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CORRUPTION IN INDIA: AN ANALYSIS OF THE CHANGES CAUSED BY ECONOMIC
REFORMS

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ABSTRACT

In this paper, I examine how and why the nature of corruption in India changed in 1991 following the implementation of market oriented reforms to the economy. While many studies assert that liberalization of the economy should decrease corruption, I find that the magnitude of corruption actually grew considerably following the reforms implemented by Prime Minister PV Narasimha Rao and Finance Minister Manmohan Singh. Through an analysis of how the License Raj era spurred corruption and how reforms changed corruption, this study will illustrate how the reforms increased the opportunity for rent-seeking, collusive corruption, and illicit capital outflows. These effects have helped change the petty corruption that characterized the License Raj era (1947-1990) to the grand corruption now evident within the post-reform period (1992-Present).

TABLE OF CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES	iv
ACKNOWLEDGEMENTS	V
Chapter 1– Introduction	1
1.1 Brief Economic History of India.....	1
1.2 Basic Definitions and Explanations of Key Concepts	3
1.3 A Constant Factor - Corruption.....	4
Chapter 2– Related Work.....	6
Chapter 3– Corruption During License Raj Era	9
3.1 An Experiment with Socialist Style Policies	9
3.2 Growth of Petty Corruption and Rent Seeking Opportunities	10
Chapter 4– Evolution of Corruption	14
4.1 Growth of Magnitude of Corruption.....	14
4.2 Liberalization, Privatization, Globalization.....	15
4.3 Increases in Rent Seeking Opportunity	17
4.4.1 Private Sector Growth.....	19
4.4.2 Collusive Corruption	22
4.4.3 Analysis of Rent-Thick Sectors	23
Chapter 5 - Growth of IFF’s and Tax Revenue Losses after Reforms	29
5.1 Desire to Amass Wealth Illegally	29
5.2 India’s Illicit Capital Outflows and Measurement Methodology	30
5.3 Measuring Losses in Tax Revenues due to IFF’s.....	32
Chapter 6– Conclusion.....	34
Bibliography	36

LIST OF FIGURES

Figure 1 – GDP \$US	
Figure 2 – FDI Inflows \$US.....	2
Figure 3 – Central Government % in Consumption Expenditure	18
Figure 4 – Average Annual Share of Investment.....	20
Figure 5 - Capital Formation Per Sector	21
Figure 6 – Illicit Financial Outflows.....	30
Figure 7 - Tax Revenue Losses.....	33

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Chapter 1– Introduction

1.1 Brief Economic History of India

In 1947, India gained independence by finally breaking off from the shackles of the British Empire. The independence movement, led by Mahatma Gandhi, placed the new nation in a position where a strong government had to be established and new economic policies had to be developed. Two men already well recognized within the political circles of India were both vying to become the nation's first Prime Minister, the top political position available. Jawaharlal Nehru and Sardar Patel, two prominent politicians that helped with the Independence effort, had contrasting views on how they wanted economy of the new nation to function. Upon the request of Mahatma Gandhi, Sardar Patel stepped down from contention and Nehru took the helm uncontested, overtaking the prominent responsibility of creating an economic policy to lead the new nation.

From independence to the present day, this paper refers to the duration as two distinct economic segments, the pre-reform period until 1991 and the post-reform period indicating the time thereafter. The pre-reform period is also referred to as the License Raj era and can be identified through its centrally planned economy in which the government controlled all aspects of the economy through a complex system of licenses, regulations, and accompanying “red tape” (Aghion, 2015). Due to stagnant growth rates and other immediate factors adversely affecting the economy, India went through a period of heavy economic transition in order to make the country more market-oriented while expanding the role of private and foreign investment. It was a

Balance of Payments Crisis in 1991 which pushed India to the brink of bankruptcy and drove a massive change in economic policy. The rupee devalued as the Indian Central Bank refused new credit and the foreign exchange reserves were reduced to a point that India could barely finance three weeks' worth of imports, forcing economic reforms that focused upon four of the major sectors, namely the financial, industrial, trade, and fiscal sectors. The post-reform period can be identified by the market oriented policies as the country encouraged trade and opened itself up to the global markets.

Following reforms, India has enjoyed tremendous economic growth with GDP increasing to an average annual growth rate of 6.8% since reforms were implemented in 1991 (Figure 1) compared to 4.6% from 1960-1991 (World Bank, 2015) . In just a few years, FDI inflows grew from US \$132 million during 1991-93 to \$42 billion in 2006-2007 (Figure 2)(World Bank, 2015). India has seen income levels rising, industries developing, and the population urbanizing at a rapid pace. A study by AT Kearney in 2005 put India as the most likely destination for foreign direct investment following China due to its impeccable growth (AT Kearney, 2014).

Figure 1 – GDP \$US

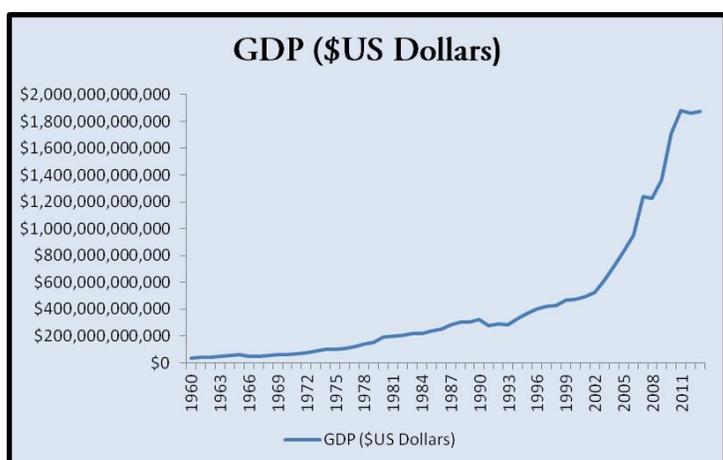
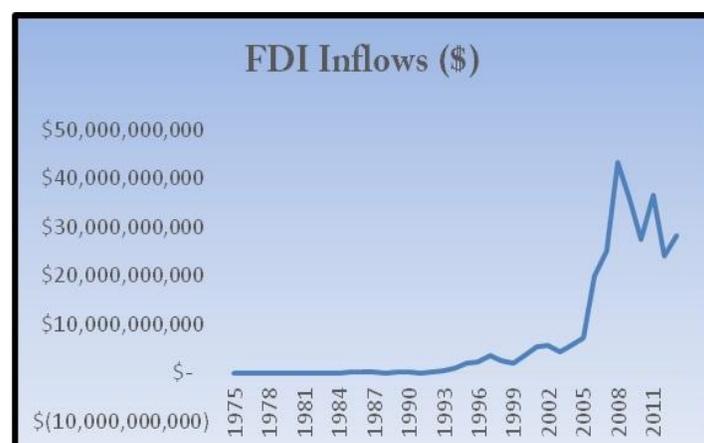


Figure 2 – FDI Inflows \$US



1.2 Basic Definitions and Explanations of Key Concepts

Corruption can be defined as the “abuse of entrusted power for private gain” (TI, 2014). According to Transparency International, corruption can be classified as grand or petty depending on the value of the money lost and sector in which corruption occurs. Grand corruption consists of acts committed at the highest levels of government that distorts policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good. Petty corruption refers to everyday abuse of entrusted power by low- and mid-level public officials in their interactions with ordinary citizens, who often are trying to access basic goods or services in places like hospitals, schools, police departments and other agencies (TI, 2014).

In this paper, we talk extensively about how increased corruption is a byproduct of the rise in rent-seeking within the economy. The process of expending resources in an attempt to influence public policy outcomes is called rent-seeking. The resources expended create no social product and as a result are regarded as a social waste (Tullock, 1967 and 1993; Krueger, 1994). Simply put, people are said to seek rents when they try to obtain benefits for themselves through the political arena.

Moreover, we further analyze the increase in corruption in this paper by observing the trends within illicit capital outflows and the tax revenues lost as a result. According to Global Financial Integrity, a research think tank based in Washington D.C., Illicit Financial Flows are illegal movements of money or capital from one country to another (GFI, 2010). GFI classifies this movement as an illicit flow when the funds are illegally earned, transferred, and/or utilized. Some examples of illicit financial flows might include:

- 1) A drug cartel using trade-based money laundering techniques to mix legal money from the sale of used cars with illegal money from drug sales.
- 2) A human trafficker carrying a briefcase of cash across the border and depositing it in a foreign bank.
- 3) An importer using trade mis-invoicing to evade customs duties, VAT, or income taxes.

1.3 A Constant Factor - Corruption

During both the License Raj era and post-reforms, a constant factor affecting economy has been corruption. Corruption really gained a foothold as a cultural phenomenon in India when it was used to bypass stringent licensing requirements before liberalization. However, the very nature of corruption in India evolved after reforms in 1991. In the past two decades or so, there has been a shift towards grand corruption as India's rapid growth has allowed for increased rent-seeking and collusive corruption due to a host of factors, allowing for a quantitatively and qualitatively larger form of corruption to erupt. Numerous scandals worth billions of dollar have rocked the economy in the past decade and have worried investors about the safety of doing business. In a recent poll by the Economist, 96% of Indians said corruption was holding their country back, and 92% thought it has got worse in the past five years (Economist, 2014). India needs its private sector to build roads, factories and cities but the relationship between the state and the privates sector is filled with corruption. The gradually worsening situation came to a peak in 2011 with the nationwide anti-corruption movement

initiated by politician Anna Hazare. The issues became so evident to the world through these protests that private firms have cut investments drastically; resulting in a fall in investment from 17% of GDP in 2007 to 11% in 2011, leading GDP growth has fallen to 5%, the lowest level for a decade (Economist, 2014).

It is not just individuals in positions of power and influence that partake in corrupt activity. People all over the country are used to paying bribes consistently in order to gain efficiency in their everyday lives, be it to obtain a driver's license, or to obtain a certificate certifying that you own a piece of land. In the latest report released by Transparency International in 2014, India ranked a dismal 85 out of 176 countries in the Corruption Perception Index (TI, 2014). Transparency International's 2013 Global Corruption Barometer stated that almost all key Indian institutions were being affected by corruption, finding that 71% of respondents believe that corruption had increased from 'a little' to 'a lot' since reforms began. Moreover, an extremely high 86% of people believed that political parties and their leaders are corrupt (TI, 2014).

Chapter 2– Related Work

While there is certainly much literature regarding corruption and the harmful effects it has in India, there is not much work that specifically addresses how or why the nature of corruption has changed from a pre-reform perspective to a post-reform perspective. One of the main reasons for this situation is the relatively short period of time since reforms and the high number of factors that could've had an influence. Being that corruption is an illegal activity, hard data or estimates are very tough to find to do a purely quantitative comparison between the two periods. Hence, the conjectures made in this paper are derived from understanding of current knowledge regarding corruption and concepts related to corruption such as rent-seeking, collusive corruption, and illicit capital outflows.

Corruption, as indicated in the introduction, has been a factor affecting the economy of India since the Indian independence in 1947. Philippe Aghion, Robin Burgess, Stephen Redding, Fabrizio Zilibotti (1997) indicate that the License Raj was a system of central controls regulating entry and production activity, primarily into the manufacturing sector (1997). The paper emphasizes how the Industries Act of 1951 following independence was the foundation for India's centrally planned economy. The act brought all key industries in the registered manufacturing sector under central government control via industrial licensing. Be it for establishing a new factory, significantly expand capacity, start a new product line or change location, an industrial license was required and this allowed the government to allocate plan production targets to firms (1997).

The primary overarching reason for the growth of corruption in India during the License Raj era was the import substitution policy that prevailed in India till the 1980's. Shyama Ramani

(2014), explains how India adopted import substitution policies as an attempt to minimize the dependence on imports and develop an industrial base. The resulting policies took the form of a complex system of price controls, high import duties, and export subsidies (2014). She also claims that these License Raj policies promoted public corruption and diverted the resources of firms towards securing concessions, permits, and licenses from the government rather than seeking any R&D support (2014).

Moreover, this study found that the policies of License Raj helped increase the opportunity for rent seeking. Each political decision has a redistributive effect and there are individuals who willing to use resources in order influence those decisions. In this paper, rent-seeking and how it changed following liberalization is analyzed.

One of the most prominent types of corruption includes collusive corruption. Corruption occurs at various levels of the bureaucratic and political hierarchies and more commonly, there is a relationship between corruption between politicians and bureaucrats (Sanjivi, Guhan 1997). There is a lot of vertical corruption evidenced as well in which the lower level bureaucratic agents pass up the share of bribes received at the operating levels. (Sanjivi, Guhan, 1997). Another process of collusive corruption occurs when government has the power to allocate lucrative licenses and contracts which give them a money making opportunity (Sanjivi, Guhan, 1997).

One of the main forms of collusive corruption that the paper addresses is the relationship that has formed between the public and private sector following liberalization. As reform policies kicked in, the private corporate sector has grown enormously in the past two decades. Empirical results show that response of private investment with respect to relative cost of capital has increased by at least 4.6 times following liberalization (Emran, Alam, Shilpi, 2003).

Furthermore, this paper addresses the increase in corruption following liberalization by observing the trends between illicit capital outflows. In a 2010 report by Global Financial Integrity, we see an analysis of illicit capital outflows dating back to 1948. Following reforms, deregulation and trade liberalization accelerated the outflow of illicit money from the Indian economy. Opportunities for trade mispricing grew and expansion of the global shadow financial system—particularly island tax havens—became a primary reason for the increasing illicit capital outflows (Kar, 2010). Based off the trade mispricing estimates, the revenues lost to tax evasion will be calculated to show one of the primary costs of corrupt activities.

Chapter 3– Corruption During License Raj Era

3.1 An Experiment with Socialist Style Policies

During the initial stages post India's independence in 1947, the economy was overseen by the new Prime Minister Nehru along with statistician Prasanta Chandra Mohalanobis. The economic policy during that time was based upon the state exercising control over the economic sectors. Prime Minister Nehru and his economic leadership team were deeply enamored with the economic policies outlined within socialism. Due to the British rule, Nehruvian nationalists were deeply suspicious of foreigners approaching them for commercial motives and were attracted to non-capitalist solutions for the nation's problems (Bhala, 2014). Moreover, Nehru's antagonistic feelings towards private companies paved the way for an economic model in which private players were suppressed and government exercised immense control on practically every facet of the economy including trade and commerce.

Self-sufficiency and self-reliance were sought in order to ensure that Western nations couldn't take advantage on India once again. Nehru restricted FDI inflows through government control of various key sectors. In fact, it was not until 1991's reform policies that FDI inflows increased from a non-existent value to almost \$45 billion dollars by 2006-07 (Yahya, 2008).

Furthermore, the government decided to adopt an economic agenda that would follow five year plans. Every five year plan was committed towards helping develop certain sectors of the economy that the government believed must grow for the countries continued progress. After Nehru took power, one of his first orders of business was bringing all the heavy industries including coal, mining, steel, machinery, and infrastructure under government control. Next, all the small scale industries

and private companies were licensed and hence indirectly under governmental control (Guruprasad, 2013). From brands of toothpaste to the types of bicycles being manufactured, the government decided the quantity that could be created based upon its own demand estimates that were vastly inaccurate. Companies were not allowed to produce more than the number permitted by the government or they would face the risk of hefty fines.

Moreover, a “License Raj” system in which tariffs were levied at high rates to discourage importation as well as licenses and quotas were also used as quantitative restrictions. The Industries Development and Regulations Act (1951) was established, bringing all key industries under central government control via industrial licensing. Under this act, an industrial license was required to establish a new factory, significantly expand capacity, start a new product line or change location (Aghion, 2015). This led to the development of increasingly complex procedures for obtaining a license and led to growing bureaucracy (Tendulkar, 2003). The licensing shifted much of the power to bureaucrats, creating the incentives and ripe opportunities for rent-seeking and bribery.

3.2 Growth of Petty Corruption and Rent Seeking Opportunities

As the new economy developed, petty corruption began to emerge aggressively. Petty corruption in this paper refers to the exchange of small amounts of money or bribes, primarily to increase the efficiency of government services. For instance, be it for obtaining a license or to process paperwork, bribes became almost routine when dealing with bureaucratic officials in India. The primary reasons for petty corruption to take a stronghold at this time are import substitution and state controlled enterprises, hallmarks of socialist style planning. In order to

implement import substitution policies, the licensing system or “License Raj” was created, the primary cause of petty corruption that characterized India until the 1990’s.

Import substitution is a foreign economic policy which advocates using domestic production rather than foreign imports. In India, it was an attempt to reduce foreign dependency and build an internal market, achieved through nationalization, subsidization of vital industries such as agriculture and power generation, increased taxation, and highly protectionist trade policies. Nehru certainly understood the numerous advantages of building a self-sufficient economy but failed to identify the countless disadvantages as well, many which drove the increase of corruption in the pre-reform period.

One of these disadvantages was that industries became complacent under the protection of the government from foreign competitors while becoming inefficient and obsolete, leading to the production of goods of cheap and poor quality. The trade barriers and import bans that were placed debilitated production, resulting in slow growth.

This environment of import substitution offered a prime environment for corruption to thrive due to two primary reasons.

- 1) The Indian economy was primarily run by government bureaucrats who were given incredible amounts of power to determine how firms operated, creating a prime environment for “rent-seeking”.
- 2) Businesses had to resort to corrupt means (petty corruption or bribery) in order to bypass the stringent licensing requirements.

The discretion granted to the government bureaucracy in handling the Indian economy was a recipe for rent seeking activity. The pre-reforms regulatory system gave government officials the responsibility to award licenses and permits. Businesses with the financial means to

bribe generally got the licenses or favors they desired, giving them enormous influence. This was also an opportunity for bureaucrats to increase their wealth by accepting bribes in order to wield their power. The maze of bureaucracy often led to some ridiculous restrictions. For instance, up to 80 agencies had to be satisfied before a firm was granted a license to produce its goods. The government decided what was produced, how much, at what price, and what sources of capital were used (Yadav, 2014). Because licenses had such a stranglehold upon business, bureaucrats could use their power as a profit seeking enterprise by accepting small bribes, the cornerstone of corruption in the pre-reform era. In addition, lobbying the government for favors and paying bribes diverted resources from other productive activities. This was essentially corruption from the supply side as bureaucrats were given an opportunity to use their influence of supplying licenses and permits with corrupt means.

As a result of the power that was concentrated in the bureaucracy, businesses had to navigate through a sea of permits and licenses to conduct business, creating the demand side of the situation. The necessity of getting government approval before undertaking major business activity slowed production down and raised costs directly. The trade barriers ensured that Indian companies faced little competition from foreigners while other licensing schemes and government regulations limited competition from other domestic companies. The stringent licensing requirements due to these economic models meant that most Indians had to resort to unethical means in order to work around the system. They had to discover ways to get the licenses and permits without large delays. This is why corruption in India prior to 1991 was characterized by rampant bribery or petty corruption, primarily to bypass the red tape. According to Jitendra Singh “in the bad old days, particularly pre-1991, when the License Raj was sway,

and by design, all kinds of free market mechanisms were hobbled or stymied and corruption emerged almost as an illegitimate price mechanism, a shadowy quasi market” (Hussain, 2012).

The transactions of bribes were not only limited to businessmen and bureaucrats but also between the common man and government officers. This trickled down from the highest levels of the system down to the lowest levels to peons as well (Guruprasad, 2013). An example would be a high level officer, upon bribing would approve an illegal license and a peon would accept a bribe to move your application form to the top for faster processing. The license raj gave discretion to the bureaucrats and created scarcities. In the pressure to get the necessary goods and services, people would pay bribes. It became so commonplace that petty bribery was considered a part of everyday life in India during the License Raj era. However, that is no longer the case as the nature of corruption changed considerably due to reforms.

Chapter 4– Evolution of Corruption

4.1 Growth of Magnitude of Corruption

Since economic liberalization in 1991, the nature of corruption has changed. While reforms were initiated to reduce the adverse effects of License Raj policies upon economic growth, the magnitude of corruption has increased.

"There's been corruption in India for thousands of years—it's endemic—but what you see is the kind of corruption changing," says Milan Vaishnav, a South Asia associate at the Carnegie Endowment for International Peace. "In the past two decades, there's been a shift toward grand corruption: the recent scandals are just qualitatively and quantitatively bigger than anything we've seen" (Xu, 2014).

In order to get a better idea of the magnitude of some of the most popular scams in India, here are some of the losses incurred through the four most well-known within the past decade.

2G Corruption Scam - \$27 Billion

Satyam Scam - \$1.4 Billion

Coal Mining Scam - \$29 Billion

Wakf Board Land Scam - \$24.6 Billion

The reason for the rise of grand corruption is the increase in rent-seeking activity which has been triggered by the onset of 1991's liberalization reforms. As liberalization policies were

enacted, the growth in the private sector combined with collusive corruption between private players and public officials led to a rise in the opportunity and expected returns of rent-seeking. This is why enormous bribes are now being paid in order to secure lucrative licenses, contracts, and policies while changing corruption from petty to grand.

The culmination of these factors that were affected by the Liberalization, Privatization, and Globalization Model (LPG) contributed significantly to the increase in the magnitude of corruption. The following sections explain in detail how the reforms have transformed the petty corruption that characterized the License Raj era into the grand corruption existent today.

4.2 Liberalization, Privatization, Globalization

On July 24th, 1991, Finance Minister Manmohan Singh presented a budget to parliament led by the P.V. Narasimha Rao government that would alter the course of India forever. Facing a balance of payment crisis during the summer, Singh devalued the rupee, abolished most of the quotas and licenses that dictated who could produce what, and allowed the opening of some industries to foreign capital. His economic reforms abolished the stringent policies that have tormented Indian businessmen for decades. Despite the existing tremendous potentiality, vast natural resources, and extensive trained manpower, India's contribution in the world trade in 1992 had been 0.53 percent, much below the level of even Thailand, one of the poorest countries in the world at that time (Gupta, 1995). India's poor trade performance as well as the immediate balance to payments crisis, led the government to finally recognize that the time had come to reshape India's economic policies by seeking to emulate the successful 'East Asian Miracle' based on more export-oriented and more globally connected strategies of

development (Malik, 2009). There were two immediate factors that are identified for the implementation of the LPG Model:

1. Global Change - With globalization occurring at a rapid pace, countries began adjusting their economies to align with the global market and global economy. The European Economic Community had become the largest single market in the world, while Gulf war has opened up a door for increasing cooperation and integration of EEC community with America.
2. Position of the Indian Economy - India has been facing grave economic crisis and external pressure for foreign exchange, There was an internal debt trap which continued from 1986 onwards backed by severe liquidity crisis. Economic turmoil created panic among the NRI community as deposits in India of about \$1.4 billion were taken away (Jain & Verma, 2009). Moreover, the monetary system was also performing poorly as foreign exchange reserves were not sufficient.

The major macro economic reforms focused upon reducing fiscal and revenue deficits. Some of the primary reforms include structural-sector specific reforms, tax reforms, reduction of food and fertilizer subsidies, and the setting up of Special Economic Zones and Agri-Economic Zones to promote exports (Andal, 2015). The new policies have helped India's GDP almost quadruple its growth as it has grown by about 7% a year on average over the past two decades and by over 9% from 2005 to 2010, numbers only outpaced by a few countries around the world. FDI inflows grew immensely as a result of the reduction in average tariff levels in India. For instance, applied tariffs on industrial goods were decreased from an overall average of 15 percent to an average of 12.5 percent. In 1990-1991, across all merchandise categories, the average

Indian import-weighted tariff was 87 percent and 164 percent on consumer goods but by 1996-1997, the average imported-weighted tariff tumbled to 24.6 percent (Bhala, 2014) Moreover, stringent regulations were wiped away to attract multinational corporations (MNCs) to open, expand, and operate production facilities in India. It did this by eliminating its 40% cap on foreign equity participation of joint ventures and eliminated trade-related FDI restrictions (Bhala, 2014).

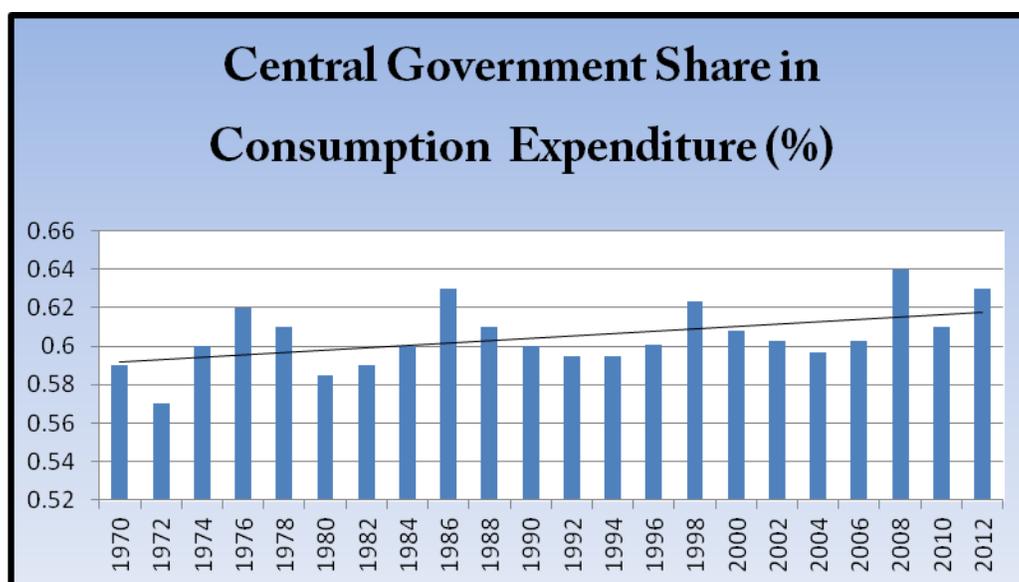
During the License Raj era, the regime of rules and quotas were maneuvered through small bribes. De-regulation of the economy through LPG took away much of these licenses, quotas, and other quantitative restrictions enacted to uphold import substitution policies of the License Raj era. However, the “licensing” mechanism is still heavily present after reforms but now primarily in the form of government contracts for private players to take up projects or receive permission from the government. For instance, a mining company could get a coal mining license for a certain location or a construction company could get the contract to build a massive governmental housing complex. The demand side of corruption changed with this mechanism because these government licenses and contracts became much more valuable after the growth experienced through liberalization, increasing the scope for rent-seeking and thus helping the magnitude of corruption grow.

4.3 Increases in Rent Seeking Opportunity

Due to liberalization, the scope of rent seeking increased at the contracting level at which politicians/bureaucrats had discretion (Congleton, 2015). Discretion in this context refers to the government’s power to allocate government licenses and contracts to firms. The

federalism structure of India has always been attractive for rent-seeking, a facet of the nation's structure further accentuated by reforms. There is a central government and state governments whose tax as well as expenditure responsibilities are outlined by the Indian constitution. While the central government has most of the financial and policy creating power, the states have the responsibility of delivering services at the local level creating an environment of lobbying by state governments for higher allocation of funds and favorable policies. Obviously, this gives the Central government prominent discretionary power, creating a ripe environment for rent-seeking (Congleton, 2015). One way to gauge how much centralization has increased from the pre-reform period to the post-reform period can be evidenced through Figure 3 which shows the share of central government in consumption expenditure and the slight increase from the 1970's to 2010. This shows that even with deregulation of the market occurring; the central government in India still has significant influence.

Figure 3 – Central Government % in Consumption Expenditure



One of the methods by which we can quantitatively perceive the increase in rent-seeking activity is by observing the performance of billionaires in sectors that are prone to rent thick activities. Rent-thick sectors are categorized as such if the government has the discretion to allocate licenses and contracts within these sectors including real estate, mining, telecommunications, construction, media and infrastructure. In data compiled by Forbes magazine, economists Aditi Gandhi and Michael Walton generated an overview of Indian billionaires' social and business backgrounds, showing that 60% of billionaire wealth was created in sectors most conducive to rent-seeking including real estate and telecommunications after liberalization while only 43% are actually in rent-thick sectors (Gandhi & Walton, 2012).

While this doesn't mean that these billionaires are all corrupt, this pattern is consistent with the increase wealth creation occurring in these sectors with the potential for rent-extraction and rent-sharing between private and government players (Gandhi & Walton, 2012). This is because of the sheer value in obtaining the licenses and contracts for competing private firms, the scarcity of licenses and contracts, and the resource allocating responsibility handed to the government. While the incentive for rent-seeking activity depicts the demand portion of this corruption, it is the growth of the private sector which first explains the supply aspect and consequentially the demand aspect.

4.4.1 Private Sector Growth

In most countries, growth in the private sector is not associated with an increase in corruption. An enlarged private sector and improved market function strengthens competitive forces in the economy, reducing rents and taking away the bribes public officials may be offered

to secure them. However, India is one of those cases in which the growth of the private sector has actually increased corruption. The increase in competition for government contracts meant that public officials can use their rent-seeking ability as a profit enterprise when allocating licenses and contracts to private players. The firms with the financial means to pay the bribe will be successful in getting the sought after license or contract.

With the economic reforms initiated by the government having had a strong industry focus and the manufacturing sector being viewed as a vehicle of growth, an important role was given to the private sector in the economy. While growth for Indian companies was severely hampered by the lack of economic freedom during the License Raj era, the reforms gave a renewed sense of life to the Indian private sector. The growth of the private corporate sector doubled between 1993-94 and 2005-06 to 20% of GDP, spurred by the increase in private investment that can be evidenced by Figure 5. Moreover, the increased participation of private firms can be further evidenced by the increase in share of capital formation within the private sector from 47% in 1980-82 to 69% in 1993-2005 (Business Standard, 2010).

Figure 4 – Average Annual Share of Investment

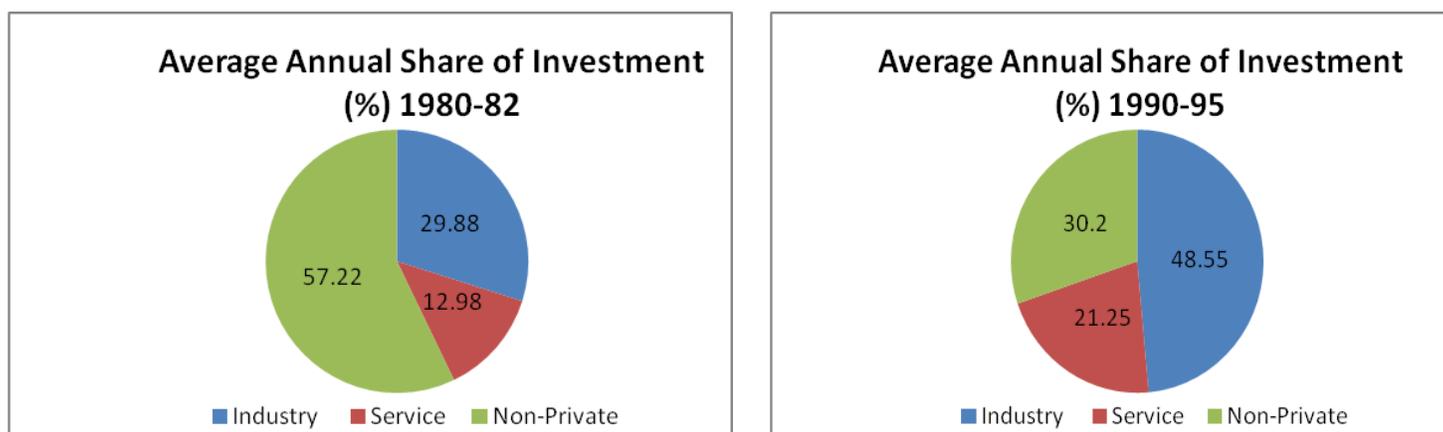


Figure 5 - Capital Formation Per Sector

	Share of Capital Formation (in %)		Rate of Capital Formation (in %)	
	Public	Private	Public	Private
Average of 1980-82	53.07	46.93	49.73	13.55
Average of 1993-2005	31.08	68.92	33.43	23.2

In the decade from 2000 to 2010, the private corporate sector overtook the public sector both in terms of net sales and net profits. The private sector's share in the net sales of manufacturing and services sector output increased from 48.83 per cent in 2000-01 to 68.55 per cent in 2009-10, with the public sector's share consequently falling from 51.17 per cent to 31.45 per cent (Business Standard, 2010). What once was an inefficient public sector spurred by License Raj policies that held total control of the economy has now allocated a lot of influence to powerful corporations that make up the private sector.

This change in private sector growth led to increased rent-seeking opportunity because as the number of private firms and their control over the economy increased, so did the competition among them. Public officials tend to allocate licenses to the firms that have the financial means to pay bribes, almost making their discretion a profit seeking enterprise. Private players are willing to resort to corrupt activities such as large scale bribery along with public officials to

secure the benefits of the licenses and contracts. Competition has made the value of the bribes skyrocket in value. This leads us to second primary factor that has led to the increase in the magnitude of corruption, collusive corruption between the public and private sectors.

4.4.2 Collusive Corruption

Moreover, the effect of private sector growth upon rent-seeking and thereby corruption is further accentuated through the collusion between public officials and private players in order to seek more benefits for themselves. According to Transparency International India, the corporate sector has been found to be actively collaborating with politicians and bureaucrats to perpetrate large scale corruption since liberalization. In a report featured by the Central Vigilance Commission, the following was stated,

‘The private sector is no more a victim of corruption in India. Instead, it is instrumental (in effecting it) and hand-in-glove with public officers. Collusive corruption, where officials from public sector undertakings join hands with the private sector, is greatly present in the Indian business environment, particularly in the power, mining and oil sectors’ (Sharma, 2013).

This relationship between business people and public officials in order to garner success for a business is also known as crony capitalism. In the License Raj era, rent seeking through collusive corruption was not as prominent due to the minimal influence of the private sector. Now, the nexus between self-serving politicians/bureaucrats and businessmen is regarded as a massive threat to India (Badarinath, 2011).

An example of a recent scandal which really exposed the crony capitalism existing in India is the Coalgate scandal. The scandal revolved around a government allotment process that enabled well-connected businessmen and politicians to obtain rights to undeveloped coal fields, costing the exchequer \$31 billion. Furthermore, the nexus can be also seen by observing election funding trends in India and how it has changed so that wealth can be used to influence public policy. Corporate donations to political parties were legalized in 1985 and businesses were also allowed tax incentives for their donations, allowing for more relationships to form between members of the government (Vohra, 2014). The following analysis of two sectors that studies have shown to be the most corrupt will help show how the rent-seeking activity has increased due to private sector growth and crony capitalism.

4.4.3 Analysis of Rent-Thick Sectors

Corruption in the Real Estate Sector

Forensic accountants at KPMG released a survey on bribery and corruption in which 32% of those surveyed said that real estate is the most corrupt sector in India, followed by telecommunications. The entry of international real estate players, foreign investors, and Indian corporate houses has caused this sector to boom within the past 15 years. Indian real estate has taken such an upward turn that and it is expected to grow from the current \$14 billion to \$102 billion in the next 10 years (Ditcham, 2007). Currently, it accounts for almost 8.5% of the India's GDP and the 5th largest destination for foreign investment in the world (Ernst & Young, 2010). The massive growth can be accredited to increasing purchasing power, existence of customer friendly bank and housing finance companies, and favorable reforms initiated by the government

to attract global investors just to name a few. Shopping malls, infrastructure developments, buildings, townships have defined the changing face of India, helping it emerge as of the most highly profitable investment alternatives for both domestic and foreign investors.

However, huge capital investments, multi-level approvals, complex processes, and massive projects create the incentive for corruption in the real estate sector (KPMG, 2010). One of the primary reasons for corruption within the sector deals with property space in India in which there is a huge mismatch between demand and supply. Due to the large population base, rising income level and rapid urbanization of India, the demand for space, especially in cities, has grown tremendously. A government report indicated that the shortage of residential houses in urban India grew from about 24.71 million in 2007 to 26.53 million in 2012 (Srinivas, 2012). Moreover, there is large demand for commercial spaces and land for building factories and huge infrastructure projects as roads, ports, and power plants as a result of the high economic growth post-reforms (Srinivas, 2012). The demand for land, existing bureaucratic restrictions within real estate, and number of private firms vying for lucrative licenses and contracts has created a valuable rent-seeking opportunity.

While reforms loosened the grip of government on several vital sectors, there is still plenty of red tape and bureaucratic rules that present the opportunity for corruption in real estate. To complete a sizable property project in India, a builder will have to get almost 60 approvals (50 of which are from the municipal corporation), produce about 175 documents, and work with 40 central, state and local government departments (Srinivas, 2012). It may take a builder up to 3-4 years to complete all the paperwork and clear all the bureaucratic hurdles, creating the motivation to bribe public officials to speed up the process. An example would be the case of Rajesh Sharma, a loan broker who charged with bribing officials of public sector banks and

financial companies \$40,000 to sanction loans for his clients who were builders. This is a prime example of how Rajesh Sharma colluded with public officials through bribery in order to secure something he needed. When compared to the License Raj era, the sizes of these bribes have increased tremendously because there is much more at stake for the potential owners of this valuable real estate across the country.

That value can be accessed through a wealth report released by the real estate advisory firm Knight Frank that shows that India is the costliest in terms of prime real estate in residential space. The report claims that property is increasingly seen as a popular investment choice among Indian ultra high-net worth individuals, a prime reason why nearly half their investment portfolios are allocated to property, the highest across the globe, followed by the Australians at 42%. These results indicate the amount of wealth available within the real estate sector in India. According to data from Venture Intelligence, private-equity funds and other investors pumped more than \$15 billion into Indian property from just 2006 to 2008 (Anand, 2015). As reforms are still occurring and further reducing restrictions within real estate, the possible returns of investment have become so high that corruption has become a very small cost to pay in order to secure huge benefits, especially for private players that have to money and influence to do it.

Corruption in the Telecommunication Sector

According to a report released by KPMG regarding corruption and bribery in India, 17% of responders in a survey stated that telecommunications was the most corrupt sector in the Indian economy. This was the second highest behind real estate, one of the primary reasons this sector is also a consummate example to depict the changes in corruption during the post-reform period. As of 2015, the Indian telecommunication network is the third largest in the world with

933.02 million connections. Within the past decade, the gross total of telephones has increased from 76.53 million telephones in 2004 to 933.02 million (Baruah, 2014).

The telecom industry in India grew 20% each year in the 1990's, a value so high that it attracted a large number of private investors (Jaffrelot, 2009). FDI investment grew from \$.5 million to \$444 million in telecommunications from just 1993 to 1998 as evidenced by Table (Will Post). The rapid growth evidenced in this sector is a result of the liberalization policies which began to be enacted from 1991 onwards, creating easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumer at affordable prices. Telecommunications in India were formerly provided by state-owned enterprises, giving the government complete monopoly until the 1990's. The government companies provided all local and long-distance communications within India. In 1994, the Indian government released the National Telecom Policy and established the Telecom Regulatory Authority of India (TRAI) but it was in 1992 in which the government began allowing licensing for the telecom sector. Moreover, all the telecom services within the country were opened up for private participation in 1994 but it was not until new policies in 1999 and 2002 reduced restrictions on the number of providers that the sector began to grow tremendously.

While the clear intent of the government to liberalize the telecommunications sector was certainly a major breakthrough for development, the sector has also become a prime example how the policies of the reform period had created a totally different dynamic of corruption and increased the opportunity for rent-seeking. To operate wireless service within India, firms needed to acquire a license from the government which enabled them the right to a spectrum (Sukhtankar, 2012). With the distribution of spectrum licenses limited, a rationing mechanism was created by the Department of Telecom in which the allocation of these valuable licenses to

private firms increased the returns to corruption significantly. The DOT also put restrictions upon who can enter the market, resulting in high prices, leading to high profits and an increased the opportunity for rent seeking. Not obtaining the licenses meant losses for the firms in competition because subscribers would simply move to those who did, something depicted later in-depth through the 2G telecommunications scam.

The private sectors participation in the telecom industry has grown incredibly since the 90's. In 1999, the private sector share in telephone was just 5%. As of 2014, that number is now 82.14%. As the number of private players increased significantly, so did the competition for lucrative licenses and contracts that were very valuable. The opportunity of rent-seeking increased because the Department of Telecom held all the power to allocate the licenses and contracts to private players, giving public officials added incentive for underhand dealings to favor certain private firms. Millions of dollars are exchanged within the private and public sector when valuable licenses for scarce resources are allocated. This opportunity for partaking in corrupt activities by public officials while awarding contracts and licenses to private firms can be further evidenced through two of the most well-known telecommunication scandals that occurred post-reforms.

Sukh Ram Case -1996

Sukh Ram, during his tenure as the telecom minister, used his position and influence to award a 30 crore contract to a private firm after taking a \$ 5,000 bribe. The private firm, Haryana Telecom Limited, was given the contract to supply 3.5 lakh Conductor Kilometers (LCKM) of Polythene Insulated Jelly Filled (PIJF) cables to the telecom department.

2G Scam - 2008

The 2G spectrum scam involved government officials and bureaucrats in India that illegally undercharged mobile telephony companies for frequency allocation licenses that would be used to create 2G subscriptions (India Today, 2008). According to the Central Bureau of Investigation, several laws were violated and bribes paid in order to favor certain firms in granting 2G spectrum licenses. These licenses were given to firms with no experience in the telecom sector, making them ineligible corporations. While many individuals took bribes and helped drive the scam, A Raja, the telecom minister in 2008, was accused of receiving a \$470 million dollar bribe for under valuing the spectrum and selling it to companies he favored. The overall cost of the scam was estimated to be about \$40 billion.

These are just two scandals that highlight the disease of corruption that has characterized the telecommunications sector since liberalization. Spectrum licenses are scarce commodities that have led to intense bidding wars between private players. The growth of the telecommunications sector, increase in private players, and collusive corruption led to more rent-seeking opportunities for public officials. Unlike the License Raj era, higher bribes could be demanded for favors and that is exactly what occurred within this sector.

Through the analysis of these two sectors, it is evident that as the reforms helped raise the values of government licenses, the increasing private participation as well as collusion between public officials and private players helped push the scope of rent seeking and thereby the magnitude of corruption upwards. An important conclusion that can be reached through the observation of corruption in both sectors is that private players show a desire to amass wealth illegally.

Chapter 5 - Growth of IFF's and Tax Revenue Losses after Reforms

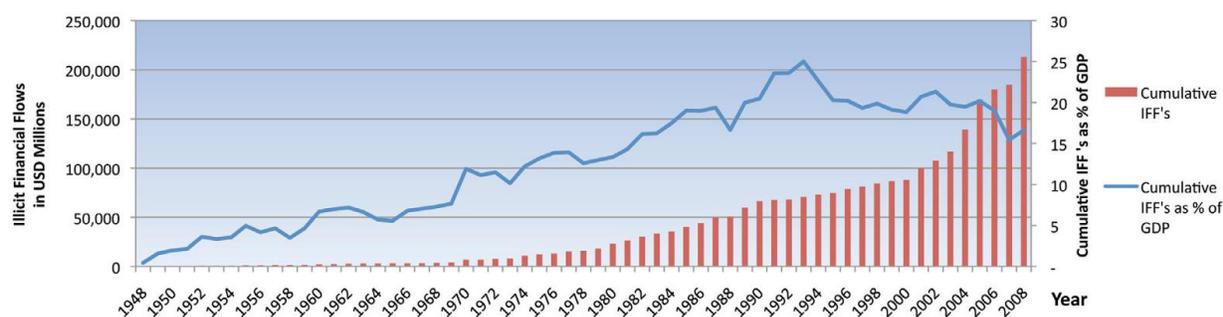
5.1 Desire to Amass Wealth Illegally

From our analysis of the private sector growth and its effects upon the rise in the magnitude of corruption, an insight that could be made is that private companies are more willing to amass wealth illegally following reforms. The growth of the economy and the value of government contracts has increased potential returns of corrupt activities to such an extent that the potential costs of corruption are not high enough to deter corrupt activities. A method by which to gauge this desire to create wealth illegally is by observing India's underground economy and more specifically, the illicit financial outflows that leave the country. Global Financial Integrity claims that the size of India's underground economy is about \$640 billion (GFI, 2010). Within this amount, only 27.8% is actually held domestically, offering support to the argument that the desire to amass wealth illegally without attracting government attention is one of the primary motivations behind the transfer of illicit capital (Kar, 2010). Moreover, private companies were found to be one of the primary drivers for the rise in illicit flows out of the country following liberalization, another indicator of how the magnitude of corruption has increased (Kar, 2010). The following chapter will show how illicit capital outflows and their resulting costs to the economy have increased since reforms, displaying the desire of private firms to amass wealth through corrupt means.

5.2 India's Illicit Capital Outflows and Measurement Methodology

According to Global Financial Integrity, it is believed that corruption is one of the main causes of illicit capital outflows (Kar, 2010). According to its latest report 'Illicit Financial Flows from Developing countries', India is among the top 10 developing countries in the world with a black money outflow of \$1.6 billion in 2010 (Kar, 2010). Total outflow of black money from the point of independence in 1948 was estimated to be \$232 billion while the cumulative value of illicit assets held by Indians during the period is said to be \$487 billion (Kar, 2010). Figure 6 below shows how illicit financial flows have grown from the License Raj Era to the post-reforms period.

Figure 6 – Illicit Financial Outflows



Between 1948 and 2008, the Indian private sector shifted its increasing deposits into offshore financial centers (OFCs) of safe tax havens in which detection of the illegally earned

money is not discoverable by the Indian government. The share of OFC deposits increased from 36.4 percent in 1995 to 54.2 percent in 2009 (Kar, 2010). This offers further support that the amount of illegally earned money was increasing, especially following reforms, showing a positive relationship with the magnitude of corruption that was addressed in Chapter 4.

In order to estimate the IFF's that were reported in the 2010 GFI study, the World Bank Residual Model (CED) and a Trade Mispricing Model based on IMF Direction of Trade statistics were used. The World Bank Residual Model tracks illicit outflows by measuring differences in a country's recorded source of funds relative to its use of funds. Meanwhile, the Trade Mispricing Model compares a country's recorded imports to what the world says it exported to that country; similarly, the country's recorded exports are compared against world imports from that country (Kar, 2010). The formulas for both models are shown below.

World Bank Residual Model (CED)

(Change in External Debt + FDI (Net)) – (Current Account Deficit + Change in Reserves)

Trade Mispricing Model (GER)

$$K = [X_i - M_j / \beta] + [M_i / \beta - X_j]$$

The exports of goods f.o.b. from country i (X_i) is compared to the imports recorded by country j (M_j) after adjusting for the cost of insurance and freight; the factor β is take to be 10% and adjusts the c.i.f. value to an f.o.b. value.

Estimates have shown that in the post-reform period, deregulation and trade liberalization accelerated the outflow of illicit money. This is a result of more trade mispricing opportunities and growth of the global shadow financial system (Kar, 2010). With these advantages, the costs of corruption are decreased as illegally wealth seeking private firms have the ability to hide their money in safe havens outside the country, raising the magnitude of corruption. Moreover, the

costs of illicit capital outflows can be roughly measured by calculating the tax revenues losses to the government as private firms avoid paying taxes on money that earned through corrupt activities.

5.3 Measuring Losses in Tax Revenues due to IFF's

Tax revenues lost can be calculated with knowledge of the amount of illicit outflows and the corporate income tax rate. Since illicit capital outflows function primarily through trade mispricing, we can roughly estimate the losses from illicit capital outflows. This model has been used by Global Financial Integrity to measure the measure losses in tax revenues across different countries. This paper uses the same formula to understand how the losses in tax revenues of India changed.

$$\mathbf{trl = \gamma (kftm) + \beta ,\delta(kfced)}$$

For a given year, it is possible to calculate the tax revenues lost from IFF's by multiplying the γ (corporate tax rate) to the kftm or illicit financial outflow measured through the GER model. The tax revenue loss from the CED model represented by kfced is omitted because kfced includes some portion of illicit financial flows that are illegal and that portion is not quantifiable (GFI, 2008). The results presented in Figure 7 depict the increase in tax revenue losses as privatization began kicking in during the late 90's following liberalization.

Figure 7 - Tax Revenue Losses



While looking at the results of the Tax Revenues lost, it is evident that tax revenues began to increase in the early 2000's, about the same time that numerous corruption scandals began to surface and the effect of reforms began to reach farther across the country. Moreover, Figure 1 from Chapter 1 depicting the rise in FDI's inflows show a sharp increase from the start of new millennium, indicating an increase in the wealth within India. The general positive relationship between the magnitude of corruption, illicit capital outflows, and tax revenues losses are further indicators that wealth was increasingly being amassed illegally.

Chapter 6– Conclusion

Corruption has become so frequent and commonplace in India that it has almost become ingrained in the culture and accepted as a naturally occurring mechanism within the economy. However, beginning in 2011, massive protests calling for stricter corruption laws and punishments for those who partake in corrupt activities headlined the nation. The process of change has begun but it won't be complete till politicians seeking benefits for themselves at the cost of others are no longer in power. Moreover, evidence also shows that while the spotlight frequently rests upon public officials as the perpetrator of most corrupt activities, the private sector is also responsible for the increase in the magnitude of corruption since economic reforms.

While many studies have found that competition within the economy should decrease corruption, this is not the case in India. The government realized that private sector participation, globalization, and liberalization were necessary for India to maintain a high growth rate and income per capita and subsequently enacted market reforms. The overall effects to the economic growth have been extremely positive but one merely needs to look at the amount of losses the myriad of corruption scandals within the last decade have caused to understand that corruption is still hurting at the wealth of the country. One can only imagine the added gains to the economy if it were not for the existence of corruption. From the petty bribery that outlines corruption during the License Raj to the grand corruption primarily evident post reforms, it was an increase in rent-seeking activity through private sector growth and collusive corruption that drove the change. This was clearly evident in two of the most corrupt sectors within the country. In both real estate and telecommunications, grand corruption scandals were the results of their respective sector's massive growth, increased private firm participation, rent-seeking opportunity due to public

official discretion to allocate government contracts, and the burgeoning value of obtaining these contracts. Furthermore, the inclination of private firms to amass wealth through illegal means was evident by the increase in illicit capital outflows and losses to tax revenue.

While corruption always has a negative connotation when discussed relative to growth, the argument can be made in the case of India that India has experienced supreme growth even with corruption, why should anything be changed? However, the past 3-4 years, India has actually faced sluggish growth and a drop in foreign investment as the scandals have gotten increasingly larger. Reports have claimed that foreign investors are increasingly getting worried about the prospects of doing business in India. Within the first 10-15 years of reforms, some of the main factors that affected rent-seeking activity and subsequently the magnitude of corruption had not fully developed. For instance, we talked about collusive corruption as being a factor but it was not only early 2000's that the private sector began to grow rapidly due to reforms in 1991.

If this rent-seeking mechanism is to be curbed, stringent laws have to be created that control the collusion between the public and private sectors and monitor allocation processes more closely. Most of the scandals that have occurred have dealt with a misuse of the discretionary power given to the public sector and that is the root of the problem. Increased regulation would raise the costs of corruption and deter more corrupt activities. Moreover, India also has to strengthen its judicial system to punish those who partake in corrupt activities in a swift and efficient manner. It will be quite interesting to see how the new government of Narendra Modi will tackle the issue of corruption within India.

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Academic Vitae

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Education

The Pennsylvania State University – Schreyer Honors College

University Park, PA

Smeal College of Business Bachelor of Science in Finance

Graduation May 2015

College of Liberal Arts Bachelor of Science in Economics

Paterno Fellow – Paterno Liberal Arts Undergraduate Fellows Program Inductee

Presidents Award of Academic Excellence, Presidential Leadership Academy

Relevant Experience

Unilever USA (Englewood Cliffs, NJ)

June 2014 – August 2014

Consumer Market Insights/Brand Development Intern Marketing

- Worked on 2.7 billion dollar Axe Personal Care business on competitor analysis and proposition projects
- Employed various data analysis tools (Ex.Nielsen Nitro, Shoppervue, Answers) to leverage key insights
- Worked with various digital media, advertising, and research agencies in NYC to develop marketing plans
- Developed comprehensive financial & communication analyses of competitor brands and new proposition for Axe Deodorant Sticks for 2016

Unilever USA (Pleasanton, CA)

June 2013 – August 2013

Customer Development Intern Sales

- Worked on project analyzing performance of Unilever Top Dish & Meal Solution Marketing Programs
- Trained and employed various data analysis tools to measure key performance indicators
- Worked closely with Safeway sales & analytics team to develop new performance measurement methodology for Top Dish programs and presented finding to top executives of company

The Daily Collegian (University Park, PA)

Business Operations Senior Representative

September 2011 – May 2014

- Market and sell advertisements to various clients (State College local businesses)
- Develop and execute promotional activities to increase readership which is about 18,000 daily
- Worked with various departments (sales, creative) to help raise revenues of over \$1 million per year

Penn State Housing (University Park, PA)

August 2013 – May 2014

Resident Assistant

- Organized community events and acted as source of assistance while overseeing over 150 residents
- Helped uphold Penn State Residence Life policies and regulations

College Works (Pittsburgh, PA)**February 2012-August 2012** *Branch Manager*

- Managed my own branch of exterior painting business as Branch Manager of Southern Pittsburgh
- Ran \$46,000 in sales with profit margins of up to 22%
- Hired, trained, and supervised 5 member marketing team, and 4 member painting team

ITC Ltd. (Hyderabad, India)**June 2009 to August 2009***Account Executive Intern*

- Worked as volunteer in sales department as Account Executive for Sabzi Mandi Supermarket Stores
- Shadowed various professionals while they negotiated deals with clientele ▪ Clerical work (Appointment Scheduling, helping file documents)

Activities & Leadership**Presidential Leadership Academy****May 2012 - Present**

- 3 Year Critical Thinking and Leadership Certification Program
- Only 30 Freshmen selected each year for the Academy following rigorous three part interview process

Penn State Lion Ambassadors – Tour Guide & Events Coordinator**January 2012 – Present****Penn State Fanaa South Asain Acapella Group – President & Founder*****January 2014 - Present****Penn State Jadhoom Fusion Dance Team – Captain****January 2014 - Present****Nanubhai Education Foundation – Head Liaison****September 2013 - Present****Skills**

- Fluent in speaking and writing English, Hindi, Telugu and intermediate ability in speaking Spanish
- Proficient in Nielsen Systems, Microsoft Excel, Access , Visual Basic, Photoshop, and Power Director

