISSN 13603047pg.4-10 (2011).</td>
</tr>
<tr>
<td>10</td>
<td><a href="http://www.dekabank.com">www.dekabank.com</a> - safe working environment that is built on trust</td>
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<td>12</td>
<td><a href="http://WWW.ABNAMROBANK.COM">WWW.ABNAMROBANK.COM</a></td>
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Bassam Fathi Aldaibat and Hani Irtaimeh\textsuperscript{19} aimed to identify the reality of strategic human resources (SHRM) and total quality management (TQM) at Jordanian bank sector, the study also examines the relation between SHRM and TQM in Jordanian banking sector, also this study aimed to identify some important aspects of SHRM components and total quality dimensions. This article helps this study to examine the relationship between SHRM and TQM and important aspects of SHRM and the components of TQM in Indian banking sector.

Harte (1995) Harte (1997) and Prughet Al., (1999)\textsuperscript{20} developed the theory of Sustainability called ‘Capital approach to Sustainability’ comprises four components of capital called, man-made capital- such as goods produced, human capital-such as knowledge and capital, natural capital – such as natural resources and social capital-such as relationship between individuals and institutions. This article helps this study to know the capital approach to sustainability of banks in India.

Neumayer, 1999 and Pearce et al., (1999)\textsuperscript{21} extended their support in the substitution between the various facets of capitals is addressed in the concepts of ‘strong and weak sustainability’. Weak sustainability implies that, all forms of capital are substitutable by each other so that any loss in one kind of capital can in theory be substituted by a surplus in other forms of capital. The concept of strong sustainability requires that, each form of capital is kept constant.

This article highlights on the ‘macro concept of sustainability’ which refers to ‘the aim to increase or at least to stabilize the percapita well-being or utility over time without leaving present or future generation worse off. This article helps in this study to find ways and means or approaches to measure the strong or weak sustainability in absolute and relative terms in the study of ‘sustainability of banks’ in a macro level with the above mentioned aim.

\textsuperscript{19}European Scientific Journal November edition vol. 8, No.25 ISSN: 1857 – 7881 (Print) e-ISSN 1857- 7431
\textsuperscript{20}Harte, 1995, Prugh et al., 1999, pp49, Stern,1997- theory of Capital approach to Sustainability’
\textsuperscript{21}Neumayer, 1999 and Pearce et al., 1999)\textsuperscript{-} theory of strong and weak sustainability and a tool of measurement
VasileCocris and AndraLaviniaNichitean (2005) in their article: CSR & Sustainability in Romanian Commercial Banks have analyzed that, the terms such as CSR principles and codes of conduct, sustainable development, financial stability and the relationship between them in order to explain their impact on the proper function of world economy. CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large. Placing sustainable banking in the center of the business implies the evaluation of the stakeholders, the initiation with dialogues with them, the implementation of customized indicators. This article helps in this study in narrating the interrelationship between the banking company and the society through its products and services and their evaluation to place the sustainable banking in the center of the banking business.

Taghizadegan, Abdullah AlSagheer & Others(2006) in the article, Six-Sigma for Sustainability in multinational organisation’ refers to ‘identification of value, defining value stream, determining flow, defining pull and improving process’ in every business function such as marketing, finance and management. The Six Sigma model provides various kinds of sustainability to all companies including banks, in terms of quality enhancement, zero defect level market share enhancement, optimal output and financial returns.

This Study is an attempt to find what kind of sustainability motivates banking companies to invest in Six Sigma. Sustainability identified includes financial/economic sustainability, social sustainability and environmental sustainability. A comparative study is conducted in order to find the most prevalent type of sustainability offered by six sigma.

The findings of the study suggest that banking/financial companies implement Six Sigma in order to attain economic sustainability through various means, such as

\[22\text{By JEL Classification pp129-143.}
\[23\text{Journal of Business case studies-May/June 2011Pg.7-15 7.3 ABI/INFORM Global}

Page 67
market share, value addition, customer base, and corporate reputation are all broadly covered under social repute, environmental protection and economic growth. This article helps in this study to make an attempt to find what kind of sustainability motivates banking companies to invest in Six Sigma.

Tom Hangstrom & Tomas Backstrom and Susanna Goransson [2009]24 in their article titled 'Sustainable Competence: a study of a Bank in Sweden- make a study how the staff members in a bank perceive a company culture and how this perception is related to background aspect (gender, age etc..) and engagement in regular regulating activities decided by the company; they made an hypothesis that, decentralization and Banking Company cultures have emerged to master increasing external flexibility, as in a competitive bank in Sweden, raising issues of the sustainability in terms of Competence and competency development.

The results of this study indicate that, there is a strong integration in the company culture related to achieve engagements in regular and regulating activities. The regression analysis adopted clearly indicates that, cultural integration is more influenced by those activities than by individual background variables and the results of the study also shows the most critical attitudes towards the culture. This study also reflects both an individual development aspect and a generational aspect.

This article helps in this study to apply the statistical tools in assessing the need for integration of culture and banking activities.

Vasile Cocris and Adnra Lavinia Nichitean (2010)25 in their research paper titled 'CSR and Sustainability of Banks’ aims to underline the importance of Civic behavior in business and bank’s role in the implementation of sound principles of CSR. The authors in their study analyzed the terms such as CSR, sustainable development, financial stability and relationship between them, in order to explain

25 Faculties of Economics, Romania University, JEL classification: G21, M14 issue, PP.130-142.
their impact on the proper function of world economy. The authors provided a synthesis of CSR and codes of conduct as well as an overview of the consumer protection system in the financial sector. The research article furnishes examples of good CSR practices in the banking sector compared to the other sectors and its relevance in the Indian banking sector.

K. C. Chakraborty (2011)\textsuperscript{26} deputy secretary RBI, in his speech opines that Sustainability Reporting has become more relevant and important in today’s context not only from social or environmental concerns, but because, globally, we have come to realise that our goal is not just growth and profits, but we are looking at inclusive growth. And, if the growth process is not equitable, it cannot be sustainable. If inclusive growth has to be a permanent agenda item in our growth process, then it has to be sustainable. This article helps this study to see that, reporting is very significant not merely in the angle of social or environmental concerns or just growth and profits, but it should be an inclusive growth as an agenda in our growth process.

Andre de Waal and Miriam Frijs (2011)\textsuperscript{27} in their Article:- Longitudinal research into factors of high performance highlighted the fact that, there is a real need for longitudinal research into the factors that cause or contribute to sustainable high organizational performance. There is a need to study the factors which determine the sustainable success of a high performance organisation (HPO) that would result in sustainable increased organizational performance.

This frame work has been applied to Nabil bank, which is taken as an HPO; An HPO is an organization that achieves financial and non-financial results that are better than those of its peer group over a period of time of at least five to ten years. HPO factors: Management quality, Openness and Action orientation. Long-term orientation, continuous improvement, workforce quality. This HPO frame work

\textsuperscript{26}Non-financial Reporting – What, Why and How – Indian Perspective
\textsuperscript{27} The follow-up Case of Nabil Bank, Nepal. – Measuring Business Excellence-Emerald group publishing Ltd. ISSN 13683047 pg.4-18 (2011).
of this article helps this study to achieve financial and non-financial results that are better than those of its peer group over a period of time in the Indian baking sector.

**DEKA BANK (2015)**\(^{28}\) reports that, Deka’s mission is to provide all employees with a safe working environment that is built on trust. The intention is to develop the skills of employees as far as possible and put them to use for the benefit of the Bank’s overall value-driven strategy, as well as to create working conditions that ensure the long-term physical and mental wellbeing of our employees. Employees need access to the right environment at every stage of their professional lives to enable them to develop both personally and professionally. This also includes a fair remuneration system that offers incentives to contribute to the company’s long-term success.

This research article helps in this study to stress the need for providing all employees with a safe working environment that is built on trust, to develop them both personally and professionally, which intern lead to the development of the banking sector.

**Deutsche Bank Human Resources Report (2015)**\(^{29}\) reports that, Deutsche Bank’s business performance relies, first and foremost, on its employees. The Bank seeks to build the capabilities of managers and staff to help them develop both professionally and personally and to position the organization for future success. Talent and development activities are aligned to three priorities: building leadership capabilities and developing future leaders; fostering an environment that supports sustainable performance; and promoting continual professional and personal development for all employees.

This article helps this study to know the need for aligning three priorities that supports sustainable performance in banking sector.

\(^{28}\) [www.dekabank.com](http://www.dekabank.com)

ABN AMRO BANK (2016)\(^{30}\) wants its employees to think about sustainability and apply in their daily work. Their attitude and behaviour make a difference for our customers. Either directly or indirectly, an employee's actions can positively impact society and the environment. We encourage our employees to develop sustainable products and services, and to consciously make the right choices.

To inspire our employees and encourage them to think about sustainability, we organised a number of activation programmes in 2014. This article helps to this study on the need for studying the attitude and behaviour of our bank employees in discharging their duties by organizing the activation programmes, which make difference for our customers to achieve sustainable banking in future.

(D)  Review of Literature on External Sustainability of Banks

**Table-D**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Financial intermediaries are ‘shadow business associates’ with an important role in covering the risk.</td>
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<tr>
<td>2</td>
<td>‘Sustainability Benchmarking of European Banks and Financial Service Organizations’ Online article in Wiley InterScience(<a href="http://www.interscience.wiley.com">www.interscience.wiley.com</a>) pg71-87, 2005</td>
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<td>3</td>
<td>The role of Banks in a society- <a href="http://www.accessbankplc.com">http://www.accessbankplc.com</a></td>
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<tr>
<td>4</td>
<td>Embedding CSR into banking business processes to link for business strategy</td>
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<tr>
<td>5</td>
<td>‘Financial Crisis – the opportunity for sustainable value creation in banking business’ pp29</td>
</tr>
<tr>
<td>6</td>
<td>CSR and Sustainability of Banks’ VasileCocris and AdnraLaviniaNichitean (2010), faculties of Economics, Romania University, JEL classification: G21, M14 issue, PP.130-142.</td>
</tr>
<tr>
<td>7</td>
<td>Banks need to consider and define their objectives in the broader context. <a href="http://www.galiciasustentable.com/GaliciaSustentable/Informe_RSC/BG">http://www.galiciasustentable.com/GaliciaSustentable/Informe_RSC/BG</a>_</td>
</tr>
<tr>
<td>8</td>
<td>The Financial Sector and Sustainable Development: Logics, principles and actors -Umberto Pisan, André Martinuzzi Bernulf Bruckner</td>
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\(^{30}\text{WWW.ABNAMROBANK.COM}\)
Merton, (1995) Scholtens and Van Wenveen (2003) \(^{31}\) banks as financial intermediaries, which are ‘shadow business associates’ with an important role in covering the risk. Banks themselves are corporations and face a large area of challenges such as economic, social, cultural, technological, political, and legislative and group of interests. This article helps this study to know the challenges before banks as financial intermediaries in covering the risk.

Olaf Weber (2005)\(^{32}\) in their article titled ‘Sustainability Bench Marking of European Banks and Financial Service Organizations’ indicate that, they wanted to a benchmark study, which relate to ‘inquiring into the extent to which European Banks and Financial Service Organizations have integrated sustainability into their policies, strategies, products, services and processes to minimize the cost and risks involved in their operations’. This article, describes the results of multi-level benchmark study of the integration of sustainability into the business strategy, services and products of European banks and financial organizations.

Furthermore, five models for successful integration of sustainability into the banking business were found: event related integration of sustainability, sustainability as a new banking strategy, sustainability as a value driver, sustainability as a public mission and sustainability as a requirement of clients.

This article helps this study to make an inquiry into the extent to which the Indian banks have integrated sustainability into their policies, strategies, products, services and processes to minimize the cost and risks involved in their day-to-day operations and the need for the development of suitable models for successful integration of sustainability into the banking business.

\(^{31}\) Financial intermediaries are ‘shadow business associates’ with an important role in covering the risk.

\(^{32}\) Online article in Wiley InterScience (www.interscience.wiley.com) pg71-87, 2005
Chris Coulter (2007) expounds in his research paper on the role of Banks in a society is currently going through a transition that presents important opportunities and, in many ways, is being felt most strongly in developing economies. Expectations are highest in the developing world for the private sector to go beyond core business lines to help improve education and health systems, address poverty, protect the environment and reinforce human rights.

By responding effectively to these expectations, local companies can not only protect and enhance their reputations, but also ensure that they are on equal footing with Banks entering their global markets. This article helps this study to know the state of banks and their role in developing economies like India to go beyond the business lines to achieve sustainability in its operations.

Gbenga Oyebode (MFR), Chairman, Access Bank, Sustainability Report (2009) reports that by embedding corporate social responsibility into our business processes, we link our business strategy. This enables us to focus our efforts on long-term value drivers that contribute to the success of our bank and progress for society as a whole. This article helps this study in stressing the need for embedding CSR into banking operations to achieve sustainable success.

Jean-Francois Laugel and Chris Laszlo (2009) in their article titled ‘Financial Crisis – the opportunity for sustainable value creation in banking business’ states that, today many financial institutions including banking industry, knew sustainability pressures in much more crucial economic circumstances.

They have described the way in which banks have approached sustainability issues through four stages of development such as sustainability reporting/window dressing, quick wins and lateral resources, core resources and game change. They have introduced a practical guide to how banking and insurance companies can

34 http://www.accessbankplc.com
35 ‘Financial Crisis – the opportunity for sustainable value creation in banking business’ p29
move forward through defined stages to create business value by integrating sustainability into everything they do.

_VasileCocris and AdnraLaviniaNichitean (2010)_ in their research paper titled ‘CSR and Sustainability of Banks’ aims to underline the importance of Civic behavior in business and bank’s role in the implementation of sound principles of CSR. The authors in their study analyzed the terms such as CSR, sustainable development, financial stability and relationship between them, in order to explain their impact on the proper function of world economy. The authors provided a synthesis of CSR and codes of conduct as well as an overview of the consumer protection system in the financial sector. The research article furnishes examples of good practices in the banking sector compared to the other sectors.

_Banco Galicia Argentina, Sustainability Report (2010)_ highlights that banking sector holds a key function in society, being as it is at the core of all savings, investment and lending activities, whether for individuals, companies, governments or other entities. As a result, banks need to consider and define their objectives in the broader context of society, and as a member of the community they service.

Responsible finance further requires banks to be keenly aware of the constant changes around them, so as to able to meet society’s expectations. This article helps this study to know the need for defining their objectives in the broader context of society and as a member of the community they service as a responsible financier.

_European Sustainable Development Network(2012)_ sustainable development is not only about intergenerational equity, but it is also very much interested in intragenerational equity, which considers the fairness of distribution of resources and risks within the current generation.

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37 http://www.galiciasustentable.com/GaliciaSustentable/Informe_RSC/BG_
38 The Financial Sector and Sustainable Development: Logics, principles and actors - Umberto Pisano, André Martinuzzi&Bernulf Bruckner
This fourth criterion calls for equal opportunities and same possibilities in terms of access to resources as important aspect of sustainable development. In sustainable development, a number of terms and concepts are therefore crucial, namely: distribution and re-distribution, wellbeing, fighting poverty, equal consideration of societies and humans around the world, an urge for democracy, and education propagation.

Seema Malik (2014) contends that Indian banking system touches the lives of millions of people and it is growing at a fast pace. Banking industry in India is facing number of challenges like changing needs and perceptions of customers, new regulations from time to time and great advances in technologies. The pressure of meeting these challenges have compelled banks to change the old ways of doing business.

The research paper focuses on how the technology has transformed the face of banking in India. India’s banking system has seen some major financial innovations in the past decades which lead to tremendous improvements in banking services and operations. The various innovations in banking and financial sector are ECS, RTGS, EFT, NEFT, ATM, Retail banking, Debit and Credit cards, free advisory services, online banking, mobile banking and many more value added products and services.

This paper also highlights the benefits and challenges of changing banking trends. Banks are investing heavily in adoption of these innovations. The need of hour is to design such a system that encourages the efficiency of investment in innovations and widens the gap between revenues and costs involved with reference to technological upgradation.

This article helps this study in analyzing the role Indian banks in changing needs and perceptions of customers, new regulations from time to time and great

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International Journal of Advance Research in Computer Science and Management Studies, Volume 2, Issue 6, June 2014
advances in technologies. The pressure of meeting these challenges have compelled banks to change the old ways of doing business.

**Aniket Shah (2015)**\(^{40}\) explains Development banks are financial institutions that provide long-term capital and advisory services for infrastructure projects, businesses, agriculture and other sectors whose financial needs cannot be served solely by the public sector, commercial banks or capital markets. They are very often publicly funded, or at least initially capitalized, by public resources. They range from international institutions such as the World Bank and the Asian Development Bank, to national level organizations like the China Development Bank, to sub-national institutions such as the Chicago Infrastructure Trust or the Connecticut Green Bank in the United States. As these examples suggest, development banks are policy instruments that exist both in the developed and developing world, regardless of the level of economic development.

This article helps this research study in assessing the role of development banks that provide long-term capital and advisory services for various sectors and projects whose financial needs cannot be served solely by the public sector, commercial banks or capital markets. They are very often publicly funded, or at least initially capitalized by public resources. This trend urges the need of a cushion to the public sector by the government of India.

**S.S. Mundra, Deputy Governor, Reserve Bank of India (2015)**\(^{41}\) in his lecture has highlighted in the presentation on Indian Banking Sector: Emerging Challenges and Way Forward, Since the onset of the Financial Crisis in 2008, the global economy has continued to face rough weather and the Indian economy and the Indian banking system have not remained immune. Recovery has been moderate and sometimes uneven. Different jurisdictions continue to be tormented by financial fragilities and macroeconomic imbalances.

\(^{40}\) Development Banking for Sustainability
\(^{41}\) Memorial Lecture series launched by State Bank of Mysore in the memory of His Highness Sri Nalwadi Krishnaraja Wadiyar on April 29, 2015
Geo-political risks surrounding oil prices and the uneven effects of currency and commodity price movements also pose significant threat to economic stability. Sustenance of highly accommodative monetary policy in the Advanced Economies has also created monetary policy challenges in emerging markets of India. This article helps in this research study about the lessons learnt from financial crisis of 2008 and the need to take some precautionary measures to overcome such vulnerabilities.

**(E) Review of Literature on Regulatory Norms and Sustainability of Banks**

**Table-E**  
List of Reviewed Articles on – Regulatory Norms and Sustainability

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>The Changing Environment of Banks, GMI Theme Issue: Sustainable Banking: The Greening of Finance</td>
</tr>
<tr>
<td>2</td>
<td>Evaluation of Private Sector Banks in India through CAMEL model - Journal of Management Research Pg.84-101, 2006</td>
</tr>
<tr>
<td>3</td>
<td>Consolidation of Banking Industry – A SWOT Analysis- The Indian Banker Vol.IV No.11 PP32 36</td>
</tr>
<tr>
<td>8</td>
<td>Continue structural reforms for sustainable growth, Economic Times, June 29, 2016</td>
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Marcel H.A. Jeucken and Jan JaapBouma (1999)\(^{42}\) illustrates that governmental policy is an important factor in designing the context that shapes some, but not all, of the actions taken by the banking sector. An overview of the match between Dutch...

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\(^{42}\)The Changing Environment of Banks, GMI Theme Issue: Sustainable Banking: The Greening of Finance
banking policy and the role of the banking sector is presented. Finally, some conclusions are drawn with regard to the possible future role of banks towards sustainability.

Due to their intermediary role in the economy, banks hold a unique position with regard to sustainable development. This intermediary role is both quantitative and qualitative. Due to their efficient credit approval systems, banks are well equipped to weigh risks and attach a price to these risks. Through such price differentiation, banks can foster sustainability. Banks can also develop more sustainable products, such as environmental or ethical investment funds. In addition, there is great scope for banks to improve their internal environmental performance. This article helps in this study in stressing the importance of government policy and the possible future role of banks towards achieving sustainability in all dimensions.

Dharmendra Singh and Garima Kohli (2006)\textsuperscript{43} in the article titled ‘Evaluation of Private Sector Banks in India through CAMEL model - A SWOT Analysis’ opined that, The Banking & Financial Sector in India underwent a significant liberalization process in the early 1990’s which led to reforms in the banking and financial sector and changed the Indian Banking structure. Liberalization of Interest rates, where banks are allowed to fix lending rates (during 1992-1997), and reduction in Cash Reserve Ratio and Statutory Liquidity Ratio (CRR & SLR) are some of the measures initiated in banking sector reforms.

As a sequel to these reforms, new private sector banks were allowed entry in the market, which brought new technologies, started product innovation and competition. Even though Indians prefer nationalized banks for their services, the failure of Global Trust Bank (GTB) made Indian depositors to question the sustainability of private sector banks.

CAMEL stands for Capital Adequacy (higher CAR is best), Asset Quality (lower NPA’s), Management (based profit per employee and business per employee),

\textsuperscript{43} Journal of Management Research Pg.84-101, 2006
Earnings quality (higher ROA), and Liquidity (cash position and the ability to meet customers day-to-day cash needs & to respond to sudden cash withdrawals). The Indian banks still suffers from under-penetration and any new bank entering the market is likely to make money. Only those banks will excel that focus on building strong brands, developing innovative new products and aim to provide higher standards of service quality by putting the customer at the center of everything they do.

For this both old and new private sector banks will continue to strive, offer cost effective strategies, efficient services to their customers, strengthening service quality and cross-selling of products/services, usage of technology, better utilization of manpower, adopting corporate governance principles, leveraging competitive abilities through conglomerate and consolidate their business operations (M&A).

Kaveri Bansal and Mona Bansal (2009)\(^{44}\) in their article titled ‘Consolidation in Banking Industry – A SWOT Analysis, states that, The Volatility in business environment has altered the ways and means by which transactions are carried out. Perpetual existence of an enterprise has become very difficult (sustainable organisation) in the complex and dynamic nature of the surrounding environment. To fulfill the expectations of the various stakeholders, high level of sustained profitability is very pivotal for the organisation.

It may be easy to achieve profitable growth internally by developing new product lines and services, expanding existing capacity, acquiring new areas, moving on to technologically advanced equipment and appreciating the need for investment in R&D. Alternatively growth process also facilitated through various forms of corporate combinations like, absorption, acquisitions, amalgamations, de-mergers, divestures, joint ventures, leveraged buyouts, mergers, sell-offs, spin-offs, strategic alliances, takeovers and so on.

\(^{44}\) The Indian Banker Vol.IV No.11 PP32-36
This article helps this study in devising a SWOT analysis, which has been made through 'Consolidation of Banks' to leverage the benefits of bigger size, geographic expansion, huge loan portfolios, improved technology, product diversification and reduced transaction costs.

K Muthukumar (2009)\(^{45}\) in the article titled 'Sustainable Banking-Overview of Global Initiatives, opined that, banks by themselves are generally environment-friendly and do not pollute the environment much through their own internal operations. However, in view of the relationship between the banking industry and the users of its products, impact on the environment through these outsiders abnormal.

The author has highlighted about the legal compliances towards the environmental care and non-compliance with such a requirement may result in heavy penalty and even criminal proceedings, which may lead to a loss of reputation and creditability.

Dr. Vedpal & Mr. Parveen Chauhan (2009)\(^{46}\) in their article titled ‘Performance appraisal through CAMEL frame work’ attempted to study the appraisal system followed by Indian Commercial Banks through an internationally accepted tool called ‘CAMEL Framework’ to assess the performance of financial institutions.

The methodology adopted for this study was, the data of 63 sample banks, where 27 public sector banks (8-SBI and its associates & 19 nationalized banks), private sector banks (17 old & 5 new generation banks) and 14 foreign banks from India for the years 2002-06 was taken and the performance ratios of the various components of the CAMEL (stands for Capital adequacy, Asset quality, Management efficiency, Earnings quality and Liquidity) were converted into composite factor score of different ratios by using the principal component analysis (PCA)a variant of factor analysis and ranked on the basis of quartile of composite score.

\(^{45}\) Article titled ‘Sustainable Banking- overview of global initiatives, The Indian Banker, vol.no.11, Nov.2011, pp48-50.

The descriptive and statistical techniques analysis of the performance of banks states that, the foreign banks along with new private sector banks were the best achievers in terms of the components of CAMEL frame work, public sector banks registered a relatively a moderate performance and the old private sector banks are lagged behind of all the above. From the results, it was concluded that, foreign banks showed their dominant position in the performance based on all the component of CAMEL frame work, followed by the new generation private sector banks.

Geetika Gupta (2010 Dec.), K.S.Sekar (2011, March) and Dr.Narinder Kumar Bhasin(July 2011)\(^{47}\),in their articles has highlighted the essence of BASEL norms/accords, both in Global and Indian perspective. During the later part of the last decade (2000-2008-2010), the financial world witnessed severe turmoil due to the contagion effect of the US subprime crisis and many banks in USA and other western countries collapsed like a pack of cards. Many high flyer banks were to be rescued with the Government’s extraordinary rescue packages. The common man bore the brunt as the tax payers money was utilized for these rescue packages.

The confidence in the stability of the banking system was rudely shaken. The tremors of the said crisis were felt everywhere across the globe and India was also not spared though the effect was relatively not much, thanks to the strict regulatory system and supervision enforced by RBI and other stimulus measures undertaken by the Government. This crisis in the banking world had happened despite banks in the US and other places proclaimed having implemented the Basel norms. In fact, just five days before the bankruptcy of Lehman Brothers in September 2008, it boasted of a Tier-1capital of 11 percent, almost three times the regulatory minimum. This led to soul searching by the banking supervisors as to what had gone wrong.

Basel accord-I was adopted in 1988 and was credited with providing stability in the international banking system. The Basel accord-II came in since the earlier one was not sufficiently sensitive in measuring risk exposures. The lessons learnt from the crisis of 2008 have led to the further refinements and the Basel-III norms were introduced from 2013 until 2015; however, changes from 1 April 2013 extended implementation until 31 March 2018 and again extended to 31 March 2019.

According to Bank of International Settlement’s Committee, Basel Committee on Banking Supervision (BCBS) the Basel-III accord has two main objectives. One being, to strengthen the regulations regarding capital base and liquidity of banks with the goal of promoting a more resilient banking sector and the other is, to improve the banking sector’s ability to absorb shocks arising from financial and economic stress. These twin objectives are to be achieved by bringing in new norms and modifying some of the existing ones in the following three main areas; capital reforms, liquidity reforms and general improvement in the stability of the financial system (more importantly systemic risk and interconnectedness).

Mervyn (Feb.2011)\textsuperscript{48} in the article titled ‘Global imbalances: the perspective of the Bank of England, focuses on the role of global imbalances played in fuelling the financial crisis and the importance of achieving a rebalancing of global demand in order to foster a sustainable recovery. The key message from this crisis is that, in today’s highly interconnected global economy, a top priority for national policy makers must be to find ways to rebalance global demand. This is important to ensure that, the level of world demand is sufficient for the world recovery to continue and to avoid future crisis.

The financial crisis damaged virtually every country in the world, where India is not an exception to this. Global imbalances are a reflection of today’s decentralized international monetary and financial system. All the main players (mainly US & UK) around the world are rationally pursuing their own self interest. But the financial

crisis has revealed that, what makes sense for each player individually does not always make sense in aggregate. These actions had collective consequences. The main lesson from the crisis is the need to find better ways of ensuring the right collective outcome. Improved financial regulation will help to intermediate the lows associated with global imbalances.

Raghuram Rajan, (2016)\textsuperscript{49}Former Governor of RBI reiterates that India needs to stay on the path of sound domestic policies and structural reforms to achieve sustainable growth. Although India stands out in terms of relatively stronger growth and improved economic fundamentals, we need to stay on the path of sound domestic policies and structural reforms in the banking sector.

This article helps this study in formulating the sound domestic policies and structural reforms in the banking sector to achieve sustainable growth and development.

**(F) Review of Literature on Customer and other Stakeholders Sustainability of Banks**

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<tr>
<td>1</td>
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<td>2</td>
<td>Sustainable banking policy, Rabobank Group and Director of Finance, Netherlands’ Banking on the planet pp5-6</td>
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<td>3</td>
<td>Sustainable World and Financial Skills to provide valuable Service to Customers</td>
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<td>4</td>
<td>An empirical Study on Technology Adoption by Indian Banks to accelerate growth in space and time.</td>
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<td>5</td>
<td>Sustainability remains a Priority to meet 10 principles of UNGC Mission</td>
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<td>6</td>
<td>Sustainable Banks Are Changing the Economy—and Our World, social earth.org/sustainable-banks-changing-economy-world</td>
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\textsuperscript{49} Continue structural reforms for sustainable growth, Economic Times, June 29, 2016
Bouma, Jeucken, and Klinkers (2001)⁵⁰ opine that, ‘Sustainability is all about ensuring long-term business success while contributing toward economic and social development, a healthy environment, and a stable society. In an economic system, a bank fulfills an important role: it is an intermediary between borrowers and lenders of money. Banks are the most important intermediaries in an economy. This intermediary function centers on bringing together and coordinating savings and investments.

As a financial intermediary between entities on the market, a bank has four functions: transforming money by size, duration, place and/or time, and risk. One of the most significant activities of banks is the lending of credit. There are considerable environmental risks involved in the financing of clients. While these usually fail to receive enough attention, there are many methods available to estimate the environmental risks of businesses. This article helps this study to identify the varied functions of banks as an intermediary between borrowers and lenders of money.

Jeucken and Klinkers in their article titled ‘Sustainability Issues Facing Banks’⁵¹ the states that, every bank must have a sustainable banking policy. If it did not, customers, lobbyists, politicians and shareholders would want to know why not. Tier-one banks have comprehensive and influential sustainability programs, but even the smallest banks in developing economies can make a real difference with very modest ambitions.

The best way for a bank to develop commercially, is to look at the big picture and act in a way that benefits consumers, the economy, society and the environment. Banks are part of complex human, social and environmental ecosystems, so it is in their own self-interests to keep those eco-systems going. Sustainable banking is where self-interest and altruism meet. They are not mutually exclusive concepts.

⁵⁰ Senior Economists at Rabobank Group and Director of Finance, Netherlands’ ‘sustainability in finance-Banking on the planet’ pp1-4
⁵¹ sustainable banking policy, Rabobank Group and Director of Finance, Netherlands’Banking on the planet’ pp5-6
The surest way for bankers to promote their own interests is, paradoxical though it may seem to some, to act in the best interests of customers and others.

The primary objective of this paper is to highlight the challenges for sustainable banking. That is, building a future that integrates consumer, supplier and shareholder demands while decreasing the impact on the world’s resources. It also outlines a strategic approach to seizing the opportunities and realizing the benefits that have been gained and are anticipated as the strategy unfolds. This article highlights the challenges for sample banks for achieving sustainable banking by meeting mutually concepts of customers where self-interest and altruism should meet.

**Finance & Sustainability Columbia Business School (2010)**\(^{52}\) opines that the primary objective of financial professionals is to provide a valuable service; whether it is investment banking, capital markets, commercial banking, or asset management, that earns a profit for the practitioner. Fortunately, the same financial services that generate a profit can simultaneously be used to create sustainable value for society. In recent years, for-profit financial services have been used to improve the environment, reduce poverty, advance developing countries, improve corporate governance, and develop social entrepreneurs.

The core financial skills that are necessary to create a sustainable world are identical to the financial skills required to earn a profit in more traditional financial services, but the application of those skills is a new and challenging opportunity.

**Tavishi and Santosh Kumar (2013)**\(^{53}\) opines that, Increasing customers’ awareness in different strata of societies has compelled bank to adopt international best practices for sustainable business focusing on key issues viz. market, customers, competition, technology and society. In order to accelerate growth in space and time, Indian banking sector has adopted many dynamics innovation but still some step are require regarding risk management, security etc.

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\(^{52}\) Columbia Business School At the very Centre of Business

\(^{53}\) An empirical Study on Technology Adoption by Indian Banks
The study is conducted using primary data from 400 respondents with a structured questionnaire. This study is accomplished to understand the consumer’s awareness of various bank technology possessing online banking, mobile banking, ATM, debit card, credit card and RTGS etc.

This study determines the factors influencing the consumer’s adoption of internet banking and mobile banking in India and hence investigates the influence of perceived usefulness, perceived ease of use and perceived risk on use of internet banking and mobile banking. This study also determines what would encourage consumer to use online and mobile banking. It is an essential part of a bank’s strategy formulation process in an emerging economy like India.

**Bill Winters, Group Chief Executive Standard Chartered Bank (2015)**\(^{54}\) states that Sustainability remains a priority to us and we are committed to promoting economic and social development in the markets where we operate in the short, medium and long term. We are committed to the United Nations Global Compact and integrate its Ten Principles on human rights, labour standards, environment and anti-corruption into our business.

**Prof. Sangeeta Haindl (2015)**\(^{55}\) propagates that it is a known fact that banks are twice as likely not to be trusted than to be trusted. Current public expectations of these financial institutions have never been lower; they are regarded as places that are driven by making a profit at all costs. These days many of them don’t have great reputations, especially since the 2008 recession, caused in part by some questionable practices.

Whatever rules banks adhere to, it is the people who lead banks and those who work within them who define the culture and ultimately determine what these organisations will become. This is where the hope for positive change lies. There

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\(^{54}\) Sustainability Summary 2015 Driving investment, trade and the creation of wealth across Asia, Africa and the Middle East

\(^{55}\) Sustainable Banks Are Changing The Economy—And Our World,

[socialearth.org/sustainable-banks-changing-economy-world](socialearth.org/sustainable-banks-changing-economy-world)
could be such a thing as a ‘good bank,’ otherwise known as sustainable banking, which addresses the needs of society as well as of finance. They are run by bankers with a different set of motivations and values.

This article helps this study by stating the banks are becoming more people-focused and placing the environment and society at the heart of what they do, banks could really become central to creating a sustainable economy.

(G) Review of Literature on Social and Environmental Sustainability of Banks

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<thead>
<tr>
<th>Sl.No.</th>
<th>Article Details</th>
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<tbody>
<tr>
<td>1</td>
<td>Sustainable Finance and Banking’ - Eburon academic publishers Nederland, ISBN90597203691-405</td>
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<tr>
<td>3</td>
<td>IFC’s Sustainability Financial Institutions: Resources, Solutions and Tools</td>
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<td>Do’s and Don’ts of Sustainable Banking - <a href="http://www.banktrack.org">http://www.banktrack.org</a></td>
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<td>Role of Banks in Sustainable Development <a href="https://www.iisd.org/business/banking/sus_banking.aspx">https://www.iisd.org/business/banking/sus_banking.aspx</a></td>
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<td>6</td>
<td>IFCs survey report 2004 on Benefits from Sustainable Policies -Emerald group publishing company Ltd. ISSN 0258 0543, vol.23, No.6,2007 pp 35 38</td>
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<td>7</td>
<td>Sustainable banking – lenders see profits in Responsibility by Fiona Harvey a special report in Financial times 12th June 2006, pp1-6. ISSN:0307-1766</td>
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<td>8</td>
<td>Many Banks remain in reactive mode to Sustainability- by Director and Co-Founder, The Association for Sustainable &amp; Responsible Investment in Asia (ASrIA)</td>
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<td>9</td>
<td>Role of Banks in a Society- a transition by Vice-president. Globe Scan Inc. (international public opinion researchers)</td>
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<td>10</td>
<td>Prosperity, Protection and Social Justice – are core of every Economy – by Director, Business Development, Department Arab Academy for Banking and Financial Sciences.</td>
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<td>11</td>
<td>Funding Ethical Causes is no Joke - Critical perspective on Accounting, Vol.17 No.7, pp865-81, Nov.ISSN:1045-2356 &amp; Matthew Gwyther - Management Today, April pp40-43 ISSN 0025-1925</td>
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<tr>
<td>12</td>
<td>Banking on Sustainability Financing Environmental and Social Opportunities in Emerging Market Economies - A IFCs report.</td>
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<tr>
<td>13</td>
<td>Sustainability — the way ahead for banking and financial institutions</td>
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</table>
Marcel Jeucken’s (2002)\textsuperscript{56} article ‘Sustainable Finance and Banking’ states that, Banks began addressing the issue of sustainability by considering firstly environmental and then social issues and attempting to incorporate them by established policies for the environment and society”. Bank Managers can argue that they accomplish their social duties by creating added value through standard activities, activities that generate an imposable profit, but it’s reasonable for the society to determine corporations to act responsible and be implied in social activities.

Marcel Jeucken (2004)\textsuperscript{57} iterates that internal environmental care means dealing with the environmental factor as carefully as possible in one’s own production process. Banks have a relatively limited environmental impact per product unit. Due to the huge volumes with which they work, however, the total environmental impact of banks is not insignificant. Banks occupy huge amounts of office space, devour large amounts of paper, have transport facilities, and consume energy and water. Cost cutting could therefore be considerable.

This article helps this research study in assessing the banks responsibility in addressing the issue of sustainability by considering firstly environmental and then social issues and attempting to incorporate them by established policies for the environment and society”.

\textsuperscript{56} Eburon academic publishers Nederland, ISBN90597203691-405
\textsuperscript{57} Sustainability in Finance - Banking on the Planet, http://www.sustainability in finance.com
International Finance Corporation (IFC) and World Bank Group (2012)\textsuperscript{58} explains that banks are increasingly adopting global standards for environmental and social risk management and developing sustainable finance products. By effectively managing environmental and social opportunities and risks together, financial institutions create long-term value for their business. Business models that address these two dimensions are helping financial institutions differentiate themselves from competitors, improve their reputation among key customers and stakeholders, attract new capital, and generate goodwill and support from stakeholders through increased transparency.

This article helps this study which explains that banks are increasingly adopting global standards for environmental and social risk management and developing sustainable finance products to achieve sustainability.

A Bank Track Manual (2012)\textsuperscript{59} - the do’s and don’ts of Sustainable Banking propounds that the discernible shift that many banks have made in recent years towards addressing the environmental and social impacts of their financial services is a welcome and important first step in this direction. More and more banks realize that ignoring social and environmental issues could considerably increase their exposure to credit, compliance and reputational risks. The progress banks make in this field, however, will be measured not by good intentions or even by strong policies on paper. To advance sustainability, banks must seek improved performance and results on the ground in affected communities and environments. This article helps this study which explains the changed role of banks in addressing the environmental and social impacts on their financial services to achieve sustainability.

International Institute for Sustainable Development (IISD)(2012)\textsuperscript{60} opines that while banks play a crucial role in promoting sustainable development, the industry got off to a late start in acknowledging sustainability as an item on its agenda. In the

\textsuperscript{58} IFC’s First for Sustainability Financial Institutions: Resources, Solutions and Tools
\textsuperscript{59} A Bank Track Manual (2012)59 - the do’s and don’ts of Sustainable Banking
\textsuperscript{60} https://www.iisd.org/business/banking/sus_banking.aspx
1990s, however, it started to play a more active role in sustainable development. The major shift happened when bankers realized poor environmental performance on the part of their clients represented a threat to their business success. This article helps this study in acknowledging sustainability as an item on its agenda to achieve sustainable development.

**IFC (2005)**\(^{61}\)**survey** of banks found that 65 percent reported tangible benefits from sustainable policies, including developing business in new areas and obtaining first-mover advantage. One of the attractions of sustainability were seen primarily in terms of reputational risk-avoiding the attentions of pressure groups that might campaign against a company for some perceived environmental or social malpractice.

Equally, banks must be aware of where future talent, infrastructure and lifeblood have to be nurtured and protected. The UK Social Investment Forum says, ‘As sustainable development becomes an ever-greater consumer, political and regulatory concern, financial institutions risk lagging behind their clients and competitors in understanding global environmental and social changes. This may expose investors and financiers to industries in long-term decline and missing out on growth opportunities in financing emerging ones’. This article helps this study in acknowledging the responsibility of banks which must be aware of where future talent, infrastructure and lifeblood have to be nurtured and protected to achieve sustainable development.

**Fiona Harvey(2006)**\(^{62}\) in the review article titled ‘Sustainable Banking-Lender see profits in Responsibility’ reports that, the increasing interest in environmental and social concerns from banks comes amid mounting evidence that seeking sustainability makes sound commercial sense. This article helps to this research study in analyzing the increased interest of banks in environmental and social concerns which of more commercial sense at present to achieve sustainability.

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\(^{61}\)IFCs,survey report 2004 -Emerald group publishing company Ltd. ISSN 0258-0543, vol.23, No.6,2007 pp 35-38

\(^{62}\)Fiona Harvey a special report in Financial times 12\(^{th}\) June 2006, pp1-6, ISSN.0307-1766
David St. MaurSheil (2007)\textsuperscript{63} in his research article expressed the fact that as many banks remain in a reactive mode to sustainability, it is likely that all will see a growing divide between the leaders and laggards, with environmental, social, and governance risks becoming ever more concentrated in the loan books of the laggards. Meanwhile, proactive banks will have the potential to tap into new consumer and product-driven market niches. This article helps to this research study that the banks are switching from reactive mode to proactive mode to tap into new consumer and product-driven market niches.

Chris Coulter(2007)\textsuperscript{64} expounds in his research paper on the role of Banks in a society is currently going through a transition that presents important opportunities and, in many ways, is being felt most strongly in developing economies. Expectations are highest in the developing world for the private sector to go beyond core business lines to help improve education and health systems, address poverty, protect the environment and reinforce human rights.

By responding effectively to these expectations, local companies can not only protect and enhance their reputations, but also ensure that they are on equal footing with Banks entering their global markets. This article helps in this study in assessing the interface between the corporates and the banks in achieving sustainability.

Khaled Bassiouny (2007)\textsuperscript{65} envisages that prosperity, environmental protection, and social justice are considered to be the core of every economy. Developing the human resources of banking and financial institutions in order to create sound, efficient, and responsive financial institutions that are environmentally and socially sustainable can help achieve substantial business benefits. This article helps this study in analyzing the role and responsibilities of banks in achieving the core

\textsuperscript{63} Director and Co-Founder, The Association for Sustainable & Responsible Investment in Asia (ASrIA)
\textsuperscript{64} Vice-president, Globe Scan Inc. (international public opinion researchers.
\textsuperscript{65} Director, Business Development, Department Arab Academy for Banking and Financial Sciences.
functions of economy prosperity, environmental protection, and social justice which helps to achieve sustainable benefits.

Christine Coupland, Matthew Gwyther and Others (2007) \textsuperscript{66} a web based reviewed article titled 'Funding ethical causes is no joke' – Banks find profit in morality and sustainability and lenders see profit in responsibility; clearly indicates the changing attitude of banks towards caring for the planet through their changed role, where the big banks have a unique and vital role and responsibility in promoting sustainable social and environmental behaviors’ throughout the world.

Many banks voiced themselves on their websites where matters such as sustainability, corporate social and environmental responsibility, ethics and values are to be found among the more commercial aspects of the message. Most of the banks are adhering to the ‘doing good, being good and funding good’, standards – called ‘Equator principles’- voluntary guidelines for managing social and environmental issues related to the financing of development projects. This article narrates essence of ‘equator principles’ in banking sector under this study.

International Finance Corporation (IFC) (2007) \textsuperscript{67} gives in the report that sustainability is now increasingly recognized as central to the growth of emerging market economies. For the private sector, this represents both a demand for greater social and environmental responsibility as well as a new landscape of business opportunity. The financial sector has been late to respond to this trend but is emerging as an important driver across all sectors in an economy. In the banking sector, new standards and codes of conduct promote corporate accountability, transparency, and consideration of impacts on environment and society. One clear example is the Equator Principles, based on IFC’s social and environmental

\textsuperscript{66} Christine Coupland, Critical perspective on Accounting, Vol.17 No.7, pp865-81, Nov.ISSN:1045-2356 & Matthew Gwyther - Management Today, April pp40-43 ISSN 0025-1925
\textsuperscript{67} VOL.23 NO.6 2007, pp.35-38 @Emerald Group Publishing Limited, ISSN 0259-0543
\textsuperscript{68} Banking on Sustainability Financing Environmental and Social Opportunities in Emerging Markets
performance standards and adopted by an increasing number of banks that operate in developing countries. This article narrates essence of ‘equator principles’ in banking sector as central to the growth of emerging market economies under this study in India.

Chaitanya Kall (2011) is of the opinion that some multinational banks and financial institutions incorporate sustainability in their functions by supporting clean technologies and embedding the concept in their core business processes - risk management and decision making.

They also implement environmental conservation and betterment of community initiatives within their operations. Most often, a separate foundation or organization is instituted in India under the broad corporate structure of an entity, which is then entrusted with this responsibility. This article helps this research study in incorporating the social and environmental sustainability factors along with financial, internal, external and technological factors in their functions.

Jan Willem van Gelder and Myriam Vander Stichele (2011) strongly feel that Banks and other financial institutions play a fundamental role in allocating financial resources. Society expects banks to make their financial resources available for the real economy and to provide products and services that serve rather than harm the public interest. Therefore, it is of utmost importance that banks actively access and manage their impact on social and environmental sustainability. The products of banks, as well as the products and production processes of companies financed by banks, are naturally prone to sustainability risks.

This article stressed the need for assessing and managing the impact of social and environmental sustainability actors while allocating the financial resources to companies, since the companies financed by banks are naturally prone to sustainability risks.

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Sustainability — the way ahead for banking and financial institutions
Friends of the Earth Europe Why to integrate Sustainability criteria in financial regulation?
Robert C. Eccles and George Serafeim (2013)\textsuperscript{70} propounds that our problem with banks, insurance companies, and other financial institutions that tout their commitment to sustainability by focusing on energy and water in their sustainability reporting is that these issues are simply not material to the sustainability of the institution itself. Thus this focus is not material to shareholders and a vast range of other stakeholders including employees, customers, counterparties, and society itself which depend upon a stable financial services sector to create jobs and responsible economic growth.

Financial institutions should be environmentally responsible in their own operations. But they and we shouldn’t be confused that this is the key to sustainability in the financial services sector. Mistaking financial institutions’ green gestures for a true commitment to sustainability will be costly. Investors and other stakeholders should be a lot less concerned about the energy efficiency of some banker’s building than the irresponsible products the company is developing that create great returns at unacceptable risk.

Ed Crooks and Camilla Hall (2014)\textsuperscript{71} contend that banks and other financial companies will for the first time be called on to report quantitative indicators of their social and environmental impact under new accounting standards. Drafts of the standards, which had not yet been finalised, included reporting of measures such as the greenhouse gas emissions of companies in which banks have investments, as well as the number of complaints handled by their compliance departments. No banks have so far committed to using the new standards, and some have suggested they would be cautious about making extensive new disclosures.

Triodos Bank (2016)\textsuperscript{72} Sustainable Banking is using money with conscious thought about its environmental, cultural and social impacts, and with the support of savers.

\textsuperscript{70} Green Harvard Business Review May 15, 2013
\textsuperscript{71} First FT daily February 23, 2014
\textsuperscript{72}https://www.triodos.com/en/about-triodos-bank/what-we-do/our-expertise-overview/sustainable-banking/
and investors who want to make a difference, by meeting present day needs without compromising those of future generations.

**WME Business Environment Network (2016)**\(^{73}\) reports that Commonwealth Bank is not just the most sustainable company in Australia, it is also the most sustainable bank in the world, and the fourth most sustainable firm globally. A rather impressive achievement considering the bank ranked 21 in last year’s Global 100 Most Sustainable Corporation in the World index. The 12th annual index published by Canadian media and investment research firm Corporate Knights ranks listed companies based on their sustainability performance.

### 2.6 Research Gap

The present research study aimed to build and expand on the previous research and provides for greater insight into the specific issues and drivers within the banking sector on sustainability. For this purpose the review of literature was undertaken on each component of banks’ sustainability. Literature survey includes financial, technical, internal, external, regulatory, infrastructural, customer and other stakeholders, social and environmental sustainability of banks. Both Indian and foreign literature on the study was perused in great detail. The review results as well as more detailed investigation of sample banks under the study helped to strengthen the business case for sustainable banking and to show how progress has been made in the implementation of formal internal, external, financial, social and environmental management procedures.

In India many researchers have undertaken research on sustainability of banks. However, each researcher has covered one or two segments of sustainability only. It is found that in the earlier researches all sustainability parameters such as financial, technical, internal, external, regulatory, infrastructural, customer and other stakeholders, social and environmental sustainability of banks are not covered. It is

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\(^{73}\)Commonwealth Bank named most sustainable bank in the world, http://www.ben-global.com
also very rare to look in to all the sustainability parameters in three sectors of banks simultaneously, that is, in public sector, private sector and foreign banks operating in India. This is the research gap indentified in the scope and coverage of the study.

Several bench mark studies have been covered by the earlier researchers and international financial and banking institutions in European countries such as Bouma, Jeucken, and Klinkers, David St. MaurSheil, Chris Coulter and so on. International Financial Corporation (IFC) survey covered a detailed study in 2012 on the sustainability of banks covering 46 countries in the world excluding India. Again this provides ample research gap. Keeping the global bench mark parameters, the present study surveyed the sample public sector, private sector and foreign banks operating in India on sustainability of banks in India.

The Sustainability of Banks before economic reforms and banking sector reforms is different from today’s open regime and stiff competition era. The present study covers the contextual gap. Banks sustainability variables were limited before the banking sector reforms and globalization. At present the banks sustainability variables are numerous. Sustainability includes the dimensions of internal, external, financial, social and environmental sustainability including technological, political, legal and cultural sustainability of banks. The Basel-III, CAMEL, Prudential Norms, Mammoth NPA, transaction cost, Asset and Liability Management, e-banking, m-banking variables were unheard of prior to banking sector reforms. The present study comprehensively covered all these variables among other things.

In Bangalore University history, this is the first ever study on Banks Sustainability. The size and volume of the study is modest but variables covered are comprehensive. The time element and gap is also a significant factor that caused the widened scope of the present study. The present study aims to add to the existing literature on the topic of banks sustainability. It also focuses on giving insights in the form of suggestions to the banks in India on the concept of sustainability.
2.7 Hypotheses

Hypothesis-1

The modes and drivers of financial sustainability differ among public sector, private sector and foreign banks under the study.

Hypothesis-2

There is no relationship between technological intervention and branch business performance of banks in three sample categories of banks.

Hypothesis-3

For sustainability of banks innovative banking products and transaction cost are very crucial for the sample banks under the study.

Hypothesis-4

The business performance of sample public sector, private sector and foreign banks is influenced by meeting customer requirements.

Hypothesis-5

In the present context social and environmental sustainability of banks is significant

2.8 Operational Definition of Concepts

- **Banks Sustainability**

  Sustainability in banking business is a dynamic state that occurs when a banking company creates ongoing value for its shareholders and stakeholders, which creates sustainable value.
- **Sustainability**: includes financial, technological, internal, external, regulatory, infrastructural, customer and other stakeholders, social and environmental.

- **Financial Sustainability**
  Refers to Greater and higher long-term returns by financing more sustainable projects and businesses, Reduced transaction cost, Reduced NPAs, Reduced risk, New business development through new products and services, Increased market share in sustainability-driven sectors, Technology driven customer service delivery, Enhanced reputation and better brand value, Better access to capital from international banking organizations, Increased value to shareholders as well as stakeholders.

- **Internal Sustainability**
  Internal sustainability of banks includes those variables which are affecting the banking business within the ambit of banks organisation design, which mainly includes; HR sustainability, Technological sustainability, Infrastructure and sustainability, Institution building sustainability, integrated sustainability and Competitive Edge and Long-term growth.

- **External sustainability**
  External sustainability factors/parameters are those factors, which are influencing the normal and routine banking functions externally and where the banks have to comply with, includes the following sustainability variables; RBI Guidelines Prudential Norms, BASEL-III Norms and other Regulatory Norms and sustainability of Banks, Technology status and External Sustainability of Banks, Competition and External Sustainability of Banks, Customers orientation and External Sustainability of Banks, Economic Parameters for Banks’ External Sustainability and Drivers & Benchmarks of External Sustainability.
- **Technological sustainability**

  It includes e-based and m-based transactions, reduced cost per transactions, e-payments, increased speed and delivery of the transactions and core-banking system.

- **HR Sustainability**

  It includes the internal sustainability of HR competencies- both job and behavioural competencies. It also covers strategic HR policy and practices.

- **Regulatory Sustainability**

  The sustainability includes rules, conditions, norms and notifications of Reserve Bank of India (RBI). It includes priority sector lending, management of non-performing assets, compliance of BASEL norms, PLR, CRR, SLR and REPO rates.

- **Social and Environmental Sustainability**

  Social, Economic and Environmental Sustainability are like a ‘three legged stool’ that represent a banks’ sustainability mainly focuses on three aspects namely, economic growth, social progress and environmental protection.

**2.9 Research Methodology**

**2.9.1 Type of Research used**

The study used survey, descriptive and analytical method of research.

**Survey:** The study after a thorough review of literature identified the topic “Sustainability of Banks in India-An Analytical Study”. The independent, dependent and extraneous variables have been identified. There after objective-wise and hypothesis based questionnaire was drafted. The pre-testing of questionnaire provided directions and strengthened the questions relating to the study. The data
collected from top management authorities, branch managers and bank staff has been tabulated, analysed and interpreted appropriately. Based on the analysis and interpretation major findings, conclusion and suggestions have been enumerated, discussed and incorporated. It is a fact finding study on the banks sustainability in regard to sample public sector, private sector and foreign banks.

**Descriptive Study:** The researcher meticulously portrays the past and the present facts on financial, technological, internal and external, regulatory, infrastructural, customer and other stake-holders, social and environmental sustainability of three categories of sample banks – public sector, private sector and foreign banks. The researcher portrayed the facts of what is happening on the sustainability fronts of banks under the study at the present scenario.

**Analytical Study:** The researcher analysed the corporate policy, culture, philosophy, programmes, vision, mission, goals and objectives of sample public sector, private sector and foreign banks. The financial, technical, Internal, external sustainability policy and programmes of twelve (12) banks, four each in public sector, private sector and foreign banks were well analysed. For the analysis causal relationship between independent and dependent variables have been appropriately aligned. For the measurement of sustainability scaling techniques and statistical tools have been used. The qualitative data under the study have been quantified by using Likert’s scale.

**2.9.2 Sampling**

(i) **Universe/Population**

All the Public sector, Private sector and Foreign banks operating in Karnataka and Maharashtra states, because major corporate offices of these banks are located in Mumbai, Pune, Bangalore and Mangalore centers.
(ii) Sample units

Categories of Banks:

- Public Sector Banks
- Private Sector Banks
- Foreign Banks

Categories of Respondents:

- Top Management Authorities
- Branch Managers
- Bank Staff

(iii) Sample Size

Composition of Sample Size

<table>
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<tr>
<th>Sl. No</th>
<th>Category of Respondents</th>
<th>Number</th>
<th>Sampling Technique used</th>
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<td>1</td>
<td>Sample Banks:</td>
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<td></td>
<td>Public Sector Banks</td>
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<td>Purposive and Judgmental Sampling</td>
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<td>Private Sector Banks</td>
<td>04</td>
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<td></td>
<td>Foreign Banks</td>
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<td>2</td>
<td>Sample Respondents:</td>
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<td></td>
<td>Top Management Authorities</td>
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<td>Judgmental Sampling</td>
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<tr>
<td></td>
<td>Branch Managers</td>
<td>12</td>
<td>Judgmental Sampling</td>
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<td></td>
<td>(1x4=4x3)</td>
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<tr>
<td></td>
<td>Bank Staff</td>
<td>120</td>
<td>Stratified Random Sampling</td>
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<td></td>
<td>(10x4=40x3)</td>
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(iv) Bases of Sampling

- The Bank should be in existence for a minimum period of 15 years before the collection of data for the study.
- The minimum turnover of the bank should be Rs. 500 crores per annum.
- Bank must have in place the internal, external, financial, social and environmental sustainability programmes and practices.
2.9.3 Data Collection

(i) Primary Data

The methodology adopted for this research programme is survey cum descriptive cum analytical one. Well-structured questionnaires and schedules for sample respondents were prepared and administered to gather the primary data on the topic from three categories of banks. To elicit further information personal interview of all the three categories of respondents were undertaken.

(ii) Secondary Data

The secondary data have been gathered from books, articles, reports, international financial and banking institutions, RBI bulletins, news papers, journals, magazines and web resources.

2.9.4 Plan of Analysis

For the purpose of analyzing data, the statistical tools and techniques such as averages, percentages, standard deviation, factor analysis, chi-square test, KMO and Bartlett’s Test, Cross Correlation, and Croanbach’s Alpha, have been used. To make the data presentable in a meaningful way, wherever necessary tables, charts, diagrams, graphs have been made use of.

2.10. Limitations of the Study

The study encountered certain shortcomings. They are:

- The findings are based on the data supplied by the sample respondents.
- The banks sustainability cannot be compared among public, private and foreign banks on the common yardsticks. This is because each bank devises and enforces specific sustainability strategies in the areas of internal, external, financial, social and environmental paradigms.
- At times, the study is equated “what should be” (value) with “what is” (fact)
2.11 Reference Period

From November 2008 to September 2016

2.12 Chapter Scheme

The thesis is presented in Nine Chapters, they are as follows:

Chapter - 01: Introduction to Banks’ Sustainability

Under this chapter, the nature of banks sustainability, drivers of banks sustainability, significance of sustainability of banks, link between sustainability and finance, components of banks sustainability, models of sustainable banking, types of banks sustainability-internal, external, financial, environmental and social, limitations of banks sustainability and the like are discussed and deliberated.

Chapter - 02: Design of the Study

In this chapter, the statement of the problem, objectives and scope of the study, review of literature and research gap, operational definition of concepts, hypothesis, methodology, sampling, data collection, data processing, data analysis and interpretation, limitations of the study, reference period and chapter scheme were dealt upon.

Chapter - 03: Profile of Sample Banks’ and Respondents

Under this chapter, the profile of sample public sector, private sector and foreign banks are covered. In public sector, SBI, SBM, Syndicate Bank and Canara Bank have been included. In private sector HDFC, Vysa Bank, Yes Bank and Karnataka Bank and at the same time under foreign category Citi Bank, HSBC, Duetsue Bank and Bank of America are covered. Each bank profile includes, year of establishment, head office, caption, product profile, workforce profile, Revenue profile, profitability profile, awards won and so on.
Chapter-04: Financial Sustainability of Banks

Under this chapter, the data analysis includes the variables such as deposit schemes, camel compliance, sustained profitability, bank governance, sustained spread, short-run and long-run financial sustainability, cost per transaction, CAGR, interest rate fluctuations, managing NPA, competition and profitability, cost of technology, fee based and fund based services, pricing of banking products, banks liability and claims so on and so forth.

Chapter – 05: Internal Sustainability of Banks

This chapter analyses the data on HR sustainability, technological sustainability, infrastructure sustainability, institution building sustainability, integrated sustainability, competitive edge and long-term growth of banks covering more than 50 sub-variables altogether.

Chapter - 06: External Sustainability of Banks

This chapter analyses the data on RBI Guidelines, Prudential Norms, BASEL-III Norms and other regulatory norms, technology status, extent of competition, customer orientation economic parameters, sustainability drivers and benchmarks.

Chapter-07: Social and Environmental Sustainability of Banks

Under this chapter, economic growth, social progress and environmental protection related banks’ lending and sustainability are analysed. It also includes integrated sustainability, banks specific sustainability, social inclusion, social and environmental management systems related processes and operations, managing social and environmental risks, banks commitment to sustainability, social inclusion based products and the like are analysed and interpreted.
Chapter-08: Impact of Bank’s Sustainability and Hypothesis Testing Results

This chapter methodically analyses the impact of bank’s sustainability on its business performance, environment and social performance. The variables include long-term returns, new business development, market share, reputation and brand value, access to capital, sustainable business case, benefits of bank’s sustainability and so on. Further, inferential statistics results have been interpreted. Eventually, hypotheses test results have been analysed and interpreted.

Chapter-09: Summary of Findings, Conclusion and Suggestions

Under this chapter the important findings have been listed initially, subsequently appropriate conclusion has been drawn. Further, constructive suggestions have been offered on the topic. Finally, directions for the future study have been provided.

Thus, the components of research design is well portrayed in that the specific problem statement pertaining to sustainability of banks, objective-wise review of literature that is factors influencing banks sustainability, internal, external, financial, technical, human resources, regulatory, social and environmental sustainability, impact of banks sustainability on business performance, research gap, research issues, hypothesis, methodology, limitations of the study are morefully incorporated. Enough care is taken to reduce research design error for the purpose of achieving maximum reliability and objectivity and reducing bias of the data.

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