# CHAPTER 1 INTRODUCTION

## 1.1. Introduction

The great trade collapse experienced in 2009 is one of the most striking phenomena observed in recent decades. The trade volume of world trade fell by 12% in 2009 which is much steeper than 1965, 1982, and 2001 (WTO, 2010). And the decline in manufacturing trade flows was more drastic. More interestingly, the world trade fell more than the world GDP in 2009 (Francois & Woerz, 2009). The main reason for this trade collapse was due to affected financial systems worldwide. This financial crisis affected financial systems in many ways. Firstly, many banks all over the world faced a credit crunch and massive bailouts. Secondly, in the year 2008 the world stock market capitalization lost nearly 50% of world GDP (Aisen & Franken, 2010). All these effects of an effected financial system underline the importance of a strong and stable financial system for an economy. And at the same time, the relationship between financial sector development and trade of a nation also received a lot of attention among economists. In economic literature, as most of the traditional international theories believed that a nation's trade is dependent on economy's endowments of land, labor, capital (H-O model). But still, causes of variations in trade openness between countries are debated among theorists. Some recent economic literature tried to explore the cross-country variations in the level of financial development and its effect on the trade flows of a nation. There are varieties of possible linkages between financial sector development and international trade, but this study only targets just one linkage. The primary purpose of the financial system is channelizing savings to borrowers which may enable firms to increase economies of scale. Economies engage in foreign trade to get advantage of economies of scale (Krueger & Obstfeld, 1994). Therefore, the focus of this study is to access the role of financial sector development in high scale economies sector of BRICS nations. It might be demand driven, that countries with more exports in high scale economies have developed financial system. In this study, manufacturing goods sector is selected as high economies of scale sector as this sector is more credit intensive (Beck, 2001). Before exploring the relationship between financial sector development and trade of manufactured goods in BRICS nations a uniform financial development index is also formed for each BRICS country to have a clear and broad picture of financial development in these countries. But before constructing financial development index deciding variables for index was challenging as different researchers have used different indicators to measure the financial sector development. Ang and Mckibbin (2007) used liquid liabilities to nominal GDP, commercial bank assets plus central bank assets and domestic credit to construct financial development index of Malaysia. Khan and Qayyum (2007) used total bank deposit liabilities, clearing house amount, private credit, and market capitalization to construct financial development index of Pakistan. Principal component method (PCM) approach is adopted to obtain the weights of variables in these studies. In this study, financial development index of BRICS countries is constructed by considering three variables namely domestic credit to private sector (% of GDP), market capitalization of domestic credit to private sector) and broad money (% of GDP) (, Xu (2000), Fase and Abma (2003), Rioja and Valev (2004) Rahman Tahir (2008)). Weights of these indicators is calculated by using PCA

(Principal Component Analysis) approach. Financial development index of each BRICS country is used as proxy of financial development for respective countries. And manufactures exports (% of merchandise exports) is used as a proxy of trade in manufactured goods. As this study is exclusive in nature and involves various concepts so before moving further in study it becomes important to explore them scientifically.

## 1.2. Financial System

Finance is a huge amount borrowed and lend by debtors and creditors respectively, for a pre decided time and at a particular rate of interest (Gurley and Shaw, 1960). Finance can also be referred as monetary funds needed by individuals, business houses and government. And, the system which deals with finance and manages all activities related to finance is known as financial system or financial sector. A financial system is very broad in nature and comprises of financial markets, financial instruments, banks, financial services, regulatory bodies etc. and the main purpose of all these is to form an essential framework for mobilization of savings from savers to borrowers as it is the main purpose of any financial system in the world. A financial system is mainly classified in following two groups: -

## 1.2.1. Organized Sector

Organized financial system has a good network of banks, financial markets and has wide variety of financial instruments and services which are governed and controlled by proper laws and regulatory bodies in the country.

#### 1.2.2. Unorganized Sector

Unorganized financial system is the system which is dominated by indigenous bankers, pawn brokers, moneylenders etc. which are not governed and controlled by any law and regulatory body in a country.

## 1.3. Financial Development

Over the years financial system all over the globe has evolved in terms of quality, quantity and efficiency and this process of evolution or improvement is known as financial development. According to Dorrucci and Drutti (2007) financial development is the ability of an economy to channelize its savings into investments efficiently and effectively within boundary lines of regulatory bodies framework, variety in its financial instruments, size of its stock market and private agent's easiness in accessing them and financial market's performance in effectiveness, efficiency. As per Hartmann and Heider (2007) financial development is a process of financial innovation and improvements in institutions of financial system which decrease asymmetric information and increase completeness in the market, promote agents of financial system to engage in transaction at reduced transaction costs and increase competition.

### 1.4. Manufactured Products

As per world bank database, manufactured products include chemicals (Section 5), basic manufactures (section 6) excluding Non- ferrous metals (section 68), machinery and transport equipment (section 7), and miscellaneous manufactured goods (section

8), excluding division 68 (non-ferrous metals) of SITC (Standard International Trade Classification).

#### 1.5. Finance and Trade Channel

There are a variety of linkages through which financial sector development can be used for trade comparative advantage. One of them is liquidity constraints that many firms face. According to this, if a countries' domestic financial system is inefficient and weak, exports-oriented firms are burdened by credit constraints which prevents many potential firms from entering the international trade (Chaney, 2005). On the other side, if less credit constraints are faced by firms, it can lead to increased investment and all potential firms become exporters (Melitz, 2003). The main findings of research papers revealed that financial system development promotes production as well as trade of a nation. Beck (2002) also suggests that financial development and trade relationships are subject to economies of scale, as financial system development shifts producer incentives towards increasing returns to scale good. High economies of scale sector gain more profits more from a higher financial development as compared to a sector without economies of scale. Better financially developed economies have a comparative advantage in high scale economies sectors and becomes net exporters.

#### 1.6. Profile of BRICS countries

Jim O'Neil coined the term BRIC in 2001 for four countries (Brazil, Russia, India and China) which were deemed to be at same stage as of advanced economies by the year 2050. And BRIC nation's leaders made the first summit in 2009 and this group

became a formal institution in 2010. South Africa joined this group in 2011. So, to understand BRICS as a group, it is important to know where these five emerging economies are placed in the global context. Currently, BRICS together holds 27% of the world's GDP,42% of the world's population, 26% of world's land territory and 40% of the world's total labor force. Its contribution has increased in global value added (GVA) of manufacturing from 2.6 % (1971) to 16.5% (2008). For growth, BRICS is becoming more dependent on manufacturing. As a group BRICS have abundance natural resources, finances, and consumers to impart further momentum to manufacturing.

Individually, BRICS nations stand very different in terms of their values and goals. They have different economic policies, structural characteristics, and geopolitical importance. China is dominating in manufacturing sector and India is dominant in software engineering, generic pharmaceuticals, BPO and textiles. South Africa is rich in natural resources (mainly mining). Each BRICS country's capital markets developed during different times and at different rates. Among BRICS countries, India and Russia mainly driven by domestic demand. In terms of landmass, Russia is largest in the group as well as largest in world. Goldman Sachs predicted that China and India will have dominance in manufacturing goods and services respectively, while Brazil and Russia will have dominance in supply of raw material globally. India and Brazil are democratic, while Russia and China are not. Structure of financial systems, income level, education, health challenges also differ within BRICS nations.

## 1.7. Rationale and Objectives of the Study

This study is focused on measuring financial development of BRICS countries and examining the relationship between financial development and manufacturing exports of BRICS countries. Financial development of any economy is very vast in scale. So, it will be very interesting to measure the financial sector development of BRICS countries on a unified scale and compare with each other and finding out where they stand in comparison to each other. It can also can be easier for policy makers to understand financial sector development and later using financial sector for policy designing.

While exploring a possible link between financial development and trade of manufacturing goods in BRICS countries, it will be interesting to find whether financial development has an effect on manufacturing exports or not. If financial development effect is found on manufacturing exports than it will underline the importance of financial sector for promotion of manufacturing exports and trade balance of a country. The significant link between financial development and manufacturing exports will also have implications for the theory of international trade. And exploring this link in BRICS countries will be much interesting as BRICS countries are very heterogenous in nature.

Therefore, based on the rationale of the study, this study aims at the following objectives: -

- i. To analyze the trend and pattern of variables used in the study.
- ii. To construct the financial development index of BRICS countries.
- iii. To assess the role of financial development in the performance of manufacturing exports of BRICS countries.

# 1.8. Propositions of the Study

## **Proposition 1**

There is significant and positive relationship between financial development and manufacturing exports of Brazil.

# **Proposition 2**

There is significant and positive relationship between financial development and manufacturing exports of Russia.

## **Proposition 3**

There is significant and positive relationship between financial development and manufacturing exports of India.

# **Proposition 4**

There is significant and positive relationship between financial development and manufacturing exports of China.

# **Proposition 5**

There is significant and positive relationship between financial development and manufacturing exports of South Africa.

# 1.9. Organization of the Study

The contents of this study are organized into following six chapters:

#### **Chapter 1: Introduction**

In this chapter, introduction of the problem and background of the problem is explained. And concepts related to this study are also explained in this this chapter like financial development, financial system and its types, manufactured products. Profile of the BRICS countries and finance-trade channel are also explained in this chapter. Rationale and Prepositions of the study are also part of this chapter.

## **Chapter 2: Review of Literature**

In this chapter, existing literature related to this study is explored comprehensively. Review of literature is divided in three parts namely review related to financial development determinants, review related to financial development and economic growth and review related to financial development and trade.

## **Chapter 3: Research Methodology**

This chapter outlines the research methodology used in the study to analyze the data and to draw results. In this chapter, research methodology related to every objective is explained elaborately in a sequential manner.

## **Chapter 4: Construction of Financial Development Index for BRICS Countries**

This chapter is devoted to analyze the trend and pattern of variables used in the study and also constructing, measuring and comparing the financial development index of BRICS countries over the study period.

# Chapter 5: Role of Financial Development in the Performance of Manufacturing Exports of BRICS Countries

In this chapter, co-integrating relationship between financial development and manufacturing exports of each BRICS country is examined. Long-run and short-run estimates are also examined. Directional causality between the financial development and manufacturing exports is also examined.

# Chapter 6: Conclusion, Findings, Policy Implications and Future Scope of the Study

This chapter is the last chapter of this study, which encompasses the whole study. Study is finally concluded in this chapter. The findings, policy implications and future scope of this study are also mentioned in this chapter only.