



## A Correlation between Mass Media Communication and Foreign Investments in India

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### Abstract

India opened its doors to globalization in 1991 and the reference point of this change through globalization has been the United States of America (USA). The current study attempts to explore the relevance that globalization has brought to India through mapping the shift in pattern of mass media coverage of India by the foreign media and parallel marketing shifting patterns in investments made by foreign financial institutions in India, over the last two decades. A total number of 500 news of NYT were selected from a period of 1991- 2010 and top 25 news articles of each year were filtered through “relevance” from the NYT website and downloaded. The findings indicate an exponential rise in the number of news items which NYT carried about India over this period. This indicates an existence of a relationship between positive news coverage by independent media and a rise in the amount of investments made by foreign institutions in India.

**Keywords:** *India; Investments by Foreign Institutions; Shift in Communication quality and quantity; Globalization.*

### Introduction

The world is getting integrated and technology is binding the various facets of human activity as a result every action of an

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individual or institution impacts the seemingly remote and apparently disassociated activities undertaken by others in far-fetched places as well. Developed nations of the North like United States of America (USA) or other European countries are linked to the developing or under-developed countries of the Asian and the African sub-continent. Technology has wired instances leading to an efficient flow of information. The technological knitting is overlapped with economic association due to the liberal economic policies and structures adopted by Asian and African nations, which has facilitated trade and commerce between developed, developing and under-developed economies of the world in creating a globalized world where political and economic powers rely on countries and systems outside their geographical boundaries to grow, develop and sustain (Amoribieta et. al, 2001). So, countries across the globe are exploring and creating systems and policies which encourage a symbiotic association with the outside world.

Economic association is one of the most popularly employed means through which countries partner with each other to establish and nurture long term associations. For developing nations, foreign investments made by multinational companies (MNCs) helps to boost the gross domestic production (GDP) while for the developed world, the other world – developing and under-developed nations are sources of untapped resources like raw material at rock bottom prices, labour, both skilled and unskilled, is available at very cheap rates and a large captive market in the form of a huge consumer base in available which leads most developed nations focus on the under developed or developing economies.

In the present times, Asia is recognized as a potential market. A recent study by the Asian Development Bank considered Asia to be in the midst of a truly historic transformation. It predicted that the continent holds the promise of making some 3 billion additional Asians, hitherto commonly associated with poverty and deprivation, affluent by today's standards. With this the world view of Asia is clearly expressed.

The factors which fuel the Asian growth can be divided into broad categories - classic and new factors. The classic factors are technical progress, capital accumulation and labour force growth while the new factors are the growing middle class; climate change and the communications revolution (Asian Development Bank; 2011). The changing economic topography of Asia has shifted the global media attention towards Asia and enhanced investments by the western companies. The current study is an attempt to map the altering stance on the western media towards India and correlate the media reporting pattern about India with the investment pattern of Foreign Institutional Investors (FIIs).

## **Literature Review**

### **Globalization and Interconnectedness.**

Globalization has been the most outstanding area which has drawn attention of scholars and practitioners, across all fields, since the end of the cold war in the twentieth century. As, Scholte (1993) puts it that "globalization stands out for quite a large public spread across the world as one of the defining term of the late twentieth century consciousness'. Most scholars find the term elusive, difficult

to define and extremely broad based as it encompasses activities ranging from 'democratization, development, market deregulation, privatization, welfare reform, new security, agendas (such as immigration and drugs), and the general retreat of all aspects of the state' (Reich, 1998). A few characteristics of globalization which have been brought out by scholars like McGrew (1990) who defines it 'as multiplicity of linkages and interconnections that transcend the nation states (and by implication the societies) which make up the modern world system. It defines a process through which events, decisions and activities in one part of the world can come to have a significant consequence for individuals and communities in quite distant parts of the globe' and Cerny (1995) looks at globalization as 'a set of economic and political structures and processes deriving from the changing character of the goods and assets that comprise the base of the international political economy—in particular, the increasing structural differentiation of those goods and assets'. The two key features of globalization have been the 'interconnectedness that transcends nations' and the emphasis on the 'changing character of goods and assets'.

Empirical evidences indicate the positive economic impact of globalization on Asian and South Asian countries (United Nations, 2008). India among other countries like China, South Korea, and Malaysia etc. has been recognized as a country of choice by the western developed world (Barthelemy and Adsit 2003) and researchers have listed out reasons like cheap labour, rapid change in technology, low cost and high returns in quality and experience and a captive untapped consumer base with an increasing

disposable income (Deavers, 1997; Ribeiro, 2001). As a result the present world is marked by economic, technological and cultural interdependence which has led to an interconnected social order (Johnston et al. 1995; Zürn 1995; Albrow 1996; Kofman and Youngs 1996; Held et al. 1999).

### **Factors of Economic Development**

Most researchers have asserted that economic concerns are the only drivers which draw the developed world towards the developing nations but there are who have laid emphasis on more sophisticated factors like media which play a subtle but an extremely crucial role in the process of economic development of a nation (Sen, 1984, 1999; Djankov, et al; 2002). Most writers have asserted a positive relationship between an assertive and free media and the development outcomes of the 'development aspiring' nation. Stiglitz (2002), focused on the enhanced degree of governmental transparency and accountability in nations where media is strong which leads to positive economic development and better public policies which is an important consideration of the multinational companies (Spitzer, 1993).

Similarly the private business agencies also operate better with stringent corporate governance norms and execution (Dyck&Zingales, 2002) and reduced principal agent problem (Besley& Burgess, 2001; Besley, et al, 2002). But a lot of research attention has not been paid to the altering shifting stance and

resultant impact which foreign media projection, holds on the development process of a 'development aspiring' nation.

In the present globalized times the development process of a nation is highly dependent upon the investments made by the foreign companies in a nation and closed doors policies of government of India has often been considered as a factor which deterred India's growth till 1991 (Johri, 1983). The foreign investment is dependent upon the 'image' which the multinational companies hold about the nation where they may want to invest funds and boost the process of economic development. Mass media plays a very important role in creating perceptions about people other countries (McNelly and Izcaray, 1986) because most people get their information about people and systems outside their immediate environment through various channels of mass media (Lippmann, 1922 cited in Cho & Lacy (2000). Therefore, mass media plays a vital role in creating images about individuals, communities and nations.

### **Impact of Media Images and Framing on Investment**

Recent studies have shown a strong correlation between media stories and stock market reactions (Tetlock, 2007; Tetlock, et al; 2008; and Peress, 2008). News stories covered in national newspapers are associated with substantial price responses on the stock market (Tetlock, 2007). This underlines the relationship between the investor and the availability of media to the investor.

With an increase in electronic media, the numbers of media

sources have grown exponentially. Availability of media reports is no longer specific to a particular geographical region. The current paper extends the research by linking FII investments to the media coverage of India by the foreign media. "Sentiment" which is broadly defined as investor psychology has been posited as an important determinant of asset price variation (Keynes, 1936; Shiller, 1990). Investor sentiment is among other things affected by the media coverage. Cindy (2013) says that it is difficult to link sentiments and asset prices, since beliefs are basically unobservable. However, she captures sentiment by "observing the qualitative tone of housing news from local newspapers- by calculating the difference between the positive and negative words across newspaper articles". Also, the literature on asset price bubbles establishes that media reflects and builds sentiment through an incentive to cater to readers preferences over a particular asset (Kindleberger, 1978; Galbraith, 1990; Shiller, 2005). It is therefore a mix of behavioral and fundamental factors that has an impact on asset prices, which are in turn governed by their demand as measured by the flow of money. The fundamental factors which are responsible for FII investments in India are the returns available in the domestic stock markets, the exchange rates, IIP data, short run interest rates, inflation, country risk ratings and the Beta of the Indian stock market. This list is not exhaustive, however apart from these fundamental factors the psychological reason (read sentiment) for investments have been looked into with the help of the content analysis and categorization of the news reports by NYT about India.

## **Methodology**

The New York Times (NYT), America's leading daily was selected to draw out data for the media coverage about a developing nation and here India was chosen as a sample of the developing world because apart from India China is another preferred destination for investment but access to both media and financial data for China was difficult to procure while that of India was available on public domain through reliable sources. Since the study was targeted at mapping the association between media coverage and foreign investments post globalization, total number of news articles pertaining to India which featured in NYT were noted and the top 25 news articles of each year from 1991- 2010 were filtered through "relevance" from the NYT website and downloaded. A total number of 500 news articles were downloaded. Of these 500 news articles, 120 articles dealt with 'Business and Personal Finance' (BPF) which were used for content analysis to segregate BPF news as positive, negative or neutral news.

To measure the association between the BPF news and the investments made by foreign institutions in India, the net cumulative investments made by foreign institutional investors (FIIs) in India between 1991- 2010 was downloaded (indiastat.com, 2014).

## ***Analytical Tool and Technique***

There may be several reasons for a lagged relationship between FII investments and positive BPF news. A simple correlation coefficient



is insufficient to characterize the relationship between FII investments and positive BPF news. Instead, the cross correlation function which is correlation between the two series shifted one against another as a function of the number of observations of the offset is used.

A correlation between the FII investments made in India from 1991 – 2010 and the total business news published by NYT about India was checked. Further, a correlation was also checked between positive BPF news and the FII investment in India. A lag effect of one year was taken because investments decisions by institutions are process driven which entails a time loss. So media impact on investments is studied with a time lag due to the time lost in the decision making process on account of organizational procedures, ‘psychological and technological’ reasons. FII’s often do not change “investment patterns” even if there are changes in the “investment environment” due to ‘inertia or habit’ (Larsen and Lomi, 2002; Dean and Mayer, 1996). They are not sure whether the “change” is “permanent” or “transitory” and would therefore want to wait and watch.

## **Results and Analysis**

Business and Finance news (BFN) about India forms a small component of the total news covered by NYT about India. Other categories in which news is covered is political and governance news, accidents and art and culture. BFN about India in has largely been positive. Table 1 below shows the composition of BFN.

**Table 1: News about India in NYT**

Year	News Reports				
	Total Reports about India	Business & Finance News (BFN)	Positive News (PN)	Negative News (NN)	Neutral News (NeuN)
1991-2010	138391	120	65	34	21

To understand the impact of news on the investment made in India a correlation was checked between the BFN covered by NYT about India and the foreign institutional investments made in India from 1991-2010. Further for a sharper understanding of the type of news and investment a correlation was checked between positive news (PN) and the investment. All the correlation values were less than .4 indicating weak correlations between the institutional investments and Business and Finance news (BFN) coverage about India. The positive news also showed a weak correlation with the investments made by in India.

**Table 2: Correlation without the Time Lag**

	FII	PN	TN	BFN
FII	1	0.34826	0.33036	0.30363
PN	0.34826	1	0.23185	0.89026
TN	0.33036	0.23185	1	0.27304
BFN	0.30363	0.89026	0.27304	1

Since the nature of the data indicated a possibility of a time lag, the impact of total news and BFN on the investment was checked with

a one year time lag. The correlation between BFN and FII was moderate but foreign investments were found to be highly correlated with the PN as the correlation value is greater than .7

**Table 3: Correlation with One Year Time Lag**

	<b>FII</b>	<b>PN</b>	<b>TN</b>	<b>BFN</b>
<b>FII</b>	1	0.71692	0.31164	0.56236
<b>PN</b>	0.71692	1	0.20252	0.89694
<b>TN</b>	0.31164	0.20252	1	0.26367
<b>BFN</b>	0.56236	0.89694	0.26367	1

**Conclusion**

The study shows an exponential rise in the number of news items which NYT carried about India over this period. There has been a change in the category and type of news report from neutral to positive and the news reporting is more visually aided with photographs and pictures. A similar pattern is noticed in the foreign investments by institutions which have grown over a period of time. This indicates an existence of a relationship between positive news coverage by independent media and a rise in the amount of investments made by foreign institutions in India.

Impact of media coverage on investments has been an area which has gathered a lot of attention because spread of information through technology aided media channels has led to broader dissemination and increased awareness. As the electronic medium has reduced the geographical barrier and therefore, post globalization media of the developed nations has stepped up the focus and attention it pays to the economic activities of the

developing nations. Investments made by institutions and retailers are dependent on media which is considered as the only authentic source of neutral information on account of which the centrality and prominence enjoyed by media in decision making is growing. The mass media coverage about India in the foreign media had a positive impact on the FII's investment decision about India as a destination. The rise in the positive news coverage about India in foreign media and a lagged rise in the FII investment is a clear indication of the "information effect".

It can therefore, be seen that with an increase in mass media coverage about India and with a special focus on higher positive news coverage, the inherent risk of investing in India reduces for an FII, and therefore results in an increase in investment activity

### **Limitations and Scope of Further Research**

CLC is a very popular method for identifying causal relationships in psychological and education research (Rogosa, 1980). However, if the individual series are auto correlated then the CLC can be misleading and distorted as a measure of the lagged relationship. This we can overcome by the process of "prewhitening" or through the "impulse response function". Further work in this area is possible after checking the data for autocorrelation. Drawing similar references for other developing countries might not be possible since the data pertains to only India.

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