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PRINCIPAL
Prof. Simrit Kaur

EDITOR
Dr. Santosh Kumari
Ph.D., M.Phil., M.Com., M.A. Educational Leadership and Management
(University of Nottingham, England, United Kingdom)

Assistant Professor
Department of Commerce
Shri Ram College of Commerce
University of Delhi
Delhi-110007
India

E-mail: strides@srrc.du.ac.in

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All correspondence relating to publication of the Journal should be addressed to:

The Principal
Shri Ram College of Commerce
University of Delhi, Maurice Nagar
Delhi - 110 007 (India)
e-mail: principaloffice@srrc.du.ac.in
Principal's Message

The mission statement of the College, signifying the existence and its roadmap to the achievement of its vision, reads as:

"To achieve and sustain excellence in teaching and research, enrich local, national and international communities through our research, improve skills of alumni, and to publish academic and educational resources"

To achieve and promote excellence in publications and applied research, the College has taken the initiative to launch a new journal exclusively to publish students' research papers and articles. It will be an add-on to the enriched catalogue of College publications and academic literature.

The journal has provided an opportunity to the students of our college to focus on research. Since the students were not opened to the research methodologies at the undergraduate level, they were mentored by experienced senior faculties of our College. Simultaneously, their articles were also reviewed by the referees and tested for plagiarism before publication. After reporting all the suggestions recommended by the referees, the articles were revised and then finally published. The College had successfully released the foundation issue of the journal “Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17" on the occasion of 91st Annual Day of College held on 13th April 2017. The Journal was released by Shri Prakash Javadekar, Hon'ble Minister of Human Resource Development, Government of India.

The college has already applied for seeking International Standard Serial Number (ISSN) for the Journal. The application for ISSN is still under process.

I would like to congratulate the students whose papers are published in this issue of the journal and simultaneously encourage all the students to contribute their research papers and articles for the successive issues of the Journal.

Best wishes for their future endeavors.

Prof. Simrit Kaur
Principal

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Editor's Message

Shri Ram College of Commerce is well known for its academic excellence and dedicated approach towards dissemination of knowledge in the academic world. The College appreciates the role of research in education and is committed to developing an inclination towards research in both faculty and students. In this pursuit, the College has taken the initiative to launch a new Journal named 'Strides – A Students' Journal of Shri Ram College of Commerce' to encourage students to pursue research under the guidance of the faculty of Shri Ram College of Commerce.

It is a bi-annual journal launched exclusively to publish academic research papers and articles by the students on contemporary topics and issues in the area of commerce, economics, management, governance, policies etc.

In order to maintain high standards of publication, the Committee on Publication Ethics (COPE) has been constituted. The COPE shall be the apex authority to take all decisions related to publication of research papers and articles in Strides. The decision of the COPE shall be final and binding.

To maintain high academic standards, academic ethics and academic integrity, a rigorous process of double blind review of research papers is followed along with screening for plagiarism of each manuscript received by the college for publication. The research work published in Strides is original and not published or presented at any other public forum.

The foundation issue of the Journal i.e. “Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17” was successfully released on 91st Annual Day of the College held on 13th April 2017 by Shri Prakash Javadekar, Hon'ble Minister of Human Resource Development, Government of India.

The successive Issues of 'Strides – A Students' Journal of Shri Ram College of Commerce' shall be bi-annually released.

Dr. Santosh Kumari
Editor

Visit: http://www.srcc.edu/publications/students-publications
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Startups Restoring The Indian Economy? - A Study on Impact of Startups on The Indian Economy

“The sun moves in its own orbit but holding earth and other heavenly bodies in a manner that they do not collide with each other through force of attraction.” (Rig Veda 1.35.9)

This proves that Indians started working towards innovation and development long before the world even started to think about it. Also, India possesses a big class of mercantile community known as Bania (Vanik) or Vaishya, who has been doing business for countless generations. Hence, a combination of innovation and business i.e. an entrepreneur is present in the blood of Indians from time immemorial. After independence when the Indian economy was completely ruined and heavily indebted up to the neck (if not up to the nose) by many countries & international banks. At that time, most of the industries & enterprises in India were dominated by the government sector. During that crucial moment, globalization happened and the giant multinational companies entered into Indian economy and transformed the economy completely. History is now repeating itself but, this time, startups might come to rescue the Indian economy.
With favourable demography, the culture of entrepreneurialism and open economic environment, India is highly conducive to entrepreneurial activity. However, India's startup economy has not been able to reach full maturity and most startups die in their infancy.

This paper gives the fundamental points of interest to put the present startup environment which is innovative inside the Indian setting and feature a portion of the related difficulties confronting India today by contrasting policies of various nations and states to discover which of it is most positive and depicts endeavours that is made by the legislature of India towards the upgradation of innovation for developing startup ecosystem.

INTRODUCTION

According to the government notification, an entity will be identified as a startup if it is working towards development, commercialization and innovation of new products, services or processes driven by intellectual property or technology.

A flood of business enterprise has been clearing crosswise over India. The accomplishment of new companies like Flipkart, Snapdeal, Paytm, Ola and others has veered the talk towards high valuations. Be that as it may, what we generally observe is particularly a hint of a greater challenge. Behind each high valuation of today is an account of blood, sweat, drudge and tears. For each business visionary who has a stunning example of overcoming adversity to tell, there are endless other people who have fallen by the wayside. The going has regularly been a long way from the assumed sentiment of thinking outside the box, upsetting the request and changing the world. It is a want to change the world that drives effective business visionaries, for only they have the visually impaired energy that is regularly the distinction amongst progress and disappointment, and they are the ones who cherish the trip more than the goal. The advanced new businesses, the unmistakable ones at any rate, are a result of a reasonable need. They take care of genuine issues.

India is a nation with more than 1.2 billion individuals, 31% of which i.e. 379 million are between the ages of 18 and 35 (According to Census Report, 2011). What's more
exciting is that a large number of these youngsters are looking for jobs, in spite of being educated. For instance, only one in four urban people under 29 years is utilized despite the fact that they hold no less than a diploma or certificate (National Sample Survey Office Report, 2013). The point of the government has been to make business doors open for youth while concentrating on fast economic growth. Building startup favourable environment is one of the components taken up by the Government of India towards the making of openings for work. The government have expected that support for innovation and development will enhance entrepreneurship development and instil an entrepreneurial spirit in the minds of the youth, which will, in turn, accelerate economic growth and development.

#startupindia

In March 2010, Mrs. Pratibha Patil, twelfth President of India, reported the government's vision by proclaiming the present decade as the "Decade of Innovation" (Nation Innovation Council, 2010). There have been striking endeavors taken by the government by declaring favorable strategies and furthermore endeavors by different government divisions towards satisfying the above vision.

The Government has also started an initiative, “Startup India”, with the expectation to construct a strong eco-system for nurturing grass root level startups with innovation in the country that will generate large scale employment opportunities and drive sustainable economic growth. The Government through this initiative aims to empower Startups to grow through their design and innovation.

This paper gives the fundamental points of interest to put the present startup environment which is innovative inside the Indian setting and feature a portion of the related difficulties confronting India today by contrasting strategies of various nations and states to discover which of it is most positive and depicts endeavours that is made by the legislature of India towards the upgradation of innovation for developing startup ecosystem.

**Problem Statement**

With favourable demography, the culture of entrepreneurialism and open economic environment, India is highly conducive to entrepreneurial activity. However, India's startup economy has not been able to reach full maturity and most startups die in their infancy. More active engagement between established organizations & startups can help the later harden their business models, jump into the big leagues and accelerate growth while enabling established companies to bring in the entrepreneurial spirit of
innovation and swiftness. The mutual success of startups and companies will drive India towards a more dynamic future by creating more jobs and boosting the economy.

**Objectives**

1. To establish whether startups can revive the GDP growth rate back to 8-9%.
2. Motivate people to build a robust Startup eco-system in the country for nurturing innovation and providing opportunities to budding entrepreneurs.
3. To foster a sense of competitiveness & propel the state and union territories to work proactively and identify replicable best practices from different states and countries.

**Methodology**

1. Measurability: Measuring the impact of startups on the economy by measuring the contribution of startups to the entire economy on one hand and measuring the economy growth indicators like GDP, Per-capita income on the other and drawing a co-relation between both.
2. Comparing across states and countries: Comparing the policies of various states in the country and comparing the country as a whole with other economies of the world.
3. Measuring the effectiveness of various schemes launched by the government. RTI's have been filed to get the accurate information from the Ministry of Commerce and Industry.

**Growth and Entrepreneurship: Related or not?**

The year 2015 completed with the number of startups reaching 3,500 which had helped in creating 80,000 new employment opportunities and adding to the Indian economic growth story immensely.

However, this takes us to a major question- Is having startups a guaranteed sign of a having a better economy or is it a lopsided situation?

An outsider's view of entrepreneurship would obviously be biased towards its potential and usefulness in increasing the state's economic growth. After all, more entrepreneurs mean more businesses, more businesses mean more competition, more jobs and of course more innovation. However, the reality is much more complicated than it actually seems to be.

Let us now analyse whether growth and entrepreneurship are related or not. To measure growth we consider GDP of the country in various years and to consider the entrepreneurial activity we consider new businesses registered.
<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>New Business Registered[^1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>920316529729.747</td>
<td>20000</td>
</tr>
<tr>
<td>2007</td>
<td>1201111768410.27</td>
<td>51700</td>
</tr>
<tr>
<td>2008</td>
<td>1186952757636.11</td>
<td>84800</td>
</tr>
<tr>
<td>2009</td>
<td>1323940295874.06</td>
<td>46000</td>
</tr>
<tr>
<td>2010</td>
<td>1656617073124.71</td>
<td>64900</td>
</tr>
<tr>
<td>2011</td>
<td>1823049927772.05</td>
<td>70450</td>
</tr>
<tr>
<td>2012</td>
<td>1827637859136.23</td>
<td>99587</td>
</tr>
<tr>
<td>2013</td>
<td>1856722121394.42</td>
<td>NA[2]</td>
</tr>
<tr>
<td>2014</td>
<td>2035393459980.06</td>
<td>98029</td>
</tr>
</tbody>
</table>

**Co-Relation[^3] analysis of GDP and number of new business registered**

Co-Relation test proves that there is a positive relation between number GDP and the number of new business registered. This is the traditional result of how the growth in GDP is closely related to the growth in the number of new businesses registered. However, in recent times some studies which have been explained below have revealed that the relationship between per capita income (a major indicator of economy) and entrepreneurship is mostly negative. Research done by The Gallup Organization, the US Census Bureau and Bureau of Economic Analysis show a negative correlation between entrepreneurship and the growth-inflated GNP.

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Pearson</td>
<td>1</td>
<td>.772*</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Y Pearson</td>
<td>.772</td>
<td>1</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**A Contrast**

Policymakers, while framing policies frequently look entrepreneurship as an way to increase the income of the inhabitants of their nation by proposing policies intended to empower entrepreneurial activity in the nation. While distinctive authorities have made diverse arguments, at the most basic level the common thought is boosting the rate of business development will make the economy more developed and will boost per capita income.

Unfortunately, those in the matter of forming policies for economic development have misunderstood the connection between societal wealth and entrepreneurship. Rates of
entrepreneurship will probably be the impact of wealth on the general public than the cause. Likewise, the connection between entrepreneurial activity and per capita income is for the most part negative, instead of positive which is regularly accepted to be simply the connection amongst self-employment and GDP.

The Gallup Organization demonstrates the pattern in the figure on the top. Examiners at the research association looked at per capita GDP with the division of the populace that reported self-employed in each of 135 nations. As Gallup's graph appears, the GDP per capita has a negative straight association with the populace that is independently employed. That is, independent work rates are higher in poor nations than in rich ones. Gallup's examination isn't the just a single report that demonstrates a negative connection between levels of per capita income and rates of entrepreneurship. Information from the U.S. Census Bureau and Bureau of Economic Analysis demonstrate a comparable sort of pattern. Between 1977 and 2011, the quantity of new employer business founded every year declined by 49 percent while in the meantime real per capita income rose by 79 percent in the United States. This demonstrates that as the United States has turned out to be wealthier, the rate at which individuals have begun their own company in this nation has declined.

Over time, a few investigators have discovered that there is a negative connection between the growth of inflation-adjusted gross national product in the Organization for Economic Cooperation and Development (OECD) nations. Other investigations demonstrate a negative relationship between rates of business formation across metropolitan statistical areas (MSA) in the United States and economic development. Those MSAs that have encountered more economic growth lately have likewise experienced lower rates of new business formation than those MSAs that have seen less growth in the economy.

Rates of entrepreneurship are adversely identified with development in wealth since rising wages make work openings more lucrative than maintaining one's own particular business. In poorer regions where there are only a couple of lucrative occupations, many individuals swing to business to procure a living. Rising income prompt to lucrative occupations in many regions. The improvement of more lucrative contrasting options to maintaining one's own particular business prompts many individuals changing from independent work to wage work in this manner, driving down the rate of entrepreneurship. Gallup's current investigation and the many examinations that have gone before it exhibit a wakeup call for policymakers who believe that entrepreneurship is a silver shot to raise wages and change economies. The information demonstrates that the rates of entrepreneurship or independent work are adversely connected with GDP or wealth of the occupants in light of the fact that wealthier spots offer individuals better work choices than maintaining their own organizations in which the risk is higher.
However, both the analysis point to the fact that state policies can be of help in one way or the other to increase the GDP of the county. So, now let us analyse the policies of different states to promote startups and the role that they play.

**States Startup Policies**

With India being a federally structured nation, the states have a vital role to play in promoting Startup ecosystems. The core functioning of enabling ecosystem in a State / Union territory is a function of the structures / framework put in place by the State/Union territory along with the implementation of the structures.

This section of the research paper is based on the analysis of various state policies collected at the 2nd Startup India States Conference organized by Ministry of Commerce and Industry. I have analysed the startup support offered by various states and tried to co-relate it with the number of startups present in the state.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Bihar</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Goa</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Gujarat</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Karnataka</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Kerala</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Odisha</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Telangana</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>West Bengal</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

*Table: Areas in which assistance in provided to startups indifferent states*
The tick mark represents that the state has provided some sort of support to the startups working in their state under the particulars stated above. The importance of this analysis is to foster a sense of competitiveness & propel the state / Union territory to work proactively and also to help the other states replicate best practices in their states.

<table>
<thead>
<tr>
<th>State</th>
<th>Number of startups recognized in state (X)</th>
<th>Number of fields in which assistance is provided (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>75 +</td>
<td>3</td>
</tr>
<tr>
<td>Bihar</td>
<td>70 +</td>
<td>2</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>60 +</td>
<td>Nil</td>
</tr>
<tr>
<td>Goa</td>
<td>N.A.</td>
<td>Nil</td>
</tr>
<tr>
<td>Gujarat</td>
<td>175 +</td>
<td>4</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>25 +</td>
<td>3</td>
</tr>
<tr>
<td>Karnataka</td>
<td>550 +</td>
<td>4</td>
</tr>
<tr>
<td>Kerala</td>
<td>125 +</td>
<td>4</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>100 +</td>
<td>3</td>
</tr>
<tr>
<td>Odisha</td>
<td>75 +</td>
<td>4</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>100 +</td>
<td>2</td>
</tr>
<tr>
<td>Telangana</td>
<td>200 +</td>
<td>4</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>240 +</td>
<td>3</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>N.A.</td>
<td>2</td>
</tr>
<tr>
<td>West Bengal</td>
<td>100 +</td>
<td>1</td>
</tr>
</tbody>
</table>

Co-Relation analysis of number of startups recognized in the state and number of fields in which assistance is provided

Co-Relation test proves that there is a positive relation between the number of startups recognised in the state and number of fields in which assistance is provided. It proves that if states focus more on the establishment of facilities and provide incentives, it will provide a fertile ground for budding startups to flourish. This has been made after considering only 7 parameters mentioned above but there are many other parameters like incubation support, rent and utility bills which can be considered for finding the relation between number startups recognized in the state and number of fields in which assistance is provided

<table>
<thead>
<tr>
<th>4</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>.203</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

In statistics, the Pearson correlation coefficient also referred to as the Pearson's r, Pearson product-moment correlation coefficient (PPMCC) or bivariate correlation, is a measure of the linear correlation between two variables X and Y.

While carrying out the analysis the number of startups have been taken as a whole number and + sign have been ignored. Also, the states for which the data is not available has not been considered. Only 7 above mentioned fields have been considered for this analysis but there are various other fields which can be considered.
International Comparison

The Indian startup ecosystem has come a long way in recent couple of years with the government doing its part through different initiatives, for example, Startup India, to advance new businesses however there is unmistakably far to go even at this point.

*Table: A comparison of startup ecosystem across different countries*

<table>
<thead>
<tr>
<th></th>
<th>Number of Startups</th>
<th>Tech Based</th>
<th>Non-tech Based</th>
<th>Corporate tax rate</th>
<th>No. of days to set up business</th>
<th>Bank lending rate</th>
<th>No. of tax payment by businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>10,000</td>
<td>4,300</td>
<td>5,700</td>
<td>34%</td>
<td>33</td>
<td>10.3%</td>
<td>33</td>
</tr>
<tr>
<td>Israel</td>
<td>4,750</td>
<td>4,000</td>
<td>750</td>
<td>26%</td>
<td>13</td>
<td>3.9%</td>
<td>TBD</td>
</tr>
<tr>
<td>China</td>
<td>10,000</td>
<td>3,400</td>
<td>6,600</td>
<td>25%</td>
<td>30</td>
<td>5.6%</td>
<td>TBD</td>
</tr>
<tr>
<td>US</td>
<td>83,000</td>
<td>48,500</td>
<td>34,500</td>
<td>39%</td>
<td>4</td>
<td>3.3%</td>
<td>11</td>
</tr>
<tr>
<td>Japan</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>34%</td>
<td>10</td>
<td>1.2%</td>
<td>TBD</td>
</tr>
<tr>
<td>Singapore</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>17%*</td>
<td>2</td>
<td>5.4%</td>
<td>TBD</td>
</tr>
</tbody>
</table>

*100% exemption for startups*

India is among the five best nations in terms of startups. The US ranks first on the list with 83,000+ startups. There are around 10000 startups in India as per NASSCOM.

In the Technology-based startups, maximum concentration is in E-Commerce sector where 33% of tech-based startups revolve, it is followed by B2B sector which has around 24% of startups, Consumer Internet 12% and other sectors comprise 13%. On the other hand, in the Non-Technology based startups, the maximum concentration is in the Engineering sector which has around 17% of startups, followed by Agri Products sector with 13% of startups and other sectors comprise 32%.

However, India is far away from many countries in providing facilities to startups in India. It requires 30-60 days to set up a business in India as compared to 2 days in Singapore. The corporate tax rate in 34% in India which is double of corporate tax rate in Singapore (it provides 100% exemption to startups). India has a bank lending rate of 10.3% as compared to 1.2% in Japan.

As per World Bank report, India ranks 130 out of 189 nations in "ease of doing business". Opening a business in India is considerably harder than other BRIC partners.

In this research paper, we will compare India with Israel as both the countries got independence 60 years back from now and started building themselves around the same time but, Israel has been far ahead of India in terms of startups in the country mainly due to the favourable policies in Israel.
In comparison to India, Israel is way ahead. Even the flagship programme of the Narendra Modi government to encourage innovation and entrepreneurship, StartUp India, has not brought much difference to the scene and has how collaborated with Israel and launched a new event “India – Israel Global Innovation Challenge” under which India and Israel are joining forces in order to address some of the world’s most pressing innovation challenges. Startup India and the Israel Innovation Authority has invited entrepreneurs, research teams, startups, etc., to submit their solutions to challenges in the areas of digital health, agriculture and water.

Israel has the world’s most astounding per capita accessibility of investment. In 2015, Israeli entrepreneurs raised over $5 billion and had raised over $3 billion before the finish of H1 2016. Israel has a flourishing environment of more than 4,000 new companies, starting at 2016. For a nation with a populace of scarcely eight million, this is splendid. Israeli startups are centered around digital security, advertisement tech, health tech, and a considerable measure of SaaS-based innovations. A large portion of the startups are centered around building answers for the European markets, since Israel itself doesn't have a sufficiently vast local market.

There are many factors to the success story of Israel as a startup hub — a mandatory military service, the necessity of self-reliance as there are no friendly neighbours, the lack of natural resources as which has led to innovation, its immigrant and the diaspora population which is among the richest in the world — among many others. The Israeli government in 1974 appointed the Office of the Chief Scientist (OCS) with a devoted R&D finance. Activities like this, determined from the best, have been instrumental in driving a culture of innovation in the nation. A year ago, the OCS allowed over $30 million to such new businesses.

Since it is now proved that the state which provides more incentives to startups attracts more startups and hence more development. So, now let us analyse the various incentives offered by different states in India.

**Different Startup Policies and incentives launched by the government**

Indian government plans to fabricate an ecosystem that advances entrepreneurship at the startup level and has taken various activities to guarantee that the entrepreneurs gets suitable help.

**Make in India**

In September 2014, Prime Minister Narendra Modi presented a major activity "Make in India" to advance the assembling division by elevating organizations to put resources into the segment. The expectation of the battle is to draw in remote speculations and
urge local organizations to take an interest in the manufacturing in this way adding to the development story. For instance, an online framework for condition clearances, filling income tax returns and extension of industrial licenses to 3 years have been set.

1. The government raised the limit of Foreign Direct Investment limits for the vast majority of the segments.

2. Protection of the licensed innovation privileges of pioneers and makers by redesigning foundation, and utilising state-of-the-art technology.

Standup India

The Prime Minister aims to assemble frameworks for empowering startups and desires to make the nation the best destination for new startups. In August 2015, he reported another initiative "Standup India" to help new businesses with bank subsidizing and energize enterprise among the youthful Indians. On sixth January 2016, the Union Cabinet had given approval to Standup India initiative which desires for advancing startup culture among women and scheduled tribe and castes. A portion of the notable highlights include:

• Loans under the plan would be given for greenfield projects in the non-farm segment
• Intention of the plan is to encourage no less than two such activities for every bank office
• The plan is relied upon to profit no less than 250,000 borrowers in three years from the launch of the Scheme. It likewise plans to back out the current administration for new startups and is thinking about extending tax incentive to the startups.

Digital India

This is an activity drove by the Indian government to guarantee that government services are made accessible to each resident through online platform. In July 2015, the PM declared the Digital India activity that plans to interface provincial territories by building up their advanced framework. This converts into a great business opportunity for startups. Online based companies in India have been wanting to go into India's rural region as part of the governments initiative.

As indicated by NASSCOM startup report 2015, consistently more than 800 tech startups are being set up in India. By 2020, an anticipated 11,500 tech-startups will emerge and these startups will have the capacity to utilize around 250,000 individuals in the nation.

Financial assistance

In this Union Budget for 2015-16, Finance Minister Arun Jaitley declared government's intend to set up Micro Units Development Refinance Agency (MUDRA) Bank and a Credit
Guarantee Fund with a refinance capital of INR 20,000 cr and INR 3,000 cr. In April 2015, the government announced Mudra Bank to support the development of private companies and assembling units. The recently set-up Bank would give a credit office of up to INR 50,000 to small startups, credit of up to INR 5 lakh to little bigger startups and advance of up to INR 10 lakh to the MSME sector.

The bureau has affirmed the formation of a Credit Guarantee Fund for MUDRA advances
• It is normal that the store will ensure advances of over INR 1,00,000 cr to micro sector
• MUNDRA scheme is expected to benefit 1.73 crore individuals according to the finance minister

Single online clearance system

PM Narendra Modi wants to bring an online approval window which will give more than 200 grants required by various enterprises from different government divisions

1. This new framework of approval for new entrepreneurs will enable them to apply for and track the status of their applications/permit grants on the web
2. Currently, 81 state-level clearances, including land procurement, setting up an industrial facility are being digitized
3. 133 clearances that are being allowed by other central government divisions, including the home, defence and railroad service will be announced on the web.

Real Impact of these policies on the economy

<table>
<thead>
<tr>
<th>Name of the Incentive</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make in India</td>
<td>+ Development of labour intensive manufacturing sector</td>
</tr>
<tr>
<td></td>
<td>- Violates the theory of competitive advantage</td>
</tr>
<tr>
<td>Standup India</td>
<td>+ Provides refinance window through SIDBI</td>
</tr>
<tr>
<td></td>
<td>- Loss for banks as it provides lower rate of interest than market rate</td>
</tr>
<tr>
<td>Digital India</td>
<td>+ Nation Optic Fiber Network</td>
</tr>
<tr>
<td></td>
<td>- Small retailers deal only in cash and cannot invest in digital infrastructure</td>
</tr>
<tr>
<td>Financial assistance</td>
<td>+ Empower and support the needy people and small businesses</td>
</tr>
<tr>
<td></td>
<td>- It met only 62% target in 2016-17</td>
</tr>
<tr>
<td>Single window online clearance system</td>
<td>+ Reduce time taken by reducing human interface and by increasing transparency</td>
</tr>
<tr>
<td></td>
<td>- Less reliable data</td>
</tr>
</tbody>
</table>

A Reality Check: RTI Filed

To find the reality of implementation of initiatives and policies framed by the government, an RTI was filed to confirm the basic information about the Startup India program and benefits available under it to the startups.
While, the basic information about the Startup India Program like when was it started and how many startups are under it had been given in the RTI there are lot of different answer found in the different government sites and hence this questions the credibility of both, the information in RTI and in the government websites. In the RTI, when a question was asked to confirm how many startups have actually benefited from the Startup India program, it failed to disclose any number and simply mentioned the various advantages available under the initiative.

It has been a year since the Rs 10,000 crore Start Up India fund was announced with a full-page advertisement in some newspapers with much fanfare to promote entrepreneurship. However, no names of the startups or any other beneficiaries is still known to the public. The announcement generated a lot of hype but the government did not give any guidelines on who or what kind of startups qualify to apply for these funds. A year has passed and still no one knows which agency/body is dispersing the funds so, one does not know how the programme can be termed a success.

**Recommendations**

1. Building state ecosystem by establishing a startup policy, startup portal and helpline for each state
2. Organising events to promote entrepreneurial activity and create a culture of innovation and inspiration for success of startup ecosystem
3. Developing incubation centres, co-working spaces, entrepreneurial cells and instilling an entrepreneurial spirit in every student.
4. Real-time implementation of policies or incentives announced by the states and connecting startups to various angel investors and venture capitalists.
5. Announcing ranking of states on the basis of startup ecosystem to foster a competitive spirit among the states.

**Conclusion**

India has a large, demographically diverse populace, with numerous youngsters looking for work. The nation is on a way to development however, the rate of development has been moderate. The government has understood the underlying foundations of the essential issues and made appropriate reforms, predominantly in the regions of economy, administration and labour as it tries to free itself from negative parts of its colonial legacy. Understanding that the innovation-led enterprise improvement holds guarantee for development, the government has taken significant approach activities with a strong development plan. There are difficulties in understanding the objective,
yet as this article has shown that the Startupindia program is a major step towards development since it tends to the majority of the key difficulties in building up a effective innovation ecosystem. The principle activities are the provision of funds and expelling of sluggishness in the ecosystem for innovation by improving linkages and making it vibrant in a comprehensive way. The policy is set up now but its prosperity relies upon its execution. Some time will be required before conclusions can be drawn about the policy's definitive consequences for the development way. However, the new policy reforms reflect strong development desires and resonates with the zeal and zest of the youth who wish to journey on the risky path of innovation-based entrepreneurship.

Endnotes

[1] New business registered is considered in place of new startups registered as accurate data on new startups registered in not available is not available and new business registered is directly proportional with new startups registered.

[2] While calculating co-relation between GDP and New Business Registered 2013 data has not been considered due to the lack of accurate data.

[3] In statistics, the Pearson correlation coefficient (PCC, pronounced /ˈpɜːrson/), also referred to as the Pearson's r, Pearson product-moment correlation coefficient (PPMCC) or bivariate correlation, is a measure of the linear correlation between two variables X and Y.

[4] Sustenance Allowance: Money given in advance to a new startup to fulfill the necessities while awaiting for first earnings.

[5] Statutory Licenses: A compulsory license provides that the owner of a patent or copyright licenses the use of their rights against payment either determined through some form of arbitration or set by law.

[6] Patent: A government licence conferring a right or title for a set period, especially the sole right to exclude others from using, selling or making an invention.

[7] Fund of fund: The Union Cabinet has approved setting up of Fund of Funds for Startups (FFS) under Small Industries Development Bank of India (SIDBI) for stretching out help to new companies.
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https://data.worldbank.org/country/india
https://data.worldbank.org/indicator/IC.BUS.NREG?view=chart
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https://www.yourstory.com
https://www.startupindiahub.org.in
Building the state startup ecosystem, Ministry of commerce and industry
State Startup Ranking Framework, 2017 - KPMG
State Startup Policies, Ministry of commerce and industry
Appendix

A RTI filed to get accurate information on startups and schemes launched by the government to promote innovation and entrepreneurship.

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**RTI Application/Time Bound**

No. 9/81/2017-81  
Government of India  
Ministry of Commerce & Industry  
Department of Industrial Policy & Promotion  
(Startup Ind) Section

Udyog Bhawan, New Delhi  
Dated: 10th October, 2017

To
Shri Anshul Jain,  
Email: anshul.jain12345@gmail.com

Subject: RTI Application of Shri Anshul Jain t/o Delhi regarding information on Startup India.

Sir,

This is with reference to your RTI application no. DCIPP/R/2017/80376 dated 18th September, 2017, received in this section on 29th September, 2017, regarding information on Startup India.

S.No. | Question | Reply
--- | --- | ---
1. | How many startups are there in India? | As on 25th October, 2017, 4169 startups are recognized by Startup India. This information may be found at the link [http://startupindia.gov.in/](http://startupindia.gov.in/)
2. | When was Startup India started? | The Startup India Program was launched on 16th January 2016.
3. | How many startups have been benefited through Startup India Scheme? | There are number of benefits available under Startup India initiative such as-
   - Provision for 'Tax Exemption on Capital Gains',
   - 'Income-Tax holiday for 5 years',
   - Self-Certification Compliance against 6 labour laws,
   - Rebate on IPR filing fee
   - Exemption from the criteria of prior experience/turnover
   - Relaxation from EALD.

No information is available in respect of number of startups who have benefited from the entire incentives available under Startup India scheme.

3. If you are not satisfied with the above response, the First Appellate Authority is: Shri Rajiv Aggarwal, Joint Secretary, DIPP, Udyog Bhawan, New Delhi (Phone No. 23063571).

(Rajeev Kandpal)  
Director & CPIO  
Tel: 2306 3212

Encl: Copy of RTI Application.

Copy for information to:- Section Officer (RTI Section), DIPP, Udyog Bhawan, New Delhi.
The Initiative to Boycott Chinese Goods

India and China have a long history of relations—bilateral, diplomatic and trade. The relations have witnessed conflicts but post-war, China hardly ever brought up boarder disputes with India and thus, relations at present seem peaceful. Government reports show that trade between India and China has been leading to a trade deficit for India (which has been on the decline since 2012-13). China is also a major investor in Pakistan and is trying to implement the One Belt One Road (OBOR) policy with the help of the ‘String of Pearls’, which is being blocked by India. All of this has potential negative impacts on both countries and thus, in an attempt to hamper Chinese growth, the Indian public has started a movement to boycott Chinese goods. Survey results show that 40.7% consumers bought Chinese goods due to their low price and about 31.4% people gained their knowledge about the boycott from social media. Most people also felt that the boycott will have a huge impact on the Chinese Economy. Sellers, on the other hand, favored Chinese goods due to higher profit margins (as high as 50% for some goods). If the demand for a particular good had reduced after the boycott, they had switched to Indian or Korean articles. This had lead to a fall in Indian imports from China. On the other hand, cases of dumping against China had increased. Keeping all this and the fact that exports to India make-up only about 3% of China's total exports, in mind, we can conclude that in the short run, the boycott will not have much of an impact on the Chinese Economy. However, in the long run, if India is able to domestically produce the goods that it
currently imports, the Indian industries could derive economies of scale, which would ultimately lead to development for India and yield long-term benefits.

INTRODUCTION

India and China have a long standing history of relations. The cultural and economic relations trace back to time of the silk route, when India and China used to trade goods like carpets, spices, silk etc. The 19th century witnessed the first and second opium wars, which were attributed to China's growing trade with the East India Company. The modern relations come after three major border disputes, namely the Sino-Indian war (1962), the Chola Incident (1967) and the Sino-Indian Skirmish (1987). The trade between these two countries, however, continues to flourish, with the balance of trade being unfavorable towards India. At present, the two countries are also facing issues regarding Kashmir and ceasefire violations, with the trade balance scenario not changing much. The citizens of India, however, have taken up an initiative to boycott the goods made in China as a small attempt to shake the Chinese economy.

At present, according to the reports of the Department of Commerce, Government of India, India exports a number of goods to China, including animals and animal products, agricultural goods, tobacco and manufactured tobacco substitutes, minerals, chemicals, compounds, fabrics etc. which have a net worth of $10,196.69 million (2016-17) and consists of about 3.6907% share in the total exports to China. Also, India imports goods like animal products, agricultural products, ores and minerals, pharmaceutical products, fertilizers, fabrics and fibers, glass, iron and steel and other metals, nuclear reactors, machinery and mechanical parts, aircrafts, toys etc. which have a net worth of $61,286.24 million and hold a share of 15.9467% (2016-17) in India's Exim bank. Out of this, the goods most imported are electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts, with a value of $29,565,939.82 million (2016-17). This has recorded a growth of 9.80% whereas the most exported items are salt, sculpture, earths and stone; plastering materials, lime and cement with a total value of $9,327,959.39 million (2016-17). This has recorded a growth of 37.12% over the previous year i.e. 2015-16. The Exim bank shows that exports have grown by 13.17% with a total value of $276,280.29 million whereas the imports have grown by 0.87% with a total of $384,319.29 million. Putting this in the simple formula of-

Balance of trade = Exports-Imports
= $276,280.29 million-$384,319.29 million
= (-) $108,039.01 million
(According to Department of commerce reports)
This means that the current trade scenario has put us at a loss and hence given us a huge trade deficit. At the same time, China has a huge trade surplus with India. This deficit for us, however, has been decreasing from 2012-13 to 2016-17.

![Figure 1: Growth Rate of Imports and Exports](image)

China, at present, wishes to build a corridor linking China, which has a very small coastline, to the west, which will include Africa and Europe. This link will be established by connecting China to the Gwadar port in Pakistan via a direct road link. Thus, this is also called the China-Pakistan Economic Corridor (CPEC). The problem, however, is that this corridor passes through Pakistan occupied Kashmir and thus, India is not allowing its use. China's blocking of India into the Nuclear Suppliers Group could also be one of the reasons for the same. Some experts also claim that China feels isolated as it is not a part of G7 and thus, it is making attempts to include itself (Apurva, 2017), China's Belt and Road initiative: In giant trade Belt, Road to new growth rush, The Indian Express, Available at :: [http://indianexpress.com/article/explained/china-belt-and-road-initiative-in-giant-trade-belt-road-to-new-growth-rush-4651727/](http://indianexpress.com/article/explained/china-belt-and-road-initiative-in-giant-trade-belt-road-to-new-growth-rush-4651727/) [Accessed August 31, 2017] ).

China has no access to the southern world oceans and thus, the CPEC becomes very important for it. Without it, the Chinese shipments from Europe and Africa have to travel all the way around India to reach the Chinese ports on the eastern side of the country. Currently China is, in many ways, trying to corner India by establishing relations with all of India's neighboring states. Moreover, China's 'String of Pearls' policy, which is seen as China's attempt to establish military and commercial facilities and relationships with
countries that could help it in sea transportation is seen as a threat to India as it could sway it's neighbors in China's favor.

Nepal – The trade and investment between China and Nepal is rapidly growing. Moreover, Nepal has started to believe that India interferes in its international affairs'. This belief was strengthened when the border was blocked during the constitutional riots in Nepal.

Bhutan- China does not have formal bilateral ties with Bhutan. However, the Doklam issue seems to be prickling the country.

Bangladesh- China has been helping Bangladesh strengthen its military since 2002. It has also moderated between Bangladesh and Myanmar. Ms. Sheikh Hasina has invited India to help in the development of the Sonadia port, for which help is already being given by China. This could be interpreted as the country fearing dominance from China and India and thus, aiming to achieve balance by asking both countries for help. Moreover, considering the political relations between the Indian government and the Sheikh Hasina lead Bangladeshi government, India and Bangladesh are likely to maintain good relations. But it is not hidden that Ms. Zia Khaleda (opposition leader), who has also said that Sheikh Hasina is ‘selling the country' to India to remain in power, does not hold a favorable view of India and thus, relations are likely to deteriorate when she comes to power. (Asma Masood, (2017). [online] Available at: https://www.mmbiztoday.com/articles/india-bangladesh-china-relations-complex-triangle [Accessed Sept 1. 2017].)

Myanmar- India and Myanmar seem to have cordial relations, but so do Myanmar and China. Though Myanmar's democratic ties seem to be better with India, the military ties are better with China. Also, about 10% of the people in the country are originally from China. In fact, the city of Mandalay is practically a Chinese city. It is also noteworthy, that China has far greater investment in Myanmar than India does. (Shastri Ramachandaran, (2017). [online] Available at: http://www.thecitizen.in/index.php/NewsDetail/index/5/6450/Myanmar-Advantage-China-Over-India [Accessed 26 Oct. 2017]).

Sri Lanka- China has invested heavily in Sri Lanka as a part of it's “String of Pearls' policy. Mahinda Rajapaksa, the sixth president of Sri Lanka, had often looked to China for economic and diplomatic support. China is also one of the largest investors in Sri Lanka, which gives it immense indirect control of the country. These investments have been used for the development of roads, highways; ports etc, among these, the Hambantota Port Development and the Colombo Port Development project form a major part. At the same time, India too, is trying to expand ties with Lanka by conducting advanced talks to operate an airport in the southern tip of the island. China too, has invested in this region

Pakistan- The construction of the CPEC would mean immense development for Pakistan along with access to an international airport.

According to The World Bank Group (US), Pakistan's GDP has been growing at fast rates since 2000 and is likely to keep growing even in future. In 2016, the GDP was $283.66 billion. The Annual GDP Growth of Pakistan is also expected to grow at a steady rate and reach 5.8 in the year 2019. The Foreign Direct Investment (FDI), Net Inflows to Pakistan amounted to a total of $979 million in 2015 (World Bank Group (US) (undated) Country Profile).

**Figure 2: Growth of Pakistan's GDP (US$)**

Source: Data, World Bank Group (US)

**Figure 3: Global Economic Prospects Forecast for Pakistan**

Source: Data, World Bank Group (US)
According to data on the website of the Board of Invest, Prime Minister's Office, Government of Pakistan, in 2016-17, Pakistan had received a total of $2,410.9 million of FDI (including and excluding private proceedings). Out of this, China had invested a total of $1,185.6 million of FDI in Pakistan. This is higher than the amount invested by any other country. From this, we can conclude that Chinese investment in Pakistan amounted to about 49.176% of its total investment. An amount this large is enough to sway any country's policies in its favor.

Considering that there is not much record available about the usage of the investment that the country gets, it is speculated that Pakistan uses the Chinese investment to fund its military operations (unverified). Moreover, the belief that Pakistan supports terrorism and even funds it, combined with the blocking of Pakistan from the naming of Maulana Masood Azhar as a terrorist by the United Nations reiterates the belief that Pakistan, as a state, supports terrorism and thus, uses the funds it gets to support it.

Initially, China and India started with having one-quarter and one-third of the world’s GDP share, respectively. This share has been steadily declining and has reduced to 14.9% and 6.3% respectively.

![Economic history of China and other major powers](image)

**Figure 4: Share of world GDP of different countries**

Considering China's economy currently and India's high growth rate, it becomes clear that both countries aim to be superpowers in the world but this is not possible and thus, a conflict is inevitable. However, both parties are trying to avoid it. China, for example, has understood the resentment that the Indian population has developed against Chinese goods and thus, is trying to enhance diplomatic ties with steps like withdrawing from Dokhlam and condemning Pakistan's terrorism at the BRICS summit.

If the movement was to be given a starting point, it would be in October, 2016. This was a time when the movement picked up momentum and gained mass support. This was displayed when the sale of Chinese goods fell severely, as was also covered by many major newspapers.

Figure 5: Media coverage of the initiative to boycott Chinese goods.

The aim of the initiative was to change the perception of the people with regard to Chinese goods. The idea was that if people develop a negative view towards Chinese goods, they will not buy them, owing to the already existing surplus of Chinese goods in their shops, the shopkeepers will not buy Chinese goods from the wholesalers who, in turn, will not import them and thus, India, with a huge population (and therefore, a huge demand), will be able to cripple the Chinese economy by taking away from them, the revenue that Indian imports used to provide to them.
In a survey conducted, it was found that people mostly bought Chinese goods because they were cheaper than the goods of any other country (40.7%). Another reason that people stated behind the purchase of Chinese goods was that they had no available substitute (36.4%). People also believed that Chinese goods were of better quality (1.9%) while 0.6% of the people bought Chinese goods due to peer pressure. A majority of the people (63.9%) checked whether the product that they are purchasing was made in India or in some other country. 41% of people also felt that Chinese good are not value for money.

7. Why do you buy Chinese goods?
164 responses

Figure 6: Responses behind the reason to purchase Chinese goods

Most of the people (34.1%) have gained their knowledge about the boycott via social media sites and Watsapp. This instantly puts the validity and reliability of the information they possess, in question.

9. Where does your understanding of the boycott of Chinese goods come from?
169 responses

Figure 7: Sources providing knowledge to consumers about the boycott
The popular perception in the minds of the people is that our boycott of Chinese goods will have a huge impact on the Chinese economy, as felt by 58.2% of the respondents. They also felt that we i.e. Indians can surpass the use of Chinese goods. Here, it is important to note that one of the reasons behind the sale of Chinese goods being so successful in India is that in the Indian economy, Substitution Effect is greater than the Income Effect, especially for the people in lower income categories. Thus, China is able to sell cheaper goods in large quantities in India.

6. How much impact, do you think, our boycott of Chinese goods will have on the Chinese economy?

![Pie chart showing responses]

**Figure 8: Magnitude of impact consumers expect the boycott to have**

The share of exports to India from China is just over 3%, which is a very small part of the total exports of China. With a negligible share in the Chinese economy, it is very difficult for India to impact the Chinese economy in a major way, even if we stop importing goods from China. Moreover, India imports capital good (including Boilers, nuclear reactors, railway locomotives and parts etc.) from China, which need high capital investment and thus, do not have Indian counterparts.

The world was globalised with the idea that each country should produce what it is best and most efficient at producing. The boycott of Chinese goods puts India in a sticky situation because many of the things that India currently imports from china (Eg.- electrical, television images etc.) either cannot be produced in India at all or cannot be produced as efficiently and at costs as low as those at which China produces the goods. This means that if we boycott the Chinese goods, forego their import and start producing those goods in our country, even if we ignore the initial costs of setting up the industry (which too, would turn out to be quite high), the cost of producing those goods would be very high and thus, could do us more monetary harm than betterment. A rational consumer too, wants to be able to buy as much as possible, while spending as less as possible. If this rational consumer is also a manufacturer, he/she will want to minimize his cost, thereby increasing his profits. Considering that Chinese machinery is
cheaper than Indian machinery, the manufacturer will, being a rational consumer, end up buying Chinese machinery, which forms a huge part of India's Import basket.

![Indian imports](image)

*Figure 9: Share of Different items in India's Import Basket (Date Source: Ministry of Commerce, Government of India)*

In another survey taken, it was found that sellers were impacted greatly by the boycott of Chinese goods. The sellers who had fixed establishments managed to recover from the loss and switched over to 'Made in India' versions of the goods that they used to sell. However, transit sellers and those who did not have fixed establishments or registered shops were unable to recover from the loss. They were of the opinion that the boycott should not take place as it disrupted their livelihood and shopkeepers who could earn up to Rs. 1000 per day before the boycott, had difficulty in earning even Rs. 100 per day now (as reported by a toy seller of a temporary establishment in Chandni Chowk). On the other hand, sales of goods like earplugs, fidget spinners and phone covers remained unchanged despite the boycott. In fact, most people did not ask for the production destination of such goods. Out of the people who did ask, hardly anyone refused to buy the product simply because it was made in China. Such people, despite the boycott, made a profit of about Rs. 1000 per day from the sale of Chinese goods. The sellers of mobile covers, on the other hand, had a 30% profit margin per Chinese good.

Shopkeepers reported that they kept Chinese goods in their shops because the profit margins on Chinese goods were higher than those of Indian goods and most people demanded Chinese goods. Chinese shoes, for example, were bought because they had
better look (shine and glossy finish) than the Indian ones. The Chinese shoes gave the sellers a profit of Rs. 18-19 per piece.

Chinese toys, on the other hand, had seen a sharp fall in demand. The profit margin on these goods was low (Rs. 2-3 per piece) and thus, the earning fell below Rs. 100 per day after the boycott. Another Chinese item that is in great demand in the markets is posters. The sale of these items has been largely unaffected due to the boycott and sellers still earn a profit of Rs. 500-700 per day by selling them. Carpets bought from China and sold in the Indian markets were impacted by the sale of Chinese goods, but sellers still made profit owing to the 50% profit margin that the goods gave them.

A shop selling pharmaceutical goods including Chinese walking sticks, wheelchairs, commodes and walkers were not impacted in any way by the sale of Chinese goods as people cannot avoid the purchase of such goods and these goods were cheap. These goods held a 10% profit margin. The sellers felt that the government needed to do a lot of work before India could stop importing Chinese goods but they felt that it was not impossible. Shops selling BP Machines, thermometers, sugar machines etc. however, were largely impacted by the sale of Chinese goods. Despite this, they managed to maintain a profit margin of 3-4%.

Sellers of welding and billing machines and air compressors made 25-30% profit on Chinese goods. They said that Chinese goods were sold by them as they gave more profits and were readily available. They were cheaper and had better finishing than Indian goods, which is why they were greatly demanded by the public. The sales of such goods remain unaffected after the boycott.

A few shopkeepers, however, also told that the boycott would not have much impact unless it is sustained because the shopkeepers have already imported goods from China and China has received the money. Now, if people do not buy the goods, it is not a loss from China but for the Indian shopkeepers who have a surplus stock kept in their storerooms and warehouses (Translated from Hindi).

An opposition to the goods made in China emerged in the form of goods that were made in India. According to Indian law, the mark of 'made in' is not compulsory except in the cases of food items and drinks, also where preferential import duties are claimed (Santander Trade Portal). Moreover, as in the case of toys and phones, a mark of 'Made in India' on the cover does not simply indicate that the product was made in India. It can also mean that a part (which could be the visible part containing the label) was made in India. The lithium-ion batteries in phones, for example, are mostly made in China. But despite that, phone packets may write 'Made in India', which could be just about a part of the phone, or simply choose to not disclose where the product is made and write 'assembled in china' instead.
Another issue that India is facing, which can be attributed to China is that of Dumping. As defined by Fundamentals of Human Geography, NCERT, dumping is the practice of selling a commodity in two countries at a price that differs for reasons not related to costs. Article VI of the general agreement of trade and tariffs allows countries to apply ‘anti-dumping measures’ if the dumped goods cause injury to the domestic industries of a country. Since China was dumping items like steel in India, the Indian industries were adversely affected and thus, India has imposed anti-dumping duty on 93 Chinese goods. The directorate general of anti-dumping and allied duties (DGAD) had initiated 169 cases of anti-dumping against China, as on December 31, 2014. In 2016, the number fell to 16 (World Trade Organization (2016) Legal Texts).

Figure 10: Number of investigations initiated by DGAD as in 31.12.2014

Bilateral Relations make it difficult for governments to intervene directly. While a layperson might say that the way forward is to completely ban the imports of Chinese goods or to drastically increase import duties of the goods imported from China, it is not possible as the step would be very similar to imposing trade sanctions on China. Such a drastic step would have an adverse impact on the bilateral relations between India and China, which is something none of the economies can afford, owing to China’s economic size and India’s growth. Thus, it can be sufficiently concluded that the government cannot take any direct action against China. It can, and is, however, taking indirect steps in the form of the Make in India policy and the policy to use domestically produced good in government offices. However, a major portion of Indian imports from China is in the form of capital goods and machinery and despite the talk about ‘make in India’, the country shows little indication of rapid industrialization (Dani Rodrick (2017), [online] Available at: http://www.livemint.com/Opinion/oE6fEzjGl0r2gnQ4dY6ezM/Growth-without-industrialization.html [Accessed 21 Sept. 2017].
As stated before, India has very little share in China’s total exports and thus, a boycott by India will not have much impact on the Chinese economy, at least in the short run. In the long run, however, such a boycott can have an adverse impact on China in general. The most obvious effect comes in the form of a spoilt image. If Chinese goods are boycotted by a growing economy like India, it will lead to a negative propaganda of China. Moreover, if relations with India are spoiled, China’s one belt one road initiative will have even lesser chances of taking shape. The boycott of Chinese goods is driven more by psychological causes than by rational, economic causes. It is also noteworthy that if India boycotts Chinese goods and everything goes as planned and imports from China reduce to zero, we cannot expect China to sit quiet. China will retaliate and stop importing goods from India as well, which will affect India’s trade and relations in the same way as it will be affecting China’s.

On the brighter side, however, it is noteworthy that a lot of people also buy Chinese goods because of lack of availability of substitutes. Thus, the motivation to boycott Chinese goods will also motivate people to produce the goods in India. This will mean that with an initial investment to set up production plants in different areas, India’s manufacturing capacity will increase manifold. Moreover, this could also encourage Indians to innovate and find innovative substitutes to the products that are currently being imported from China. This will boost the research and development sector in India and promote entrepreneurial skill and start-ups. As time passes and more and more production units will be set up, and with each unit producing more and more goods, the average cost of production of the goods is bound to reduce. The production units will also benefit as they derive economies of scale. This will, in turn, reduce the price of Indian goods in the market.

Thus, in the long run, the boycott of Chinese goods might be helpful in the growth of Indian economy but in the short run, it definitely does more harm than good.

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India and Its New States: An Analysis of Performance of Divided States - Pre and Post Bifurcation

This paper analyses the reasons behind the creation of new states. It highlights the situations in these states and ensuing achievements followed by doing comparative analysis vis-à-vis respective parent states. Creation of smaller state is not always the answer for achieving effective governance or economic viability. Many aspects have to be considered before dividing the states. The demand for new states have been based on political and economic factors, but every demand cannot be acceded to in order to protect the essence of democracy of the country.

The present paper analyses the performance of separated states pre and post bifurcating. It aims to measure the success of the decisions taken by the government to divide the states. Economic success is essential for any state to progress, but for any state to develop overall its citizens should be satisfied and enjoy a decent standard of living which can be achieved by striving towards social success. The analysis of the impact should be studied because it may affect the policies framed by the government with regard to division of states in future.
INTRODUCTION

Madhya Pradesh, Uttar Pradesh and Bihar were divided and reconstituted to create three new states Chhattisgarh, Uttarakhand, and Jharkhand respectively, after the Indian Government passed the bill of creation of new states in 2000 thereby changing the federal map of the country. With the creation of new states the number of Indian states increased from 25 to 28 and with the recent creation of Telangana after bifurcating Andhra Pradesh in 2014 the count increased to 29.

Reconstituting an already existing state to create a new state is a mammoth task. States Reorganization Committee before taking the final decision of dividing and creating a state has to consider many economic, social, cultural, natural, etc. factors. Such factors play a very important role in the viability of division and effective governance of the new states and mother states, along with the wellbeing of the citizens.

Story After Separation

Since their formation, the new states have experienced dramatic improvement in economic growth measured in terms of per capita income, gross domestic product, and industrial and agricultural sector performance. Moreover these new states performed exceptionally well in terms of various social parameters. All the new states have witnessed an improvement in the lives of their civilians measured in terms of various social conditions like literacy, infant mortality, poverty reduction rate and various other macroeconomic indicators.
Formation of Uttarakhand/ Uttarakhand

Uttarakhand was formed after dividing and reconstituting Uttar Pradesh. Civilians of the Kumaon and Garhwal hills were the first to raise the demand for Uttarakhand. This formation of Uttarakhand fulfils the demands of these people which was based on economic, social and cultural factors. The civilians of the districts who became the part of Uttarakhand in 2000, felt left out by the government of Uttar Pradesh pre bifurcation. The Sikhs in some of the districts of Uttar Pradesh and the Akali Dal, the Sikh political party vehemently opposed the idea of creation of new and separate Uttarakhand. The reason behind their grievances was the agricultural land which they held in the regions were getting divided and they were unsure of the process by which ownership of the land was to be divided.

The income divide between the people of Uttarakhand and Uttar Pradesh created inequality which caused a violent demand for new state. The British people merged Uttar Pradesh with Uttarakhand for ease in governance. But with changes in patterns related to culture, income, etc. a rift was created between the citizens of the erstwhile Uttarakhand and Uttar Pradesh. There were no common grounds between the two groups. The differences eventually led to tussle with the government, who rejected the proposal of creation of separate Uttarakhand multiple times.

But with increase in violence, and the displeasure of people with the government, the latter forcefully passed the resolution of creating a new state and Uttarakhand was created in 2000.

Formation of Jharkhand

Jharkhand comprising 18 districts of Southern Bihar was formed after taking in 35% of Bihar's population. It draws 65% of state's revenue from its coal mines and steel mills. The formation of Jharkhand was supported by Rashtriya Janata, the state's ruling party for political reasons.

The creation of Jharkhand was possible after a long period struggle by the tribal state. The Jharkhand movement was based on economic and social demands. The mal treatment of the civilians of the tribal states, the grant of reservation rights by constitution only to some communities, the growing number of industrial projects undertaken by the government, etc triggered the Jharkhand movement. The civilians of the tribal state suffered mal treatment for a long period of time. The desire to break through the chains of deprivation and injustice, led to the creation of movement which concluded by the formation of new state, Jharkhand.

The Jharkhand movement depicted the pent-up anger of the tribal people against the injustice suffered by them. The wrong doings against the tribal people led to the creation
of new state for them. The fifty year long movement and efforts, which was initiated soon after independence of the country, by the tribals did not go in vain, and a new state was finally created in 2000.

**Formation of Chhattisgarh**

Chhattisgarh was formed after dividing and reconstituting Madhya Pradesh. The creation of the new state was based on various social and cultural factors with the movement and demand for creation of separate state being governed by Brahmmins and Kurmis of upper class. Seven districts of Madhya Pradesh went into the formation of Chhattisgarh.

The Brahmmins and Kurmis of upper class first raised the demand for a new state in 1920s. But from 1920s till 1980s the demand for new state was raised multiple times, but never accepted and acceded to. With the formation of state wide forum in 1990s the demand for separate Chhattisgarh got a boost and saw the light of creation. The new government in power, National Democratic Alliance (NDA), again sent the Separate Chhattisgarh Bill to the Lok Sabha in the 1990s where it was finally approved and passed by the members.

**Formation of Telangana**

Telangana was formed after dividing and reconstituting Andhra Pradesh. The demand for a separate Andhra was raised for the first time in 1955. The Telangana movement was initiated when the people of Telangana raised the voice against the leaders and people of Andhra for taking away their jobs and land, and not promoting development and infrastructure in the Telangana region. Telangana along with Andhra formed Andhra Pradesh, when they were merged and combined on November 1, 1956, to create one state for the population who spoke and conversed in Telgu.

In 1969, Andhra Pradesh faced a violent movement for a divided Andhra, for creating Telangana. Thereafter, the violent movement in Telangana earned political interests. Following the political switch to fulfill the demand for a new state a panel was established on February 3, 2010 which was chaired by Justice (Retd.) B.N. Srikrishna. The purpose of the panel was to create a separate state without any further protests by the people by holding interactions with various organizations and implementing the efficient division and finding the solution for the new statehood.

The A.P. Reorganization Bill was approved by the cabinet at the center in December, 2013. The bill had the process of bifurcating the state and each issue was broadly considered by the committee before passing the bill. The Bill was finally passed in 2014, and the dream of separate Telangana never saw the end since then.
Story After Separation

Since their formation, the three new states which have been created in 2000 i.e. Jharkhand, Uttarakhand and Chhattisgarh have experienced dramatic improvement in economic growth measured in terms of per capita income, gross domestic product. Moreover these new states performed exceptionally well in terms of various social and citizens well-being parameters. All the new states have witnessed an improvement in the lives of their civilians measured in terms of per capita income, economic growth and various other macroeconomic indicators. Since their creation, among all the states in India, the new states have performed better than any other states in the country.

Parameters related to Economic Growth

1. Comparison in terms of Gross State Domestic Product (GSDP)

The comparison of growth rates by taking Gross State Domestic Product (GSDP) as the economic parameter of the new and mother states pre and post division, is presented in Table 1.
### Table 1

<table>
<thead>
<tr>
<th>States</th>
<th>Jharkhand</th>
<th>Bihar</th>
<th>Uttarakhand</th>
<th>Uttar Pradesh</th>
<th>Chhattisgarh</th>
<th>Madhya Pradesh</th>
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</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>1.91</td>
<td>6.05</td>
<td>20.91</td>
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<td>24.63</td>
<td>13.89</td>
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<td>11.69</td>
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<td>25.16</td>
<td>22.18</td>
<td>16.1</td>
<td>20.83</td>
<td>22.17</td>
</tr>
<tr>
<td>2009-10</td>
<td>14.61</td>
<td>14.51</td>
<td>26.25</td>
<td>17.7</td>
<td>2.47</td>
<td>15.35</td>
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<tr>
<td>2010-11</td>
<td>26.50</td>
<td>24.94</td>
<td>18.72</td>
<td>14.69</td>
<td>20.18</td>
<td>15.75</td>
</tr>
<tr>
<td>2012-13</td>
<td>11.83</td>
<td>20.7</td>
<td>10.62</td>
<td>13.84</td>
<td>14.72</td>
<td>18.39</td>
</tr>
<tr>
<td>2013-14</td>
<td>13.9</td>
<td>17.05</td>
<td>13.53</td>
<td>10.55</td>
<td>12.10</td>
<td>20.33</td>
</tr>
<tr>
<td>2014-15</td>
<td>14.32</td>
<td>17.06</td>
<td>12.88</td>
<td>13.16</td>
<td>13.2</td>
<td>16.86</td>
</tr>
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<td>Average Growth</td>
<td>14.18</td>
<td>17.9</td>
<td>18.9</td>
<td>14.1</td>
<td>16.1</td>
<td>16.2</td>
</tr>
</tbody>
</table>

(Figures are in %)

Table 1 reveals the percent growth rates at current prices of all the states bifurcation which help us conclude that the new states performed as well as their mother states. After division the growth rates of the three new states have increased and they performed as well as their respective parent states. Analysing the Uttarakhand- Uttar Pradesh pair, the former state witnessed an average growth rate of 18.9% over the period 2005-06 to 2014-15 while Uttar Pradesh progressed with the percent growth rate of 14.1%. Except for the Jharkhand- Bihar pair, the other two pairs exhibited that the newly created states performed better vis-à-vis the performance of their respective mother states.

Jharkhand grew at 3.6% before separation but the growth rate jumped to 6.6% post separation. Correspondingly, Uttarakhand grew at 4.6% before creation. After separation the growth rate for Uttarakhand increased by a greater margin of 10.4%. Chhattisgarh witnessed a growth rate of 3.1% pre separation but after creating a separate state, it also started growing at 8.4%. Similarly, all the mother states witnessed a surge in their growth rate post bifurcation.

**Chart 1**

(Ministry Of Statistics, Government of India, 2015)
2 Comparison in terms of Per-Capita Income

Table 2 indicates the economic well-being of the citizens of the six states pre and post separation as measured by per capita income as economic indicator.

<table>
<thead>
<tr>
<th></th>
<th>Per-Capita Income 2011-12 (Rs.)</th>
<th>Per-Capita Income 2012-13 (Rs.)</th>
<th>Per-Capita Income 2013-14 (Rs.)</th>
<th>Per-Capita Income 2014-15 (Rs.)</th>
<th>Average (From 2010-2015)</th>
</tr>
</thead>
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<td>Bihar</td>
<td>13149</td>
<td>14356</td>
<td>15506</td>
<td>16801</td>
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<td>28882</td>
<td>30950</td>
<td>26,768</td>
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<td>Madhya Pradesh</td>
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<td>24867</td>
<td>26853</td>
<td>29218</td>
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<td>Chhattisgarh</td>
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<td>28087</td>
<td>28373</td>
<td>29047</td>
<td>27,965</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>18014</td>
<td>18635</td>
<td>19233</td>
<td>20057</td>
<td>18,658</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>48525</td>
<td>52606</td>
<td>55375</td>
<td>59161</td>
<td>52,078</td>
</tr>
</tbody>
</table>

Comparing the per capita income of the civilians in the new and mother states, the people of the new states are enjoying better economic conditions. The gap between the Uttar Pradesh-Uttarakhand pair is the highest with the latter's per capita income around three times the former. There is not a significant difference between Madhya Pradesh and Chhattisgarh, but the latter is ahead with 27965 as average per capita income. As far as Bihar-Jharkhand pair is concerned, Jharkhand is ahead with 26768 average per capita income while Bihar has only 14689 average per capita income.
Comparing the average per capita income of the mother and new states, the new states have shown a better performance. There is a wide difference in per capita income between Bihar and Jharkhand, Uttar Pradesh and Uttarakhand.

3 Comparison in terms of growth in Agriculture

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bihar</td>
<td>-7.47</td>
<td>18.90</td>
<td>-13.6</td>
<td>16.70</td>
<td>12.51</td>
<td>8.23</td>
<td>-6.18</td>
<td>4.40</td>
<td>4.18</td>
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<tr>
<td>Chhattisgarh</td>
<td>9.32</td>
<td>-9.95</td>
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<td>12.52</td>
<td>1.38</td>
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</tr>
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<td>Jharkhand</td>
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<td>16.57</td>
<td>-6.21</td>
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<td>26.23</td>
<td>6.15</td>
<td>8.30</td>
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<td>18.17</td>
<td>20.40</td>
<td>18.85</td>
<td>10.92</td>
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<tr>
<td>Uttar Pradesh</td>
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<td>3.80</td>
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<td>-3.66</td>
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<td>8.85</td>
<td>-2.51</td>
<td>5.12</td>
<td>3.49</td>
</tr>
</tbody>
</table>

Table 3 reveals that Bihar witnessed a negative growth rate in agriculture in some of the years. There has not been a steady growth in the agriculture sector but it managed to gain an average growth rate of 4.2%. Correspondingly, Jharkhand experienced a steady increase in growth in the agriculture sector (except a small dip in 2009-10). The average growth rate of the new state is 8.73% which is almost double vis-à-vis its mother state, Bihar.

In the agriculture sector, the growth rate experienced by Chhattisgarh is 6.11% while Madhya Pradesh grew at a higher rate of 11%. Uttar Pradesh- Uttarakhand pair had a similar growth rate in the agriculture sector, with a minor difference between their growth rates. The minor difference was majorly attributed to the difference in the progress of the industry.

Thus, barring Chhattisgarh- Jharkhand pair, the newly formed states showed a better performance vis-à-vis their respective mother states. Despite Bihar that had a better overall growth index, it is around 4%, behind Jharkhand in the growth. There is not much variation between Uttar Pradesh and Uttarakhand pair.

4 Comparison in terms of Industrial Growth

Chart 2 reveals the growth rates of the new and the mother states of the industrial sector. Observing the same we can find that the performance of new states is as good as the parent states over the period of 2004 to 2009.

Table 4 exhibits industrial performance of the six states over the period 2007-08 to 2014-15. Bihar witnessed the highest average growth at 12.86% in the industrial sector.
among the six states. Jharkhand over the same period saw a lower average industrial growth rate of 7.9%. Uttarakhand surpassed Uttar Pradesh by a greater margin of around 11%, growing at a rate of 14.4% while Uttar Pradesh experienced only 3.81% growth rate. Over the same period, Madhya Pradesh and Chhattisgarh grew at almost similar rate (6.66% and 5.83% respectively).

Chart 2

Table 4

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<tbody>
<tr>
<td>Bihar</td>
<td>19.47</td>
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<td>14.07</td>
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<td>Madhya Pradesh</td>
<td>5.93</td>
<td>18.98</td>
<td>6.86</td>
<td>6.86</td>
<td>5.26</td>
<td>2.40</td>
<td>2.55</td>
<td>4.45</td>
<td>6.66</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>34.01</td>
<td>-15.56</td>
<td>6.73</td>
<td>21.31</td>
<td>-0.58</td>
<td>3.56</td>
<td>6.02</td>
<td>NA</td>
<td>7.93</td>
</tr>
</tbody>
</table>

Table 4 shows a huge gap in the performance of the mother states vis-à-vis their respective new states in terms of growth in the industrial sector. Only in case of Uttar Pradesh-Uttarakhand the latter has surpassed its parent state by around 11%. For other pairs, Bihar is ahead of Jharkhand by 5% and Madhya Pradesh is ahead of Chhattisgarh by 1%.

Parameters related to social conditions

1 Comparison in terms of Poverty Reduction

Table 5 reveals that except the Madhya Pradesh- Chhattisgarh pair, all the other new states have been more successful in reducing the poverty vis-à-vis their respective parent states over the period of 2004 to 2010. Considering the Madhya Pradesh- Chhattisgarh pair, the former was able to decrease the poverty by 11.9% while the latter was successful in reducing it by only 0.7%. Uttarakhand was successful in reducing it by 14.7% which is more than the 3.2% reduction in poverty experienced by Uttar Pradesh.
Jharkhand was able to reduce poverty by 6.2%. Correspondingly, Bihar experienced only 0.9% reduction in poverty rate.

<table>
<thead>
<tr>
<th>(Niti Aayog)</th>
<th>2004-05 (%)</th>
<th>2009-10 (%)</th>
<th>Reduction in poverty over the two periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bihar</td>
<td>54.4</td>
<td>53.5</td>
<td>0.9</td>
</tr>
<tr>
<td>2. Jharkhand</td>
<td>45.3</td>
<td>9.4</td>
<td>35.9</td>
</tr>
<tr>
<td>3. Madhya Pradesh</td>
<td>48.6</td>
<td>12</td>
<td>36.6</td>
</tr>
<tr>
<td>4. Chhattisgarh</td>
<td>49.4</td>
<td>48.7</td>
<td>0.7</td>
</tr>
<tr>
<td>5. Uttar Pradesh</td>
<td>40.9</td>
<td>17.1</td>
<td>23.8</td>
</tr>
<tr>
<td>6. Uttarakhand</td>
<td>32.7</td>
<td>17.4</td>
<td>15.3</td>
</tr>
</tbody>
</table>

*(Poverty Rate - % of population below poverty line)*

**Chart 3**

(Figures are in percentages)

![Bar chart showing poverty rates in different states from 2004 to 2011.]

**Table 6**

<table>
<thead>
<tr>
<th>(Niti Aayog)</th>
<th>Bihar</th>
<th>Jharkhand</th>
<th>Madhya Pradesh</th>
<th>Chhattisgarh</th>
<th>Uttar Pradesh</th>
<th>Uttarakhand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>33.7</td>
<td>10.3</td>
<td>7.1</td>
<td>39.9</td>
<td>14</td>
<td>29.4</td>
</tr>
</tbody>
</table>

With Uttar Pradesh being a home to 73 million people, the highest number for any Indian state, all the 6 states (new and mother states) together gave shelter to 180 million poor people of India.

Table 6 exhibits the poverty rate of the states for the period 2011-12. Considering the number of poverty rate over the years from 2004 to 2011 in the 6 states, we can observe
that Uttarakhand had the lowest percentage of poor people while Chhattisgarh had the highest. Uttarakhand and Bihar were able to decrease the percentage of poor people in the population by a similar margin, and the highest percentage among all the 6 states.

2 Comparison in terms of Literacy Rate

Table 7

<table>
<thead>
<tr>
<th></th>
<th>Bihar</th>
<th>Jharkhand</th>
<th>Madhya Pradesh</th>
<th>Chhattisgarh</th>
<th>Uttar Pradesh</th>
<th>Uttarakhand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>47.0</td>
<td>53.56</td>
<td>63.74</td>
<td>64.66</td>
<td>56.27</td>
<td>71.62</td>
</tr>
<tr>
<td>2011</td>
<td>63.8</td>
<td>67.6</td>
<td>70.63</td>
<td>71.04</td>
<td>69.72</td>
<td>79.6</td>
</tr>
</tbody>
</table>

(Figures are in percentages. Figures are of the last Census in 2011)

Table 7 reveals that in all the three pairs the new states had a higher literacy rate compared to their respective parent states in the year 2001 as well as in 2011. Comparing the Madhya Pradesh- Chhattisgarh pair, the latter trailed in this parameter but there was only a difference of 0.4% between the literacy rates of the two states for the year 2011. There is a difference of 3.6% between the literacy rate of Jharkhand and Bihar with the former leading the race in 2011. As far as Uttar Pradesh- Uttarakhand pair is concerned, there is a difference of around 10% with the rates being 69.7% and 79.6% respectively for 2011.

As far as percentage figures of the six states are analysed, the new states achieved better literacy rate during the year of 2011 compared to the literacy rate achieved by the parent states. Even one year after bifurcation of the sates, the new states had better literacy rates vis-à-vis their respective parent states.

3 Comparison in terms of Infant Mortality Rates (IMR)

As a health indicator Infant Mortality Rates is used.

Table 8

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bihar</td>
<td>44</td>
<td>43</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>39</td>
<td>38</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>59</td>
<td>56</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>48</td>
<td>47</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>57</td>
<td>53</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>35</td>
<td>33</td>
<td>32</td>
<td>33</td>
</tr>
</tbody>
</table>
Table 8 reveals that the pattern of IMR increasing and decreasing is not similar among the six states. During the period of 2011 and 2014, Bihar was able to decrease IMR by 2 units to 42 while Jharkhand decreased IMR by 5 units to 34. Madhya Pradesh decreased IMR by 7 units to 52 while Chhattisgarh decreased the same by only 5 units to 43. Uttarakhand reduced it by 2 units to 33, but Uttar Pradesh was able to decrease by a greater margin of 9 units to 48.

**Chart 4**

![Bar chart showing IMR trends in different states from 2009 to 2011.]

*Source: Sample Registration Systems, Registrar General of India*

After analysing only the IMR rates, Uttar Pradesh was the worse off states. But as far as improvement in terms of reduction in IMR is concerned, Uttar Pradesh was able to decrease the same by the highest margin over the period of 2011-2014. Observing the IMR rates, the new states showed a better condition than the mother states, who have a high IMR.

**Telangana and Andhra Pradesh**

**Comparison in terms of Economic Growth**

The comparison of growth rates by taking Gross State Domestic Product (GSDP) as the economic parameter of Telangana and Andhra Pradesh pre and post division, is presented in Table 9. Telangana's economic growth in terms of GSDP grew at 10.1%, at constant prices, in 2016-17 to Rs. 5.11 lakh crore, thus clocking a rate of growth higher than the national average for the third consecutive fiscal. Andhra Pradesh, which is on the top of the list of GSDP of the Indian states grew by 11.61 per cent as per revised estimates of 2016-17.
Table 9

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>5.35</td>
<td>10.85</td>
<td>13.12</td>
<td>2.14</td>
<td>7.24</td>
<td>6.81</td>
<td>6.25</td>
<td>4.05</td>
<td>7.16</td>
<td>7.21</td>
<td>7.02</td>
</tr>
</tbody>
</table>
| Telangana     | 15.88     | 11.62     | 10.55     | 13.44     | 1.15      | 18.03     | 8.66      | 4.11      | 4.76      | 5.33      | 9.35    

Estimates relate to bifurcated Andhra Pradesh, separate area of Andhra Pradesh and Telangana

The above table shows the comparison in terms of GDSP for the area now divided between Telangana and Andhra Pradesh separately. Before bifurcation, Andhra Pradesh experienced one of the highest growth rate among all the states in India. During the period of 2005-2015, Andhra Pradesh witnessed an average gross domestic growth rate of 7.02% while Telangana experienced growth rate of 9.35%. Just after separation, Andhra Pradesh's GSDP grew at more than 7% rate after a relatively sluggish period before separation.

Comparison in terms of Per Capita Income.

Table 10, Per Capita Income at current prices

<table>
<thead>
<tr>
<th>(Niti Aayog)</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>58733</td>
<td>64773</td>
<td>72301</td>
<td>81397</td>
<td>90517</td>
<td>77247</td>
</tr>
<tr>
<td>Telangana</td>
<td>66951</td>
<td>75124</td>
<td>85169</td>
<td>95361</td>
<td>103889</td>
<td>85299</td>
</tr>
</tbody>
</table>

Estimates relate to bifurcated Andhra Pradesh, separate area of Andhra Pradesh and Telangana

Table 10 shows the average per capita income experience by Andhra Pradesh and Telangana during the period 20010-2015 was 77247 and 85299 at current prices. After separation, the per capita income was higher for Telangana at 103889 than experienced by Andhra Pradesh at 90517. However, both Andhra Pradesh and Telangana managed to increase the income post separation.

Comparison in terms of Agriculture & Allied Activities

Table 11 Annual Growth rate of Agriculture & allied activities at constant (2004-05) prices

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>17.92</td>
<td>-1.78</td>
<td>6.84</td>
<td>-1.14</td>
<td>3.21</td>
<td>7.46</td>
<td>7.94</td>
<td>5.90</td>
<td>5.79</td>
</tr>
<tr>
<td>Telangana</td>
<td>16.28</td>
<td>6.01</td>
<td>-12.47</td>
<td>19.36</td>
<td>-0.36</td>
<td>11.49</td>
<td>8.39</td>
<td>NA</td>
<td>6.96</td>
</tr>
</tbody>
</table>

Estimates relate to bifurcated Andhra Pradesh, separate area of Andhra Pradesh and Telangana, Figures are in percentages
Andhra Pradesh's agriculture share in the gross domestic product (GDP) is growing unlike the decline India as a whole was witnessing. The average growth rate of agriculture and allied activities during the period of 2007-2015 for Andhra Pradesh and Telangana was 5.79% and 6.96% respectively. There is not a steady pattern in the growth rate of the agriculture sector for Telangana which experienced a negative rate and a growth rate of 19.36% pre-bifurcation. Telangana constitutes Hyderabad, one of the main economic growth driver for the erstwhile Andhra Pradesh. This might play a major role in bringing an increased growth rate for the newly created state.

**Comparison in terms of Industrial Growth**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>14.96</td>
<td>-0.39</td>
<td>3.80</td>
<td>3.24</td>
<td>12.94</td>
<td>-4.36</td>
<td>1.02</td>
<td>5.25</td>
<td>4.56</td>
</tr>
<tr>
<td>Telangana</td>
<td>6.44</td>
<td>15.98</td>
<td>2.28</td>
<td>16.84</td>
<td>5.75</td>
<td>-4.13</td>
<td>0.13</td>
<td>6.18</td>
<td></td>
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</tbody>
</table>

*Estimates relate to bifurcated Andhra Pradesh, separate area of Andhra Pradesh and Telangana, Figures are in percentages*

In India, Andhra Pradesh and Telangana are some of the top states in India where business can be done with ease in comparison to other states. The undivided Andhra Pradesh formulated many policies for growth related to various sectors in the states. From growth in the industrial sector by developing biotech parks, industrial clusters, etc. to growth in the textile, tourism and leather, the government is trying to build infrastructure for the overall development of the economy.

**Conclusion**

With changes in the structure of federal map of the country by the recent increase in the number of division of states and demand for the same, the impact of such bifurcation on the well-being of the civilians and the economic development of the separated states and country as a whole becomes an important area of study. The analysis of the impact should be studied because it may affect the policies framed by the government with regard to division of states. The present paper, therefore attempts to analyse the parameters that measures such divisions and the performance of these states pre and post bifurcation. To conclude whether the division of states was favourable or unfavourable many factors need to be considered.

After bifurcation of Bihar, Madhya Pradesh and Uttar Pradesh creating Jharkhand, Chhattisgarh and Uttarakhand respectively in 2000, and the separation of Andhra
Pradesh creating Telangana in 2014, many opinions about the performance of new states in comparison to the mother states were raised. After analysis, we find that on average the new states have performed better than their parent states. Economic indicators such as poverty, infant mortality rate, GDP, etc. were observed pre and post bifurcation and we found that these newly formed states have shown tremendous improvement as compared to their mother states.

Through this report, the analysis showed how the new states performed better than their respective parent states in terms of various economic and social indicators. After division in 2000, the Gross State Domestic Product, per capita income, industrial growth rate and agricultural growth rate of the new states were comparatively higher than that of the mother states. The per capita economic indicator showed the better economic conditions and standard of living enjoyed by the citizens of the new states. The growth rates experienced by the states in the industrial and agricultural sectors depends a lot on the kind of land and infrastructure acquired by a state after the bifurcation.

The increased efficiency in governance can be figured after analyzing the social parameters. The new states were successful in decreasing poverty, infant mortality rate and increasing literacy. The poverty rate and IMR being lowest and literacy rate highest for Uttarakhand, this new state has surpassed all other Indian states on many social parameters. The demand for a separate state by the people does not always lead to efficient governance and better social and economic indicators. Therefore, it is not always the right answer. The performance of state post bifurcation depends a lot on the process of division and participation of citizens in the same.

Reconstituting an already existing state to create a new state is a mammoth task. States Reorganization Committee before taking the final decision of dividing and creating a state has to consider many economic, social, cultural, natural, etc. factors. Such factors play a very important role in the viability of division and effective governance of the new state and mother state, along with the wellbeing of the citizens. In case of Jharkhand and Telangana, the government had not much choice but to give in to the pressure of the people. The government should carefully observe the progress and growth of each state. Every growth indicator has a negative effect of creating inequality. The regional inequality creates different demands, and the feeling of inferiority. This can eventually lead to the demand for the new state. Hence, the government should be more vigilant when it comes to inequality and other social factors in a state, because they are one of the major reasons for violent protests in the history of country.

References


17. Niti Aayog, State Statistics- http://niti.gov.in/content/literacy-rate-7years

Goods and Services Tax: Its adoption and challenges faced

(An Empirical Study on GST readiness of Small and Medium Enterprises)

Abstract

GST also known as the Goods and Services Tax can be defined as a comprehensive tax system that will subsume all indirect taxes levied by the States and Central Governments, and unified economy into a coherent national market. It is expected to iron out wrinkles of existing indirect tax system and play an important role in the growth and development of the country. Small and Medium Enterprises (SMEs) have been the backbone of the Indian economy for decades. For a capital scarce developing country like India, SMEs are considered as relief for several economic burdens like unemployment, poverty, income inequalities and reginal imbalances. The implementation of Goods and Services Tax (GST) has changed the format and provisions regarding filing of return due to which the businesses had to undergo significant changes and update their knowledge. It is important for the businesses to be ready for accepting such a change in order to avoid confusion. This research focuses on the impact of this new tax regime on Small and Medium Enterprises of the country. The research findings pinpoint towards the challenges faced by SMEs towards the adoption of GST and outlook of the businesses towards it. The readiness on GST is still at
nascent stage in India. The study found that there is difference in the perception of the Business Sectors about the perceived improvements required in current GST. It was also found that there is no difference in their perception with regard to its Benefits and Challenges faced in its adoption.

Key words: Goods and Services Tax; incorporate all indirect taxes; Growth and Development; Small and Medium Enterprises; relief from economic burden

Introduction

The sound of the bell which was rung in the Parliament at the stroke of midnight of 30 June, 2017 has echoed in the world as the trumpet of Indian political maturity and cohesion. It was indeed a historic occasion and a paradigm shift as India moved towards ‘One Nation, One Tax, One Market.’ Though the midnights of 2017 and 1947 are not comparable in the bliss of freedom but the setting, the high domed Central Hall of Parliament was virtually recalling history in the presence of Honorable Prime Minister and President of the country.

GST is a destination-based single tax on the supply of goods and services from manufacturers to the consumers which has replaced multiple indirect taxes levied by the Central and State Governments, thereby converting the country into an undivided market. Among other benefits, GST aims to improve the ease of doing business in tax compliance, improve tax administration, mitigate tax evasion, broaden the organized segment of the economy and boost tax revenues. Such regime has already been adopted by 160 odd countries that includes many powerful nations like Germany, Russia, UK, China and Japan. The introduction of GST in India is expected to be a big step in the direction of improving the country’s ranking in the ease of doing business. Sadly, India is placed at a lowly 130th position out of 190 countries in the World Bank’s Doing Business report 2017.

CONCEPT

GST is an indirect tax which will incorporate almost all the indirect taxes of both Union and State Governments into a single tax. GST will be levied on all the transactions of a business such as sale, transfer, purchase, lease, barter, or import of goods and services. India has adopted a dual GST model, which means that taxation is governed by both the Central and the State Governments. Transactions taken place within a single state will be chargeable with Central GST (CGST) by the Central Government and State GST (SGST) by the State Government. An Integrated GST (IGST) is levied by the Central Government for inter-state transactions and imported goods or services.
**LITERATURE REVIEW**

<table>
<thead>
<tr>
<th>AUTHOR AND YEAR OF STUDY</th>
<th>BRIEF DESCRIPTION AND FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed and Poddar (2009)</td>
<td>The findings concluded that introduction of Goods and Services Tax will provide a transparent tax system with increase in output and productivity of Indian economy. But the benefits of such tax regime are critically dependent on the rational design of the tax.</td>
</tr>
<tr>
<td>Vasanthagopal R. (2011)</td>
<td>The study concluded that switching to a smooth and simpler Goods and Services Tax from current arduous indirect tax system in India will be a positive step in prospering the economy of the country. More than 130 countries in the world have acknowledged the success of GST.</td>
</tr>
<tr>
<td>Mawuli Agogo (2014)</td>
<td>The study concluded that in the case of economically developing and underdeveloped counties, GST is not gratifying and does not provide sufficient development but if still these countries plan to adopt GST then the rate should not be more than 10% for ensuring growth.</td>
</tr>
<tr>
<td>Kumar Nitin (2014)</td>
<td>The study finds that application of Goods and Services Tax in a country helps in removing economic distortion by current indirect tax system and is expected to boost equitable tax structure which is indifferent to topographical locations.</td>
</tr>
<tr>
<td>Pinki et al (2014)</td>
<td>The study viewed that the new NDA government in India is positive towards implementation of GST and it is beneficial for Governments and consumers in long run only if its implementation is backed by strong IT infrastructure.</td>
</tr>
<tr>
<td>Lim Boon Poh et al. (2014)</td>
<td>The study stated that GST will boost the prices both in the short term and long term, resulting in a fall in domestic consumption, thus, adversely affecting the growth of economy.</td>
</tr>
<tr>
<td>Sehrawat and Dhanda (2015)</td>
<td>The study concluded that the application of Goods and Services Tax stands for a seamless tax system which will collate most of current indirect taxes. In long term, it will lead to higher productivity, improved employment opportunities and increase GDP by around 1.5%.</td>
</tr>
</tbody>
</table>
Statement of Problem

The main aim of GST is to simplify the taxation process, reduce the burden of taxes and ensure compliance of tax payment. This is possible only if all the Governments and GST Council implements it efficiently, which is thereby dependent on the cooperation between businesses and government. Unfortunately, the study reflects the failure of government in educating the businesses properly and communicating the necessary features of the new tax regime. This leads to misunderstandings and reduces the faith of the enterprises on the governmental practices and facilities.

Thorough and up-to-date knowledge of tax laws is necessary to avail the benefits provided under the provisions of the Act. Unless the businesses are properly aware of all the provisions of GST, the new tax regime will not be able to achieve its true objective. Thus, it is important to clarify all the doubts of businesses and help them to prosper through proper cooperation. The current study is an effort to analyze the readiness of the existing SMEs and their views regarding the new tax regime of GST in the light of tax administration measures being implemented by the Government.

Theoretical Analysis

GST seeks to replace 17 indirect taxes (8 Central + 9 State levels) and 23 Cesses of the Centre and States, eliminating the need for filing multiple returns and helps in rationalizing the tax treatment of goods and services along the supply chain from producers to consumers. A study by CII-KPMG (2014) concluded that the businesses faced major issues with respect to registration of VAT, excise, customs and service tax; movement of goods; dealing with tax authorities; availing tax incentives; and obtaining timely tax refund. Using IT platform of Goods and Services Tax Network (GSTN), which is a shared infrastructure between Centre and States, providing reliable and efficient IT backbone for smooth functioning of the new tax regime, where tax payers can register, file, make payments and claim refunds online at anytime from anywhere without having to interface with any tax officials.

Though with many other benefits along with the listed one, the study has found certain limitations regarding its implementation also. Since, GST is presently undergoing many changes, it is often argued that the tax authority should have explored such problems before the implementation because it is difficult for the enterprises to keep a note of all such changes. There have also been certain technical glitches which had made it difficult to claim the input tax credit by the businesses (Dated 16 September, 2017 in Economic Times).

As mentioned, some of the provisions of GST have had an adverse effect on small and medium enterprises especially regarding the monthly filing of returns. Since, in the previous taxation system, these enterprises had to file return quarterly, so this transition was an expensive and cumbersome process on their part. Realizing the problem, the
Finance Minister, Arun Jaitley along with the GST Council modified the provisions that taxpayers with turnover Rs. 1.5 crore or less will also file quarterly returns instead of the monthly return which will cover 90% of assessees.

**Objective of the study**

The objectives of the study are:

1. To judge if the SMEs are satisfied with the implementation of the new tax regime in their respective business sectors.
2. To check if the existing firms are well-aware of all the relevant information and their views on the role of government in educating them about GST.
3. To analyze if the impact of GST is different in different business sectors.
4. To study the impact of GST in their business sector in the short run and their expectation in the long run.
5. To analyze their views regarding any modifications (if needed) in the present system of GST.

**Hypotheses**

The following hypotheses were made about the objectives:

1. “H01” - **Positive Outlook for GST** does not significantly vary across the **Business Sectors**.
2. “H02” - **Improvements required in GST** do not significantly vary across the **Business Sectors**.
3. “H03” - **Challenges of GST faced** do not significantly vary across the **Business Sectors**.
4. “H04” - Perceived **Benefits of GST** do not significantly vary across the **Business Sectors**.

**Methodology**

The study is analytical as well as descriptive in nature. It makes use of both primary data and secondary data. A few enterprises from different business sector were taken as sample for pilot study in order to prepare a well-structured questionnaire to collect information relating to GST readiness of the small and medium enterprises of the nation. The data was obtained by a field survey of the actual enterprises through online and offline modes.

The sample consisted of individuals who were 21 years or older; running a micro, small or a medium enterprise and willing to participate in the study. The survey was conducted in Delhi, Surat, Bangalore, Calcutta and Manipur. August-September, 2017 was considered as the period of study for collecting primary data. Secondary data for the study was
collected from the reports of GST Council, circulars and notifications of Central Board of Excise and Customs, Books, Journals, Yojana Magazine and News Paper Reports.

All data were tabulated and analyzed with the help of statistical tools. SPSS was used for the analysis. Percentages, averages, ratios, factor analysis, Kruskal-Wallis test were used to analyze the data.

DATA ANALYSIS AND DISCUSSION

A. Sample Demographics

Table 1 summarizes the demographic profile of 50 respondents. Out of these respondents, 66 per cent were less than 40 years old. The increasing number of startups in this modern era can be a key reason. Regarding educational qualification, 88 per cent respondents have passed 12th standard, where majority of them were graduates. A good educational background can help an individual to analyze the impact of Goods and Services Tax in a better manner. In the case of Business Sector, most of the respondents were from textile and electronics whereas only 16 per cent were related to Pharmaceutical and Scientific tools. These sectors were selected because of the following reasons:

1. Textile is the second largest employment generating sector in India,
2. Electronics sectors can contribute 25% to India's GDP, and
3. Pharmaceutical and Scientific tools affects the health of the citizens.

Table 1: Demographic profile of the Respondents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 to 30</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>31 to 40</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>41 to 50</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>51 to 60</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>61 to 70</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Educational Qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Passed 10th</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>10th Pass</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>12th Pass</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Graduate</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><strong>Business Sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textile</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>Electronics</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Pharmaceutical and Scientific tools</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>
## B. Analysis of Responses

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Filing of returns should be done quarterly instead of monthly.</th>
<th>GST should have only one tax rate.</th>
<th>GST is better than the past tax regime.</th>
<th>Due to GST, Businesses will not file their true return to the Government.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 50</td>
<td>50</td>
<td>50</td>
<td>50</td>
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<tr>
<td></td>
<td>Missing 0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Frequency Table

- **Filing of returns should be done quarterly instead of monthly.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>29</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Agree</td>
<td>08</td>
<td>16</td>
<td>16</td>
<td>74</td>
</tr>
<tr>
<td>Not Sure</td>
<td>02</td>
<td>04</td>
<td>04</td>
<td>78</td>
</tr>
<tr>
<td>Disagree</td>
<td>07</td>
<td>14</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>04</td>
<td>08</td>
<td>08</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

- **GST should have only one tax rate.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Agree</td>
<td>17</td>
<td>34</td>
<td>34</td>
<td>54</td>
</tr>
<tr>
<td>Not Sure</td>
<td>03</td>
<td>06</td>
<td>06</td>
<td>60</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>30</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>05</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

- **GST is better than the past tax regime.**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>04</td>
<td>08</td>
<td>08</td>
<td>08</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>42</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>Not Sure</td>
<td>05</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>Disagree</td>
<td>13</td>
<td>26</td>
<td>26</td>
<td>86</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>07</td>
<td>14</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
• Due to GST, Businesses will not file their true return to the Government.

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>04</td>
<td>08</td>
<td>08</td>
<td>08</td>
</tr>
<tr>
<td>Agree</td>
<td>12</td>
<td>24</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>Not Sure</td>
<td>09</td>
<td>18</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>Disagree</td>
<td>22</td>
<td>44</td>
<td>44</td>
<td>94</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>03</td>
<td>06</td>
<td>06</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Bar Charts

- Filing of returns should be done quarterly instead of monthly.

- GST should have only one tax rate.
C. Factor Analysis

Prior to performing Principle Component Analysis (PCA), the suitability of data for factor analysis was assessed. For this, Kaiser-Meyer-Olkin (KMO) index of sampling adequacy and Bartlett's Test of sphericity were checked. The KMO index ranges from 0 to 1, with 0.50 suggested as the minimum value for a good factor analysis and the Bartlett's Test of Sphericity should be statistically significant (p < .05) for factor analysis to be considered appropriate (Hair et al., 1998). As seen in Table 2, Kaiser-Meyer-Olkin (KMO)'s value 0.746 and Bartlett's Test of Sphericity (p = .000) both showed enough adequacies of data to support the factor analysis.
Table 2: KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | 0.746 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 349.597 |
| | Df | 153 |
| | Sig. | 0.000 |

As visible in Table 3, Principle Component Analysis (PCA) revealed the presence of five components with eigen value exceeding one. There are four factors resulting from the analysis explaining a total of per cent of variation in 58.743 the entire data set. The percentage of variation explained by the first, second, third and fourth factors are 22.307, 12.642, 12.255 and 11.539 per cent respectively after varimax rotation is performed.

Table 3: Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>2.201</td>
<td>12.226</td>
<td>42.601</td>
</tr>
<tr>
<td>3</td>
<td>1.581</td>
<td>8.781</td>
<td>51.382</td>
</tr>
<tr>
<td>4</td>
<td>1.325</td>
<td>7.361</td>
<td>58.743</td>
</tr>
<tr>
<td>5</td>
<td>1.193</td>
<td>6.627</td>
<td>65.370</td>
</tr>
<tr>
<td>6</td>
<td>0.913</td>
<td>5.070</td>
<td>70.440</td>
</tr>
<tr>
<td>7</td>
<td>0.866</td>
<td>4.810</td>
<td>75.250</td>
</tr>
<tr>
<td>8</td>
<td>0.801</td>
<td>4.452</td>
<td>79.702</td>
</tr>
<tr>
<td>9</td>
<td>0.705</td>
<td>3.918</td>
<td>83.619</td>
</tr>
<tr>
<td>10</td>
<td>0.566</td>
<td>3.145</td>
<td>86.764</td>
</tr>
<tr>
<td>11</td>
<td>0.419</td>
<td>2.328</td>
<td>89.092</td>
</tr>
<tr>
<td>12</td>
<td>0.414</td>
<td>2.298</td>
<td>91.390</td>
</tr>
<tr>
<td>13</td>
<td>0.363</td>
<td>2.018</td>
<td>93.408</td>
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<tr>
<td>14</td>
<td>0.350</td>
<td>1.943</td>
<td>95.351</td>
</tr>
<tr>
<td>15</td>
<td>0.320</td>
<td>1.778</td>
<td>97.129</td>
</tr>
<tr>
<td>16</td>
<td>0.224</td>
<td>1.245</td>
<td>98.375</td>
</tr>
<tr>
<td>17</td>
<td>0.169</td>
<td>0.937</td>
<td>99.312</td>
</tr>
<tr>
<td>18</td>
<td>0.124</td>
<td>0.688</td>
<td>100.000</td>
</tr>
</tbody>
</table>

*Extraction Method: Principal Component Analysis.*
Table 4: Rotated Component Matrixa

<table>
<thead>
<tr>
<th>Rotated Component Matrixa</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>GST will improve the position of the industry.</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is easy to file return in GST.</td>
<td></td>
<td>.609</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Government is properly educating businesses regarding filing return under GST.</td>
<td>.650</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST is being implemented properly.</td>
<td>.630</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The businesses are aware of GST app.</td>
<td></td>
<td>.609</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST will help in maximizing profit in the industry.</td>
<td>.628</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption is Tax department (if exists) is the biggest challenge in GST implementation.</td>
<td></td>
<td>.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST is the cause of decreasing GDP.</td>
<td></td>
<td>.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST will be able to achieve its goal in the long run.</td>
<td>.641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST will benefit both the consumers and businesses.</td>
<td></td>
<td>.666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST is better than the past tax regime.</td>
<td>.735</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to GST, Businesses will not file their true return to the Government.</td>
<td></td>
<td>.521</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filing of returns should be done quarterly instead of monthly.</td>
<td>.540</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST should have only one tax rate.</td>
<td></td>
<td>.630</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST is an effective mechanism to eradicate black money.</td>
<td></td>
<td>.698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST has negative impact in a short run.</td>
<td>721</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government should reconsider its decision of imposing GST.</td>
<td>.595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input tax credit is easy to claim and understand.</td>
<td>.465</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
    a. Rotation converged in 5 iterations.

Based on the results reported in the “Rotated Factor Matrix”, as seen in Table 4, The following factor structure emerged:

- **Factor 1**: The positive outlook of the new tax regime, Goods and Service Tax (like, will it improve the position of industry or will it achieve its goal in the long run) are loaded on Factor 1. Thus, we name this factor as “Positive Outlook”.

- **Factor 2**: The questions suggesting the improvements required for the better implementation of GST (like, should filing of return be done quarterly or does it have negative impact in short run) are loaded in Factor 2. Thus, we name this factor as “Improvements”.

- **Factor 3**: The challenges of this new taxation policy (is it a cause for decreasing GDP of the nation or corruption in the tax department) are discussed in Factor 3. Thus, the name assigned to this factor is “Challenges”.

• Factor 4: The questions evaluating the positive impact of Goods and Services Tax in the long run (like will it benefit the consumers and businesses or is it an effective mechanism to eradicate black money) are loaded in this factor. Thus, we name the factor as “Benefits”.

Thus, factor analysis results clearly suggested that a model with three factors was adequate to represent the data. The four factors collectively accounted for 59 per cent of the variance in the questions framed regarding evaluating the readiness of small and medium enterprises regarding Goods and Services Tax (GST).

D. Reliability of the Scale Used

<table>
<thead>
<tr>
<th>Factors</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Outlook</td>
<td>.810</td>
</tr>
<tr>
<td>Improvements</td>
<td>.701</td>
</tr>
<tr>
<td>Challenges</td>
<td>.648</td>
</tr>
<tr>
<td>Benefits</td>
<td>.755</td>
</tr>
</tbody>
</table>

One of the most widely used measure of internal consistency of a measurement scale is Cronbach's alpha coefficient. The closer the Cronbach's Alpha coefficient is to one, the higher is the reliability of the scale (Nunnally, 1978; Nunnally and Bernstein, 1994). We checked the reliability of all the four factors measured through Factor Analysis. The Cronbach’s alpha coefficient for three factors – Positive Outlook, Improvements and Benefits were 0.810, 0.701 and 0.755 respectively, suggesting the scale used were highly reliable. Only for the 'Challenges' factor, the Cronbach’s coefficient was 0.648 which slightly below the threshold level of 0.7.

Cronbach's $\alpha$ is:

$$\alpha = \frac{N^2 Cov}{\sum s^2_{item} + \sum Cov_{item}}$$

E. Kruskal Wallis Test

To test the Hypotheses (Positive Outlook for GST, Improvement, Challenges, and Benefits of GST, do not significantly vary among the groups made based on Business sector of the respondents), test of Normality of data was carried out and as per Kolmogorov Smirnov and Shapiro-Wilk Test data was not found to be Normal. Hence, Kruskal Wallis a Non-Parametric Test was used.

The Kruskal-Wallis test is an alternative test of Analysis of Variances. It allows the comparison of more than two independent groups. Applying the Kruskal-Wallis Test, we can decide whether the groups are identical or not.
## Hypothesis Test Summary

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>The distribution of Positive_Outlook is the same across categories of Business_Sector.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.161</td>
<td>Retain the null hypothesis.</td>
</tr>
<tr>
<td>The distribution of Improvements is the same across categories of Business_Sector.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.009</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>The distribution of Challenges is the same across categories of Business_Sector.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.766</td>
<td>Retain the null hypothesis.</td>
</tr>
<tr>
<td>The distribution of Benefits is the same across categories of Business_Sector.</td>
<td>Independent-Samples Kruskal-Wallis Test</td>
<td>.374</td>
<td>Retain the null hypothesis.</td>
</tr>
</tbody>
</table>

Asymptotic significances are displayed. The significance level is .05.

The above table shows that there is a significant difference among the various business sector categories of respondents in terms of improvements required in present GST, but no such difference was found among these groups in terms of Positive Outlook, Challenges, and Benefits of GST.

- **Positive Outlook**

![Box plot showing Positive Outlook across different business sectors.](image)

<table>
<thead>
<tr>
<th>Total N</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Statistic</td>
<td>3.657</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>2</td>
</tr>
<tr>
<td>Asymptotic Sig. (2-sided test)</td>
<td>.161</td>
</tr>
</tbody>
</table>

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.
• Improvements

![Box plot](image)

<table>
<thead>
<tr>
<th>Total N</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Statistic</td>
<td>9.399</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>2</td>
</tr>
<tr>
<td>Asymptotic Sig. (2-sided test)</td>
<td>.009</td>
</tr>
</tbody>
</table>

1. The test statistic is adjusted for ties.

**Pairwise Comparisons of Experience (Post-hoc)**

The significant difference was seen in at least one of the groups of respondents based on Improvements required in GST. In order to find which group/s differs, Post hoc Analysis was used for allowing pairwise comparison, the result of which is shown in the following table.

![Node diagram](image)

Each node now shows the sample average rank of Business Sector
Each now tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance level is .05. Significance values have been adjusted by the Bonferroni correction for multiple tests.

The above table shows that groups Textile and Pharmaceutical and Scientific tools differ in their perception on the improvements required in the current GST, so we reject the null hypothesis that improvements required in GST do not significantly vary across the Business Sectors.

• Challenges faced

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.
Benefits

![Independent-Samples Kruskal-Wallis Test](image)

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

For the other 3 factors (Positive Outlook for GST, Challenges of GST, and Benefits of GST), we accept the null hypotheses that they do not significantly vary across the Business Sectors.

Conclusions and Implications

Goods and Services Tax can be considered as a second major surgical strike on tax evaders. For far too long, we have been witness to a maze of taxes and tax laws that have often even left the authorities befuddled. Finally, the dream of “One Nation, One Tax, One Market” is now a reality. The study concludes that there are improvements required in the present GST as the pinch is not felt in the same way by all business sectors, thus the current study is a catalyst to further studies which can come up with more suggestions to the Government for effective levy of the tax.

References


Appendix
Survey Questionnaire
QUESTIONNAIRE
Readiness of Goods and Service Tax (GST)

Dear Respondent

Small and Medium Enterprises (SMEs) have been considered as the primary growth driver of the Indian economy for decades. It is further evident from the fact that today we have around 3 million SMEs in India contributing almost 50% of the industrial output and 42% of India’s total export. For a developing country like India and its demographic diversity, SMEs have emerged as the leading employment-generating sector and has provided balanced development across sectors.
After the passage of the Goods and Services Tax (GST) Bill, the industry is hailing the Government for bringing up this reform which has been long pending because of political deadlocks. Thus, it is very important to analyze the impact of GST on Small & Medium Enterprises (SMEs).

In case of any query, kindly contact +91-98100-83883.

Please answer all the questions below by putting a tick ( ? ) beside your best answer. Your cooperation is highly appreciated.

Name : ________________________________
Age : ________________________________
Educational Qualification : ________________________________
Name of the Organization : ________________________________
Business Sector : ________________________________
Mobile (Optional) : ________________________________

1) GST will improve the position of industry.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure

2) It is easy to file return in GST.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure

3) The Government is properly educating businesses regarding filing return under GST.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure

4) GST will affect consumer behavior positively.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure

5) Inter-state transaction of goods and services been easier through GST.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure

6) Input tax credit is easy to claim and understand.
   a) Strongly Agree  d) Disagree
   b) Agree  e) Strongly Disagree
   c) Not Sure
7) GST is being implemented properly.
   a) Strongly Agree   d) Disagree
   b) Agree           e) Strongly Disagree
   c) Not Sure

8) Filing of returns should be done quarterly instead of monthly.
   a) Strongly Agree   d) Disagree
   b) Agree           e) Strongly Disagree
   c) Not Sure

9) GST should have only one tax rate.
   a) Strongly Agree   d) Disagree
   b) Agree           e) Strongly Disagree
   c) Not Sure

10) The Government has recently allowed rectification of errors without any penalty in the first two months of GST which will have a very positive impact in learning the process.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure

11) GST will succeed in preventing cascading effect of tax.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure

12) The businesses are aware of GST app.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure

13) GST is an effective mechanism to eradicate black money.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure

14) GST has negative impact in a short run.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure

15) The increased rate of tax on services will worsen the demand of services.
    a) Strongly Agree   d) Disagree
    b) Agree           e) Strongly Disagree
    c) Not Sure
16) GST will help in maximizing profit in the industry.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree 
   c) Not Sure  

17) Corruption in Income Tax department is the biggest challenge in GST implementation.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure  

18) GST is the cause of decreasing GDP  
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure  

19) GST will be able to achieve its goal in the long run.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure  

20) Due to GST, Businesses will not file their true return to the Government.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure  

21) GST will benefit both the businesses and the consumers.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure  

22) GST is better than the past tax regime.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree 
   c) Not Sure  

23) Government should reconsider its decision of imposing GST.
   a) Strongly Agree  d) Disagree  
   b) Agree  e) Strongly Disagree  
   c) Not Sure
Accentuating Corporate Compliances: A Trade-off Between Pellucidity and Ease of Doing Business

Despite the Indian economy unveiling a package of measures to foster the economic growth, India still lags behind 129 countries in the “ease of doing business rankings”, including all other BRICS nations.

The number of compliances to start a business in this country are so hefty that it costs the economy in its ease of doing business index. The irony in the current scenario is that the government woes other nations for FDIs but doesn't provide enough incentives to lure them. These are usually bundled up with lots of formalities like dealing with construction permits, taxation, registering property, international trade, enforcing contracts, resolving insolvencies etc.

This paper considers countries excelling in various parameters as benchmark and deals with the key area of improvement which can help India stand in a better position in terms of doing business.

INTRODUCTION

“Ease of doing business index” is an index defined by the World Bank Group. It is an annual report which
comprises the rankings given to various economies based on how flexible their compliances are in line with the needs of the business. The higher the rankings (lower numerical value), the simpler are the regulations and the stronger is the economy in terms of doing business. The report is, above all, a benchmark study of regulations. According to the report issued in 2017, India stands at the 130th position which is very inconsistent with the fact that it is one of the fastest growing economies with rising investments in various sectors. For instance, the first and foremost maneuver in the process, i.e. acquiring land, involves a series of time taking and composite procedures which de-incentivizes the small and medium entrepreneurs to start their own initiatives.

Throughout this research, we observe the compliance structure of various countries which pre-dominate the rankings based on indices defined by the World Bank and a parallel with the Indian economy is drawn so as to address the existing issues and provide recommendations thereon.

Why are these rankings so crucial?

Ease of doing business index of a country is the primary information that a foreign investor seeks while developing his stake in the economy. Especially in a country like India, it has been a topic in the limelight, be it a political or an economic discussion. It has further gained paramount significance in the election manifestos of various political parties in the recent years.

These rankings are universally accepted because of multiple reasons. Firstly, due to the integrity and independence of the World Bank and its ideal research methodology. Secondly, the parameters considered for the ranking are well defined such that they do not leave any of the notable aspect of the Business Environment untouched. The rankings are based on an aggregate of 10 indices such as starting a business, dealing with construction permits, paying taxes, enforcing contracts, getting credit and so on. Each of these factors is assigned a separate ranking after conducting surveys based on multiple questionnaires and then the aggregate ranking is evaluated.

Literature review

The concept of "doing business" refers primarily to states, since all businesses except sole proprietorships are organized under the laws of a state. An enterprise "does business" in a state or locality. Doing business has to do with carrying on the normal activities of a business entity, whether it is a corporation, LLC, partnership, or sole proprietorship. The ease of doing business index is an index created by the World Bank Group. It is an aggregate of a number of factors which are defined by the World Bank as:

Starting a business takes into account the paid-in minimum capital requirement,
number of procedures, time and cost for a small- to medium-sized limited liability company to start and officially operate in economy's largest business city.

Dealing with construction permits tracks the procedures, time and cost to build a warehouse—including obtaining the necessary licenses and permits, submitting all required notifications, requesting and receiving all necessary inspections and obtaining utility connections.

Getting Electricity throws light upon the procedures, time and cost required for a business in order to obtain a permanent electricity connection for a newly constructed warehouse. It majorly focuses on assessing the efficiency of the connection process, the reliability of supply and transparency of tariff and price of electricity.

Registering property examines the steps, time and cost involved in registering property, assuming it to be a land and building that is already registered and free of title dispute. Besides, the topic also computes the quality of the land administration system in every economy. The quality of land administration index has five dimensions: reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution, and equal access to property rights.

Paying taxes documents the taxes and mandatory contributions that a medium-size company must pay or withhold in a given year, as well as gauges the administrative burden in paying taxes and contributions.

Getting Credit explores the strength of credit reporting systems and the efficacy of collateral and bankruptcy laws in facilitating lending.

Enforcing contracts appraises the time and cost for resolving a commercial dispute through a local first-instance court, evaluating whether each economy has adopted a series of bonfire practices that promote quality and efficiency in the legal system.

Resolving insolvency deals with evaluating the shortcomings in existing insolvency law and the main procedural and administrative hurdles in the insolvency process.

Trading across borders deals with the logistical process of import and export. It measures the time and cost (excluding tariffs) associated with documentary compliance, border compliance and domestic transport.

Protecting minority interest computes the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain as well as shareholder rights, governance safeguards and corporate transparency requirements that reduce the risk of abuse.
Discussion

Indian Scenario

As already stated, the position of India worldwide is substandard and deplorable. Each index with India’s ranking and the defined benchmark is discussed below highlighting the prevalent issues in India and the possible recommendations for their improvement. To start with let us first consider the current ranking of our country in individual parameters.

Table No.1- India’s position in various parameters of ease of doing business index

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ranking As In 2017</th>
<th>Changes Compared To 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>130</td>
<td>🔄 1</td>
</tr>
<tr>
<td>Starting a business</td>
<td>155</td>
<td>🔄 4</td>
</tr>
<tr>
<td>Dealing with construction permits</td>
<td>185</td>
<td>🔄 1</td>
</tr>
<tr>
<td>Getting Electricity</td>
<td>26</td>
<td>🔄 25</td>
</tr>
<tr>
<td>Registering Property</td>
<td>138</td>
<td>🔄 2</td>
</tr>
<tr>
<td>Getting Credit</td>
<td>44</td>
<td>🔄 2</td>
</tr>
<tr>
<td>Protecting minority interest</td>
<td>13</td>
<td>🔄 3</td>
</tr>
<tr>
<td>Paying taxes</td>
<td>172</td>
<td>-</td>
</tr>
<tr>
<td>Trading across borders</td>
<td>143</td>
<td>🔄 1</td>
</tr>
<tr>
<td>Enforcing Contracts</td>
<td>172</td>
<td>🔄 6</td>
</tr>
<tr>
<td>Resolving Insolvency</td>
<td>136</td>
<td>🔄 1</td>
</tr>
</tbody>
</table>

(Source: www.doingbusiness.org)

Study of Indices

Starting a business and Dealing with construction permits

To start with the business, one needs to acquire land. The land acquisition process in India comprises a concatenation of complicated steps. A number of windows are to be visited to get various approvals wherein every officer demands a separate fee. The administration is so inherently unorganized that the officers often tend to adjourn the appointments without proper cause and consequently, the time and cost required exceeds. This de-motivates the investor at the initial stage of starting business. The leading example in this category is New Zealand, where the procedure followed to start a business is mostly online, requiring less than a day. The numbers of procedures to be followed are less than 10 in New Zealand, as compared to 35 in India. Also, the cost
required (as a percentage of the cost of the warehouse) is 3.1% whereas the cost in India is as high as 25%.

A possible solution can be a centralized administration with an online portal. For instance, in India, a separate clearance is required from multiple environment departments such as the river, drinking water, forest, pollution etc. which can be conveniently integrated under the same roof. This will lead to a considerable decrease in the required time and cost. Also, in the later stage, an efficient online system for the same can be developed which will minimize the hassle in the whole process. Considerable labour reforms and skill development are also required to ensure better coordination with the human capital. Enhancement of financial markets in order to grant easy access to funds to the small and medium enterprise may also contribute to improvise the situation.

**Getting electricity**

In the current era, where most of the businesses are becoming capital intensive, the importance of power cannot be questioned. In the recent years, the Government of India has been striving hard to ensure easy access to electricity even in the isolated regions of India. This is clearly evident from the consistent improvement in India’s position in this index. Despite the accent from 51st rank (in 2016) to 26th rank in the current year, it still lags behind the dominant countries in this sector. The benchmark here is Korea, Republic, where just 3 procedures are required for getting an electricity connection, as compared to 26 procedures to be followed in India. The cost (as a percentage of per capita income) of the same in the former is 38.30% whereas; it is 45% in the latter. The inspection and clearances procedures are hefty, owing to the limitations of the administration.

It is suggested to improve the efficiency in the administration to curtail the unreasonable delays. It is required to decrease the number of procedures for acquiring an electricity connection to ensure that businessmen can focus on core areas. A proper structure of hierarchy is needed to increase the accountability of staff for accelerating the entire process.

**Registering Property**

Registration of property plays a crucial role to avoid illegal acquisitions but the length and cost of the procedure in India act as a hurdle in starting up of the business operations. From the bygone time, there have been landing issues in India and the mechanism for dealing with them is lethargic and cumbersome. Also, drawbacks of the judicial system lead to an unnecessary elevation in the legal expenses. The country leading in this is New Zealand, where one can get their property registered in just 1 day
by following 2 simple procedures as compared to India where it takes 46 days in fulfilling the required 7 procedures. The cost (as a percentage of property value) of registration is 0.1% in New Zealand. On the contrary, the same in India is 7.7% making a huge impact on its ranking.

A number of steps that can be taken in this direction include, lowering the stamp value, creating a separate judicial wing for handling property disputes regarding business and decreasing the lead time of the registration process.

Paying Taxes

They say, “Nothing in an economy is more certain than a tax.” Taxes have always been one of the most significant areas of interest for every enterprise. The indirect tax is the chief source of tax revenue for the government and hence requires strict compliances. It is very unfortunate for India that despite innumerable tax compliances, which are required for greater transparency, the problem of tax avoidance and evasion still persists. These were originally meant to avoid malafide trade practices but it ended up disadvantaging the ease of doing business index. The data below shows the situation of the economy in this field before the advent of Goods and Services tax implemented in 2017. Though there have been important changes with the introduction of these taxes, but the number of drawbacks is still large enough.

Table No.2- Comparison of tax structure of India and Hong Kong

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Mandatory Contributions</th>
<th>Time Required for compliance (Hours)</th>
<th>Payments Per year</th>
<th>Tax Rate as a percentage on profit</th>
<th>Paying Taxes Rank</th>
<th>Mode of Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>3</td>
<td>74</td>
<td>3</td>
<td>22%</td>
<td>3</td>
<td>Online</td>
</tr>
<tr>
<td>India</td>
<td>25</td>
<td>241</td>
<td>25</td>
<td>60%</td>
<td>172</td>
<td>Joint</td>
</tr>
</tbody>
</table>

Source: www.doingbusiness.org

One of the basic problems of Indian Taxation law is the large number of returns per year, and the mandatory payments that are time and cost consuming. Even after the introduction of GST, the problem still prevails as the number of GST returns is as high as 37 per year. It demands a dedicated department, full of experts in the enterprise, to adhere to these statutory requirements which cost a lot of money to the company. A developing economy does need a lot of funds in its treasury, due to which the rate of tax, (as a percentage of income) is kept very high which is also a problematic issue.

The continuous improvements by the Finance Ministry of India in this direction are indeed a commendable effort, but there need to be changes made to a greater extent to reach to a better position worldwide.
Getting Credit

Being the cheapest source of fund for any kind of business, almost every business relies on debt at some point in time during its lifetime. This has its role especially during the introduction stage of any business. The only problem which arises in this process is the strict norms for checking the credit worthiness of the borrower. The irony is that in spite of the government’s intention to allow more credit in the economy to facilitate growth, it is bound to frame a rigid law, because of increasing Non-Performing Assets in the economy.

Due to heavy compliances and banking regulations, the SMEs tend to rely on informal credit sector which charges a higher rate of interest as compared to banks. Thus, they end up in a debt-trap, hurting the business sentiment of the SMEs.

A free flow of credit information in the market, less stringent laws for small sectors and a widespread network of the banking system to ensure that credit reaches even to the most deserted part of the country is the need of the hour. An efficient system of providing credit is required to avoid inconvenience to the blooming start-ups.

Enforcing Contracts and Resolving Insolvency

The existing law in the country is complicated and there exist a lot of loopholes to be taken advantage of. Thus, a lot of time is taken by the Judiciary to reach a verdict in any order. In addition to this, the liberty of appealing against the decision of a lower court in a higher one makes the justice-seeking process, even more, time-consuming.

The benchmark country in this parameter is Korea (Republic), the facts of which are compiled as follows:

Table No.3- Comparison of sub-indices under enforcing contract and resolving insolvency between India and Korea (Republic)

<table>
<thead>
<tr>
<th>Economy</th>
<th>Enforcing Contracts Ranking</th>
<th>Resolving Insolvency Ranking</th>
<th>Enforcing Contracts</th>
<th>Resolving Insolvency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Economy</td>
<td></td>
<td>Average Time taken to enforce a contracts (days)</td>
<td>Cost (% of claim)</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>1</td>
<td>4</td>
<td>290</td>
<td>12.70%</td>
</tr>
<tr>
<td>India</td>
<td>172</td>
<td>136</td>
<td>1420</td>
<td>39.60%</td>
</tr>
</tbody>
</table>

Source: [www.doingbusiness.org](http://www.doingbusiness.org)
It is evident from the data that India stands at a poor position when compared to the leading economies. The major issues contributing to this situation is the higher average time taken by the judicial system and the cost involved thereon. The number of judges is very less as compared to the population of India. The absence of digitalization in this field makes it even worse. India needs an efficient and effective judiciary to improvise the whole justice-seeking process at a reasonable. The recently passed insolvency and bankruptcy code by the Indian legislature may improvise the rankings in this sector. It will be critical in resolving India's bad debt problem, which has crippled bank lending. The new law attempts to resolve cases within a year, unlike the present procedure which lasts for almost 4 years. It is one of the major initiatives of the government in the direction of easing the doing business index in India.

**Protecting Minority Interest and Trading across borders**

These are the two indices India has been excelling on. Time and again, there have been updating incentives and ease in the field of export. In addition to this, protecting minority interest is one of the fields it ranks great.

**Limitations**

The paper has been limited by the following factors:

a) The report does not directly consider general parameters such as a nation's proximity to large markets, quality of infrastructure, crime or inflation.

b) The list of parameters chosen by the World Bank group is not exhaustive and hence a number of other factors can be considered. The report fails to measure all the aspects that may concern the economy or the investor.

c) To determine their rankings, the World Bank relies on four sources of information: the laws and regulations on the books, experts well-versed in local business practices, national governments, and World Bank staff. The World Bank uses these various inputs to estimate how many hoops a “prototypical firm” must jump through to carry out a set of standardized tasks. As economists Mary Hallward-Driemeier and Lant Pritchett have noted, where the informal economy thrives and regulations are poorly enforced, the de jure regulations measured by the World Bank are often only tangentially related to the de facto processes that businesses encounter.

d) Particularly in case of India, the federal structure has been completely ignored. The assessment of the entire country has been done by considering just two cities i.e. Mumbai and Delhi which makes it lack coverage.

e) Lastly, the entire study is based on secondary data.
Conclusion

The aforementioned discussion helps us to ponder upon the fact that as of now India excels in just 2 out of 10 parameters and there are a humongous hue and cry that follows when it comes to the other parameters. India needs to come up with a feasible model of structural reform that if doesn't act as a panacea to all obstacles is at least able to lure greater Foreign Direct Investments, improve India's international standing when it comes to ease of doing business. Through our research, we have un-layered the deplorable condition and also recommended some tangible changes to go about.

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www.doingbusiness.org/methodology
Are Central Banks creating the next Financial Crisis?

This paper aims at identifying the Internal and External problems Central Banks are creating and analysing the consequences of their action. Since the 2008 Financial crisis hit the world economy, central banks of both developed and developing countries are fighting to revive growth, push demand for credit as well as consumption. In the hindsight, the tools which they have used have either backfired or not delivered the requisite results. In this paper we shall discuss about the problems and consequences of the actions which Central Banks have taken both in developed and developing countries. For developed economies, we have chosen US, Japan and Euro zone which were the worst hit by the 2008 crisis. The measures which they adopted were Ultra-low interest rates (some had negative interest rates), Quantitative Easing and Extensive Bond Buying to revive demand. The situation in developing economies is no different although, the problem is more serious and chronic. Countries like India, Italy and Europe and Central Asia (Excluding High Income Countries) has one of the highest NPA in the world, as high as 10% of total gross loans. The paper identifies the internal and external problems central banks are creating and analysis the consequences of their actions.

INTRODUCTION

The basic function of any central bank in any economy is to monitor and control the supply of money so that inflation is under control. Apart from this, the secondary functions of central banks includes Full
Employment, Stability in Exchange rates with Foreign countries, Moderate long term Interest rates, Sustainable economic growth rate. This can be done through different ways like altering the Interest Rates, Open Markets Operations of buying and selling Government Bonds, Reserve Requirements changes to control the supply of money in the economy.

Apart from this, central banks keeps a check on the functioning of different subsets of capital markets like the bond markets and helps in the development of bond markets if it's underdeveloped like India. Alternatively, they keep a check on the functioning of commercial banks in the economy by laying out different guidelines so that they are not indulged in some unfair practices.

**What central banks in developing countries are collectively doing wrong?**

For developing countries, we have chosen India, Italy and Central Asia (Excluding High Income Countries). The problem in these economies is not of growth as they have revived themselves from the shocks and aftermath of the 2008 financial crisis. However, these economies have one of the Highest NPAs (as high as 10%) and these have now become a hurdle from the economy and a hindrance for growth. Table 1 shows the NPL as a % of the total loans in the banking system

<table>
<thead>
<tr>
<th>Country</th>
<th>Non performing Loans (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>9.2</td>
</tr>
<tr>
<td>Italy</td>
<td>17.1</td>
</tr>
<tr>
<td>South Asia</td>
<td>9.6</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
</tr>
<tr>
<td>Australia</td>
<td>1.0</td>
</tr>
<tr>
<td>North America</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Source - th eglobaleconomy.com*

The NPL problem here is centric to developing countries only where there is one more commonality i.e. the bond markets in these respective countries is underdeveloped which is one of the reasons of such High NPL. Although, there are other country specific reasons also for these high NPL like political influence in India, the divergence of monetary and fiscal policy in Italy.

Developed countries on the other hand have developed bond markets and hence low level of NPL in their economy. Table 2 here exhibits the bond market size of different countries, total of the world global bond market share
### Table 2

<table>
<thead>
<tr>
<th></th>
<th>Bond Market Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Italy</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>South Asia</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Japan</td>
<td>14%</td>
</tr>
<tr>
<td>Australia</td>
<td>10-12%</td>
</tr>
<tr>
<td>US</td>
<td>33%</td>
</tr>
</tbody>
</table>

*Source: [www.fred.stouisfed.org](http://www.fred.stouisfed.org)*

There is direct negative correlation between the size of NPA and the bond market size, this is because if the corporate bonds would have listed in the markets, then any negative news with respect to the company like default in interest payment or a breach of any negative covenants would drag the price of the bonds and increase the yields for that bonds classifying it as risky bonds. This would hamper the goodwill and credibility of the company in the market and the company would not raise funds in the future.

Moreover, if companies opt for bond market to raise capital, this would help banks to not service the credit requirement of corporates as they have high funds requirement and bank's loan portfolio will be centric to few big corporate, this will not minimize the bank's risk with respect to the default risk.

**Japan- A perfect example**

*Figure 1- Bond Market as % of GDP*

*Source: [www.theglobaleconomy.com](http://www.theglobaleconomy.com)*
Figure 2- NPA as % of total deposits

Source- www.globaleconomy.com

As we can observe in the above figure a significant rise in the development of Bond Market has led to the fall in NPA of the banks, as this has given a platform to the Corporate Giants to raise a substantial capital from that source apart from raising money from Banks and if there is any Bad news about the company that has came up in the market it has been corrected in the Market itself apart from hindering the Loan profile of the Company.

Although there are several other factors for a sharp decline in NPAs but this can be considered as one of the prime example where Japan had seen a development in their bond markets and a sharp decline in the bank's NPA.

**What Central Banks in Developed Economies collectively doing wrong?**

There has been various Crisis in the past ranging from the The Great Depression to the 2008 Global Financial Crisis which have left have a chronic impact on the functioning of the major economies on the globe. But the question which arises here is that have the Central Banks Learned from this?

Whenever a country is being Hit by a crisis all its Population looks at the Central Bank, as the lender of the last resort and think now only they can bail out us out from this situation. Central Banks of both the Developing and the Developed countries fight to revive growth push demand for both credit as well as consumption and Investments so as to provide a sustainable future for its people. In this Hindsight we will highlight the major shortcoming of the tools which they have used have either backfired or not delivered the required results and would also throw some light on the current picture of their policies and workings which would lead to another devastating situation.
2008 SUBPRIME FINANCIAL CRISIS

Going 10 years back in the history we find the disastrous crisis hitting the world economy ie, SUB PRIME CRISIS. During the early 2001 US economy experienced a mild, short lived recession so in order to keep recession away the Federal Reserve lowered the Federal Funds rate 11 times from 6.5% in May 2000 to 1.75% in December 2001 thereby creating a flood of Liquidity in the economy. As due to this measure it was an easy prey for rest less bankers to lend to more restless borrowers who had Less Income, No Job and even No Assets.

So when living a dream of acquiring a house for such people was becoming a reality facilitated by ease of obtaining Credit from the market then there has to be a great appreciation in the prices of such houses and exactly the same thing happened, the market was getting filled with Loans of Bad Credit Risk. Fed still didn't got the smell of such disaster and kept on slashing the Interest rates to record low in 45 years to 1%. The whole picture of Financial Market was being getting resembled to a Credit Market where everything was being easily obtained at Huge discount and without any Down Payment. Unfortunately there was no one to warn the Federal Reserve about the turmoil which was likely to arise later.

The Bankers then decided to repackage these housing loans and pass the Debt to another player in the market in the form of Collateralized debt obligation. The game was going was going on very nicely until when Fed just seemingly woke up and raised the Interest rates to 5.25% on June 30, 2004 which remained constant till August 2007 and home ownership at that time reached to a Saturation point.

The early signs of decline could have been discovered when house ownership peaked almost 70%. Further during end of 2005, housing prices started to fall which led to a 40% decline in the US Home Construction Index, due to this many subprime borrowers began on defaulting on their loans due to higher interest rates. Then in 2007 the situation even worsened that every month, one Subprime lender or another was filing for bankruptcy and this domino effect flooded the whole markets with default after another. Various Big Organisations like Lehman Brothers, Indymax bank also collapsed. By October 2008, the Fed funds rate and discount rates were reduced by 1% and 1.75% respectively. Central Banks all over the world also resorted to rate cuts to aid the world economy but such, liquidity support and rate cuts in itself were not enough to stop such a widespread Financial meltdown.

JAPANESE DEFLATION

At the end of 2012, the Japanese Central Government was under 997 trillion Yen in Debt. The interesting part here is that it is about 200% of their GDP and more than $80000
Debt per Capita. There is a very little chance of it ever being paid back and the situation is every time is getting even worsened.

So let's trace back in time and let's see how Japan landed up in such a situation and how Japanese Central Bank failed to bail it out from that. It's necessary to understand how the Japanese government firstly accumulates such a high debt at the very first place. The tax received by the government in the past few decades have been less than the expenses incurred by it, so it started borrowings from the external sources to meet its revenue expenditure. The Japanese Government used to borrow money by issuing IOU to the foreign institutional investors. In the initial years it was good going for the govt and the Bank of Japan but they ignored the consequences that would be generated later. As time passed the Debt got increased overtime and the investors started to worry about their investments, now here is when the Bank of Japan came into the picture, BOJ during the successive years lowered the interest rates, which basically means it would print currencies until the interest rates would hit its targets satisfying the investors that their investments are safe. Successively the investors keep buying the govt. IOU and the debt accumulated during the course of action.

During 2011, when the investors saw that the government Tax revenues are not even enough to meet its interest expenditure they started selling their bonds thereby raising the interest rates in the markets, Now after this the Japanese Government tried to increase their tax revenue by raising tax, but the outcome which generated was that it increased the inflation growth in the economy.

**Figure 3- GDP Growth in real terms**

![GDP Growth in real terms](www.bloomberginternational.com)
The Central Bank's policies to overcome Debt burden in 2014 backfired completely to the country of increasing the Sales Tax due to which the Consumer Spending and the Gross Domestic Product fell, sending the economy into further recession as the inflation rate clipped 0% indicating the failure of BOJ to overcome Deflation.

**Figure 4- Bank of Japan Balance Sheet**

![Aggressive easing](source: www.bloomberginternational.com)

The quantitative easing measure further adopted by BOJ, further failed to produce the goods for the economy as the Japanese Yen appreciated to 80.6% in the first quarter of 2016 as compared to 34.5% in 2013 as the exports were facing a Bullish time along with the stock market until 2013 as afterwards the monetary stimulus lowered the exports as they became expensive in the International Market and began further widening the gap in the Fiscal Deficit this Aggressive easing measure adopted by the govt. also made it impossible for it to attain the 2% interest rate target.

**Conclusion**

Central Bankers across globe are well equipped with the resources both monetary and human but have failed to tackle the crisis which persist in their respective economics. These central bankers have not learnt from the mistakes done by their peers as shown by the example of Japan in both cases. Moreover, the policies adopted are unconventional monetary policy tools which don't have any positive results in the past and have majorly backfired.

Central Banks needs to understand the crisis which they knowingly or unknowingly are creating by using fancy and new tools to tackle the problem statement. Once a learned
man rightly said that, “it's very difficult to teach academicians the basic foundations of their respective fields.” It's time central bankers should stick to the basics of monetary policy or we will be witnessing another crisis with greater magnitude of 2008

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How Secure is our Data?- An Analysis of Data Privacy and Data Security in this Digital Era

This paper aims at analysing the issues pertaining to data ownership, security, privacy and protection in the light of ever increasing collection and usage of individual’s personal data by banks, e-commerce companies and other government and private corporate institutions. It seeks to examine the question “To what extent does one have rights on his personal data?” Furthermore, it scans the probable impacts of the landmark decision declaring Privacy a fundamental right on the activities like data mining and big data analysis at the national level. In the era of rapid digitalisation and big data, this verdict certainly calls for new, relevant and impactful laws in this sphere.

INTRODUCTION

“No person shall be deprived of his life or personal liberty except according to procedure established by law.”

-Article 21 of the Indian Constitution

As per the landmark judgement passed by the Supreme Court on 24th August, 2017, right to privacy forms an integral part of right to life as granted by the article 21 of the Indian Constitution. At the same time, this right is not absolute and is subject to reasonable
restrictions under article 19(2) in case it interferes with national sovereignty and integrity, security of the state and public interest.

After this milestone judgement, the Supreme Court has expressed concern over the inroads into right to privacy in this digital age, thereby calling for a data protection law which ensures that the data collected is prevented from being used for unauthorised purposes. However, we are yet to see what new developments take place in the legislative arena to strengthen informational privacy.

Data privacy and security aims at ensuring that an individual or entity's personal data is protected from unauthorised use and is not released in public domain without the owner's consent.

**How secure is our data: The nature of threat**

Individuals often get product promotional messages from companies with which they have never transacted in the past or shared their contact details. Have you ever wondered, “How”? When we share our contact details with one company, these details might then be shared by this company with third parties as well thereby causing a threat to our data privacy and security.

Though every application or website provider claims that it puts in place a data policy to safeguard the data security and privacy needs of the users, the purpose is not fully served in reality. In spite of this, it is often alleged that user's personal data is sold by these sites to third parties for a price and used for purposes other than those authorised by the users. In the absence of any definite legal requirements, providers create their own data policies and take users' approval.

With the increasing number of profiles that users maintain on different websites, they either find it too taxing to read their terms and conditions or only skim through their data policy without really ensuring whether their personal data is fully secure or not. In some cases it is also found that providers initially promise to provide data protection, but change their policy at a later date which makes data less secure.

**Issues related to data privacy and security**

Data security threats are faced by almost everyone, be it individuals, corporate entities or government. Thus, the issue of
informational privacy and security needs to be analysed at three distinct levels so as to
get a holistic view of the current scenario and the required data protection laws. These
three levels have been briefly discussed in this paper.

At the individual level, we share a lot of our personal data with banks, insurance
companies and educational institutions which must be kept secure through restricted
access and proper identification and authentication.

In this digital era, our frequency of creating user accounts, filling up our personal data is
on an increase. Unlike private corporates and the government that are relatively more
conscious regarding the safety of the enormous data that they store and use, individuals
tend to leave their data under-protected most of the times due to lack of awareness and
understanding.

In the context of privacy of one's data after it has been provided to a particular entity, the
case of Canara Bank is worth highlighting. “Parting with information does not deprive
the individual of the privacy interest. The reasonable expectation is allied to the purpose
for which information is provided,” held the court. (Ref: District Registrar v. Canara Bank,
2005) Put simply, this means that an entity has no right to bring its customers’ data in
public domain without their consent.

One needs to be really cautious while deciding with whom and to what extent should he
share his personal data.

At the private corporate level, corporate houses are custodians of data of a large
number of people. Here, leakage of enormous confidential data in the public domain is a
grave issue. One of the major threats that business organisations face in relation to data
privacy and security is Insider Threat (CERT). People from within the organisation may
leak out the organisation's confidential information for self-interests.

In the light of recent incidents of data leakages of millions of customers of foreign
organisations, data safety has become an even more serious issue. If foreign
organisations are not confident about the security of their data, they might back out
from Indian markets thereby adversely impacting the economy of our country.

At the government/administrative level, the state needs to maintain a large amount
of information in relation to governance and national security to which it has exclusive
access rights. Such data needs to be protected from intruders who might use it for
purposes leading to adverse impacts on national security and public interests. When
citizens apply for various essential documents with the government agencies, their
personal data gets stored in the national databases which need to be protected.
Solutions to the data privacy and security concerns:

A comprehensive approach to data protection requires solutions at four interconnected levels. The ways through which data security and privacy can be ensured to a reasonable extent are behavioural, technological, procedural and legal.

![Figure-2: Solution Levels For Ensuring Data Privacy And Security](image)

1. Behavioural solutions: These refer to the conduct of users regarding the data usage. Users need to be vigilant and careful while providing their data to different online and offline organisations. Need is to cautiously read and understand the data usage policy of the platform before sharing any personal data with it.

2. Technological solutions: With the deployment of various kinds of cloud computing technologies at the individual as well as corporate level, the need for proper backup, archive and recovery procedures have arisen to prevent loss of data. Numerous softwares like MacAfee, OneTrust, and TrustArc are available in the market that assists in data protection.

One of the technological solutions is data masking, which helps in preventing unauthorised use of sensitive data. Under this method, a part of the data is converted into a form not readable by general users. For example, banks show only last 4 digits of the customers' national identification number to their representatives. (Wikipedia)

*End-to-end encryption* is a technology that enables only the communicators to read the messages thereby preventing it from third party access and inference. Its purpose is to prevent the data from being tampered with while in transit. Whatsapp shows the following message “Messages to this chat and calls are now secured with end-to-end encryption.”

*Server and client authentication:* Applying the private and public key infrastructure, the certifying authority needs to certify the physical and virtual servers, users and network devices to prevent unauthorised access. Only the users in possession of the requisite keys can access the data.

(Information Technology Act, 2000)

*Creation of security domains:* Creation of ‘federated clouds’ is another way of keeping data privacy intact. A federation is a group of entities that can legally access
and share the data stored on a cloud subject to the mutually agreed terms and conditions. Federal clouds can interpolate (exchange data and resources) through defined networks only.

3. Procedural solutions: Data security audit refers to the procedure of systematic and independent examination of how secure the data in any organisation is. Business organisations mandatorily need to get their information systems audited by a qualified authority to ensure that their data storage and handling mechanisms are secure. This procedural check makes these organisations more conscious towards the compliance of data privacy and security norms. Such audits focus on physical, logical and behavioural aspects of data protection. They check the sufficiency and appropriateness of security systems installed by an organisation.

4. Legal solutions: Currently, India lacks in exclusive laws on data protection. The Information Technology Act, 2000, Intellectual Property Act and contractual relations define the standards for data protection in our country.

The IT Act contains provisions to prevent the unauthorized use of computers, computer systems and data stored therein. The act fails to fix the liabilities of internet service providers for breach of data privacy norms while transmitting customer data.

The Intellectual Property Laws also provide safeguards against infringement on data privacy by penalising copying of copyrighted data from systems.

National Association of Service and Software companies (NASSCOM), has been active in the sphere of formulating data protection policies at the private level. A central database called the national skills registry has been created to compile and maintain the database of all BPO and IT companies' employees in India. Also, a self-regulatory organisation to monitor data protection in the BPO sector has been set up.

With the comprehensive verdict on privacy, the TRAI is actively participating in bringing a check on customers' data storage and usage by the leading mobile phone companies. In mid- August, 2017, the IT ministry asked 30 handset companies to share the security protocols they follow to secure mobile phones, triggered by threats of data misuse especially by companies which have servers based in China. Furthermore, verification and audit of devices wherever necessary would be conducted with an aim to ensure the privacy, security and protection of user data.

**Dealing with Big Data: An analysis of the impact on data mining and innovation**

Just scrolling through the common wall of your Facebook profile and you see a list of products you recently checked for on an e-tail website like amazon or flipkart under the
head 'things you may like.' Ever wondered how does Facebook get to know what you searched for on other websites? This is all a result of online tracking, information circulation and target advertising called Digital Advertising Alliance- an application of big data mining.

Data mining refers to the process of examining and analysing an enormous existing database using artificial intelligence and efficient knowledge discovery techniques to derive new, futuristic and advanced information. Technological advancements have facilitated the collection and processing of huge personal data to analyse shopping habits, banking activities, medical records or other related data. In a developing country like India, data mining plays a significant role both in regulation and innovation. Thus, the Supreme Court in its judgement has recognised Innovation as a vital ground for claiming reasonable restrictions. Without any prejudice to the data privacy and security, data must be permitted to be used for innovation. (The Times of India)

However, it is evident that companies especially in the telecom, financial services and banking sector will now need to obtain multiple layers of consent from the customers before sharing their data with third parties.

**Conclusion and Recommendations**

Despite privacy being pronounced as a fundamental right and numerous initiatives being taken by the government and private companies in the realm of data protection, India still needs to go a long way before our data could be really secure and free from unauthorised access and consumption. The existing laws under the Information Technology Act need additions and modifications to benefit the current requirements.

Need is to conciliate data security and privacy. Though the two mostly go hand in hand, at times ensuring data security might lead to an impingement on data privacy. Employment of methods like user authentication for anomaly detection, collecting data provenance and tracking user location to ensure data safety leads to collection of users' privacy sensitive data by the administration, thus giving rise to security v. privacy conflict. Need is to device and implement methods which balances the two aspects thereby ensuring complete data protection. A few measures that balance data security with privacy are:

1. **Privacy safeguarding access control for data on a cloud:** Through this technique, unauthorised access to data can be prevented by using the identity information about users for data stored in public cloud without requiring this information to be disclosed to the cloud.

2. **Privacy safeguarding location based access control:** Under this method, authorised users can access data only from systems located at recognised secure locations.
Attempts to access data from unsecured locations will be denied without disclosing users’ location to the control system.

With the Indian digital economy being worth $500 million at present, it is certainly going to be a complex task to balance data usage for development and innovation with data privacy and security.

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HEALTH IS WEALTH- There are many pillars of a growing economy- Education, Employment, Infrastructure and Healthcare. This research paper revisits the Healthcare system in India and directly draws the link between growing economy and the ever-growing healthcare system in India. We look forward to cover varying aspects of healthcare system of our country and also look at opportunities at our disposal including aspects relating to medical tourism, increased employment opportunities in this sector, a look at the new health policy of the government, how an economy of a country and health of its people is related and the new health policy.

INTRODUCTION

A nation will be prosperous when its human capital is fully utilized. It can be fully utilized only when it performs well in all the parameters of Human Development Index which measures the overall well-being and prosperity of human resource of a particular country. It consists of three parameters which are Healthcare, Education and Income level. Healthcare is one of the most important indicators of well-being, development and prosperity. Our Research paper elaborates extensively on the Healthcare system in India.

The history of healthcare in India is long drawn. From plastic surgery being performed by Shushruta way back in 6th century B.C to the invention of one of the most superior forms of medicine- Ayurveda. The Indian system of medicine didn't only phantom on illness and
standalone treatment but also combined concepts such as diet, beliefs, and culture into treatment of people. Fashioned on these multi-dimensional approaches was the Indian system of healthcare. The healthcare system in India has evolved since then but today the situation is grim and the public healthcare system is in shackles. Despite India’s impressive economic performance after the introduction of economic reforms in 1990’s, progress in advancing in health status of Indians has been slow and uneven. More than 250 infant deaths in a month in Gorakhpur and more than 600 deaths of children in a hospital in Ranchi and numerous cases like these have time and again proved that healthcare system in India needs a serious rethinking. Growing population and rising middle class in recent years has been marked by a "dual disease burden" i.e. a continuing rise in communicable diseases and a spurt in non-communicable or "lifestyle" diseases, which accounted for half of all deaths in 2015. Despite problems healthcare has become one of India’s largest sectors, both in terms of revenue and employment.

WHERE DOES INDIA STAND?

India has a lot of catching up to do with its neighbors, including China, Bangladesh, Bhutan and Sri Lanka in terms of healthcare. According to the Global Burden of Disease Study (GBD) published in the medical journal- The Lancet, it has finished a dismal 154th among 195 countries on the healthcare index. India has a score of 44.8 and lags behind Sri Lanka (72.8), Bangladesh (51.7), Bhutan (52.7) and Nepal (50.8) and ranks above Pakistan (43.1) and Afghanistan (32.5). The HAQ index, based on death rates for 32 diseases that can be avoided or effectively treated with proper medical care, also tracked progress in each nation compared to the baseline year 1990. As per the study, India has performed poorly in tackling cases of tuberculosis, diabetes, chronic kidney diseases and rheumatic heart diseases. The journal lists India among the biggest underachievers in Asia in healthcare access. When we compare India to other BRICS and SAARC nations, we score lowly in almost every single welfare indicator. Some of the third world countries outperform India in healthcare. India ranks a low 187 out of 194 countries on health expenditure as a percentage of the GDP. India spends just 1.3 per cent of its GDP on healthcare. This figure is much lower compared to BRICS countries - Brazil spends around 4.66 per cent, Russian Federation 3.15 per cent, South Africa around 4.33 per cent and China around 3.1 per cent. Around 62% of the health expenses incurred by Indians is met using personal savings, called “out-of-pocket expenses,” compared with 13.4% in the U.S., 10% in the UK and 54% in China. Among SAARC countries, Afghanistan spends 8.2 per cent, Maldives 13.7 per cent and Nepal 5.8 per cent.

Population Foundation of India (PFI) has said low spending by the country in the (health) sector has caused growing inequities, insufficient access and poor quality of healthcare services.
Table-1: South Asia and China- Selected Health Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>India</th>
<th>Bangladesh</th>
<th>Bhutan</th>
<th>Nepal</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy (years)</td>
<td>65</td>
<td>69</td>
<td>67</td>
<td>69</td>
<td>65</td>
<td>75</td>
<td>73</td>
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<tr>
<td>Infant mortality rate (per 1000 live births)</td>
<td>47</td>
<td>37</td>
<td>42</td>
<td>39</td>
<td>59</td>
<td>11</td>
<td>13</td>
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<tr>
<td>Under 5 mortality rate (per 1000 live births)</td>
<td>61</td>
<td>46</td>
<td>54</td>
<td>48</td>
<td>72</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Maternal mortality rate (per 100000 live births)</td>
<td>200</td>
<td>240</td>
<td>180</td>
<td>170</td>
<td>260</td>
<td>35</td>
<td>37</td>
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<tr>
<td>Access to improved sanitation (%)</td>
<td>34</td>
<td>56</td>
<td>44</td>
<td>31</td>
<td>48</td>
<td>92</td>
<td>64</td>
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<tr>
<td>Infant immunization (DPT) (%)</td>
<td>72</td>
<td>96</td>
<td>95</td>
<td>92</td>
<td>80</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Infant immunization (measles) (%)</td>
<td>74</td>
<td>96</td>
<td>95</td>
<td>88</td>
<td>80</td>
<td>99</td>
<td>99</td>
</tr>
</tbody>
</table>

Sources: Human development report 2013 and World Development Indicators.

The above table clearly indicates that countries like Nepal, Bangladesh and China outperform India in almost all of the health indicators. India needs to up its game by investing heavily in its health sector for overall economic development.

MILESTONES

The Indian healthcare system is not all about failures. There is also a positive side where in, the healthcare system in India has achieved what used to once look like unachievable.
After Independence when India wasn't just suffering the ravages of partition but was also in the throes of a severe health care crisis with famines, drought, epidemics, maternal mortality, and almost absent health care service. While we still have a long way to go, our country has made great strides in ensuring universal healthcare to its people.

In recent years India's public spending on health has increased to nearly 15% of the total health-related costs of its citizens. Some of the milestones are discussed below-

- **LIFE EXPECTANCY**- At the time of independence the average life expectancy in India was just 32 years, today the average lifespan of an Indian is over 66 years.
- **SMALL POX** - Immunization programs launched at the start of the 1970s were hugely successful and India was declared small pox free in 1975.
- **POLIO**- Till the early 1990s, at least 200,000 to 400,000 cases were reported annually, today that figure is 0.
- **MATERNAL MORTALITY**-The maternal mortality rate was recorded as 437 per 100,000 births in 1992, a figure that is believed to have dropped to approximately 135 today.

**OUR EXPERIENCES**

We visited Gharunda in Haryana and Sahibabad in Uttar Pradesh to assess health conditions there and see how rural and semi-urban healthcare system work. We found two contrasting situations.

Our visit to Sahibabad which is close to Ghaziabad in Uttar Pradesh showed us how people trusted the government hospital but also complained about non- availability of doctors at all the times and how the hospital is over-burdened due to absence of additional beds. There are quite a few private healthcare centers in Sahibabad which offer quality services but at exorbitant rates which is used only by well-to-do people. Sahibabad as a region has a mixed populous in terms of presence of both middle class and poor people. Our experiences and visits to Sahibabad highlighted few key features about the real Health Industry situations of our country. Sahibabad's demographics are a replica of a normal village or sub-urban area in India with approximately 3 income-levels and 3-4 religious backgrounds. This village was chosen by us because of two major reasons, the demographics present a perfect sample village for research and also because there are both government and private players along with elite private class health care units. The presence of both the sectors at the same time, has a great advantage and helps us to satisfy two goals at the same time i.e people's preferences for a particular sector and reasons for the same too. After 4 rounds of rigorous survey and analysing data of 380 respondents, we realised that people usually prefer Government services in the rural areas because of few major reasons like credibility, perception of people that in a country like India healthcare is a public sector enterprise which means
affordable services are still a government responsibility with a view of mass inclusion. The only prevalent reason for shift to private sector is quality and waiting period in terms of time spent due to shortage in infrastructure.

This gave us two major insights: Even after so much of backlash from capitalists, media houses; the rural masses still trust government and are dependent on it for services and resources.

The major issue in this sector apart from quality is infrastructure in terms of beds, medicines etc which can be solved with a comprehensive transparent system. A ray of hope- this visit helped us remove the negativity and apprehensions with regard to our country’s government sector that can be revived through substantial efforts.

After visiting Gharunda in Haryana to assess the healthcare system, we were shocked to see the heart breaking reality in the villages there. We visited a cluster of 30 villages in Gharunda which are among the poorest of the poor villages in the state. These villages lack basic services in terms of no presence of quality education, roads, communication and healthcare. The villagers have to travel miles to the visit PHCs in the Gharunda town or travel all the way to Karnal, foregoing day's income for a basic checkup. 80% of the people in these villages are economically poor and are daily wage laborers. These villages lack PHCs and there are no hospitals in the near vicinity of these villages. Owing to the presence of hard water, there are a lot of water-borne diseases too. The positive side remains in terms of presence of local Anganwadi centres in which immunization of children is taken care of. These villages also face sanitation problems and perform really poor on socio-economic indicators.

Our conclusion from the visits is that regions close to cities still perform better in regard to the availability of basic health facilities. But regions in rural areas face the brunt of inadequate allocation of funds towards the healthcare sector in general. There are still scores of such villages which are completely untouched for the basic healthcare facilities and focused attention is required in this regard.

ECONOMY AND HEALTHCARE

The health of a country has profound effects. Its impact is just not limited to the people and their quality of life, but it also has the ability to increase or slow a country's economic development and growth. The health status of a population can contribute substantially towards the economic development of a country via increased productivity, improved learning, demographic effects and reduced treatment burden.

A study by Joanna Zator-Peljan reveals that economy of a country and the health of its people is co-related. Findings revealed that better health in the form of higher life
expectancy and improved child health may lead to a decrease in the impregnation rate hence adults will participate more extensively in the labor market, allowing them to obtain higher per capita income.

The health care industry is a $100 billion industry which is growing at a speed of 15% per annum and is expected to become $280 billion industry by 2020. It is indeed a clear signal that healthcare is going to be a major sector that stimulates economic growth and contribute to employment. Over 40 million new jobs are expected to be generated by 2020, as per a report titled 'India's New Opportunities-2020' by the All India Management Association, Boston Consulting Group and the Confederation of Indian Industries (CII).

KERALA- BEACON OF HOPE

India moved towards reliance on private healthcare without developing the support of basic public health facilities. On the contrary, in Kerala, a major expansion of public health services was accomplished before the large scale expansion of private medical care. There was universal health coverage by the state and the private care developed much later for catering to the rich. The state allowed and encouraged the auxiliary facilities of private healthcare to enrich a well functioning state system. Kerala experienced growth, which was in a way related to the development of human capabilities.

ROAD AHEAD

<table>
<thead>
<tr>
<th>HEALTH ACCOUNTS</th>
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<tbody>
<tr>
<td>Expenditure on health care</td>
</tr>
<tr>
<td>- Kerala spends 6.3% of its GDP</td>
</tr>
<tr>
<td>- Public expenditure 1.5% of GDP</td>
</tr>
<tr>
<td>Highest per capita expenditure on health in India</td>
</tr>
<tr>
<td>- Kerala Rs. 7,636 (Public per capita spending Rs.1,765)</td>
</tr>
<tr>
<td>- Punjab Rs. 6,000</td>
</tr>
<tr>
<td>- Haryana Rs. 3,600</td>
</tr>
<tr>
<td>- India Rs. 3,800</td>
</tr>
</tbody>
</table>

| Health-care expenses |
| - Households pay 76% |
| - Government 19.6% |
| Health spending |
| - Rs. 25,000 crore |
| - Medicines 36.7% |
| - Inpatient services 26.6% |
| - Outpatient expenditure 9.5% |
| - Patient transportation 4% |

<table>
<thead>
<tr>
<th>BEST &amp; WORST PLACES FOR NEWBORNS</th>
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<tbody>
<tr>
<td>BEST STATES</td>
</tr>
<tr>
<td>Kerala 6</td>
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<td>West Bengal 27</td>
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</tr>
<tr>
<td>Bihar 48</td>
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</tr>
<tr>
<td>Jharkhand 44</td>
</tr>
<tr>
<td>Rajasthan 41</td>
</tr>
</tbody>
</table>

If India had the same IMR as Kerala about seven lakh children would be saved every year.

GLOBAL COMPARISON

<table>
<thead>
<tr>
<th>Country</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile 4</td>
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</tr>
<tr>
<td>Cuba 5</td>
<td></td>
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<td>India 6</td>
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<td>Russia 8</td>
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<tr>
<td>China 9</td>
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<tr>
<td>Brazil 15</td>
<td></td>
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<tr>
<td>Sri Lanka</td>
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</tbody>
</table>

National Health Policy, 2017

Although it took India 15 years to frame a new health policy from 2002, it has certain merits from the economic and impact front:

- Raising public health expenditure from 1.3% of the GDP to 2.5% with special focus on
primary healthcare would benefit rural areas and also have a huge economic impact with increasing GDP and production.

- The concept of 'Health and Wellness Centers' that aim to provide a larger package for primary healthcare at the grass-root level can help develop primary centers with less capital requirements thereby increasing impact.

- Regulatory bodies to keep a check by standards, quality-check and indices would help develop the qualitative aspect as well. Apart from these the blend of MAKE-IN-INDIA concept by reforming the regulatory framework for drugs and devices manufacturing, thereby helps in reducing costs further.

- Increasing life expectancy from 66 to 70 years, 2 beds per 1000 population, reduce mortality rate of under 5 year old to 23 by 2025; are all achievable figures if requisite funds are allocated and used.

Though a positive step to start something new, the policy had certain drawbacks, ranging from:

- Low expenditure as compared to global trends, though we have increased expenditure targets but they still very low to world average of 4.9% and the WHO's optimum public spending figures.

- As compared to the fastest growing economy concept, we need to have above par life expectancy as per global records. When we aim to achieve 70 by 2025, Sri Lanka and Bangladesh have already ousted us.

- Change in status of government from service provider to 'strategic purchaser', though private players can help us increase the quantity & quality but private facilities barely exist in underserved areas where the gap in healthcare services is the worst. The provision of insurance schemes through private players too has a huge amount of risk where the underprivileged can be easily subdued.

- Indirectly the government is cutting down its health care expenditure and also the government's pledge of “health assurance" seems to be restricted to a basic package of services at the primary level to be delivered by public services targeted at the poor. There will continue to be poorly functioning and under-resourced public facilities at the secondary and tertiary levels and increasing insurance-based provision of care will mainly be outsourced to private facilities.

- This has a very negative side that though acute diseases can be curbed but the major chronic diseases still won't have a solution for the majority chunk of our population.

Thus a balance in both the primary and secondary and tertiary healthcare with more regulatory framework for private players to make the industry welfare-centric too might be something very important.
Medical Tourism:

- Tourism in India is one of the fastest revenue generating industry contributing around 5.92% of the national GDP and providing employment to over 9.24% of the total country’s workforce.
- India is emerging as a leading nation for people across the world for medical treatment owing to affordable and cheap healthcare as compared to North America and Europe.
- The Indian government issued more than 1.78 lakh medical visas in 2016, including for follow up treatment, as against 1.22 lakh in 2015. It is a clear indication that India is becoming a mega hub of medical treatment to foreign patients.
- Majority of the patients coming to India for treatment are from the Middle East, Africa, Bangladesh, Afghanistan, Maldives, Pakistan, Bhutan and Sri Lanka. India’s cost advantage will significantly open doors to the US and Europe over future, due to lower cost than the US and almost half that of Europe.
- More tourists are coming to India because cost of treatment here is much less compared to the US and the European countries. We are also trying to integrate medical tourism with normal tourism," said Parvez Dewan, Former Secretary, Ministry of Tourism-Government of India.

![Bar chart showing medical tourism arrival and FTA in India](image)

WHAT WE INFERENCE

- Healthcare industry in India has a great future with respective to the new liberal policy and development of profit clause in the existing industry has attracted and will continue to attract big houses to invest and develop it as a competitive industry thereby benefiting the consumers in the long run.
• But, as the other side of the coin there needs to be a check on the private players to not let them overpower the welfare clause. The recent policy of the government to put a cap on the maximum price to be charged on medical devices will help increase the impact and make healthcare more accessible by the poor. Social entrepreneurship projects can play a vital role in improving the healthcare facilities in the interiors of our country.

• The startup era, with the youth and innovative ideas can make this industry even more competitive leading to better results in long run also apps can make services more accessible. It’s universal that technology has a better accessibility than human reach so its beneficial too.

• The development of better health infrastructure has an additional benefit for the country and GDP, i.e. flow of foreign exchange in terms of medical tourism, a recent trend.

• Thus a liberal-cum-regulatory policy, young blood and growth trends can cast a great image on our healthcare industry benefiting the rich and poor together.

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Inflation Targeting

This paper aims to study Inflation Targeting in the Indian as well as the International context. We seek to learn about its implementation in both these contexts. There are a few inferences one can draw from India's experience but it is too early to draw well-defined conclusions. It also aims to study financial stability concerns alongside the Inflation Targeting framework. We discuss certain issues related to the IT approach such as exchange rate volatility along with its potential for increased transparency and reduced inflation volatility. We also take a look at the financial stability concerns. Finally, we draw some conclusions based on the work done in this area in the past, certain economic models related to this approach, along with statistics and trends.

INTRODUCTION

Inflation targeting is a monetary policy strategy used by central banks for maintaining prices at a specific level or within a particular range involving methods like interest rate changes, which could assist to attain the targeted level of inflation.

Inflation targeting stems from Irvin Fisher's “Compensated Dollar” Policy and John Maynard Keynes approach of “Flexible Exchange System”, the latter is the same as Inflation Targeting. The first three countries to adopt the Inflation Targeting approach were New Zealand, Canada and United Kingdom in the early 1990s. Germany adopted certain elements of this approach earlier.

There are certain factors that must be considered, when a country is going to introduce inflation targeting initially. The first is that the central bank of a country has the power to conduct its own independent monetary policy, second is that it follows a single
variable approach and targets only one variable, which is inflation. The authorities can take some precursory steps: Establish numerical targets for inflation for a fixed set of periods & decide the length of time to hit the target. Indicate clearly to the people that achieving the inflation target is more important than all other objectives of monetary policy & devise a strategy to be used for communicating guidelines in the IT regime, Develop a model or methodology for inflation prediction that utilizes numerous indicators consisting of data regarding inflation in the coming years and lastly, choose which measure of inflation is to be used.

This paper first contains the Literature Review of Inflation Targeting, while next section explores its implementation, costs, & benefits in the Indian setting. Later sections incorporate financial stability & exchange rate volatility concerns along with analyzing the statistics, trends, and nominal anchors used & available for this approach alongside macroadeconomic concepts of Phillips curve & inflation expectations. Finally, it contains the inferences & conclusions drawn from the extensive research and data collection and section 9 contains the references used.

LITERATURE REVIEW

Since 1990s a considerable amount of literature on Inflation Targeting has been evolved. Views have usually been expressed in terms of costs and benefits of IT or regarding the parameters to be considered or the framework of the policy.

In general, the advantages of Inflation Targeting are many, ranging from decreased and balanced inflation volatility (Svensson 1997), fall in the effect of inflation of shocks and better absorption (Mishkin 2004), better safeguarding of inflation expectations (Kohn 2007, Swanson 2006, Levin 2004). However, the same comes with its own costs such as constrained strength and power of the central bank to react to unanticipated situations; Possibly poor results in the state of employment, exchange rate and a few other macroeconomic variables; Likely instability in the case of supply-side shocks which are substantial; meager amount of support from the people of the nation. (Bernanke 2003). A few other challenges it confronts were discovered after the crisis that took place in 2008 that are huge positive surprises which affect inflation can affect central bank credibility in a negative manner, fiscal imbalances, commodity price shocks. A few economists also suggested that the need to shift from CPI anchoring to PPT anchoring. However, the biggest challenge being faced by most central banks is how to maintain their credibility. (Luiz A)

As expressed by King (2005) in one of his studies, he discovered that IT approach consists and amalgamates two distinct elements, first being an accurate quantitative target for inflation in the medium run and the second being the reaction to economic surprises in the short run. The target helps formulate a mandate-type system in which
the private sector can anchor their expectations about inflation in the coming days or years. Other significant observations made comprise that of Woodford (2003) and Svensson (2007) which exhibits that the significance of inflation targeting can be measured by a quadratic loss function comprising the total of the square of inflation deviations from target and a weight times the square of the output gap. Firstly, as Friedman and Phelps exhibited, a perpetual larger inflation rate does not always mean a larger rate of growth and employment. Acknowledgement of this idea braced a deviation from monetary policy as a method of short run demand management, and makes us pay attention to the aim of price stability, which is a long-term focus; it is the base of IT. Secondly, advantages of balanced and low inflation as well as demerits of high inflation have received an improved awareness. Thirdly, the literature immensely centered on the merits of inflation expectations in monetary policy. The impact of choices in regard with the monetary policy on private sector expectations are now a key factor for authorities involved in decision-making. As opposed to this new developing agreement amongst most economists, expectations are anchored well by IT policy. Ball and Sheridan (2003) took up a comparison of the results of monetary policy in various nations and discovered, that the ones who have a past of high inflation prior to 1990s consequently encountered a higher level of disinflation in comparison to nations, which witnessed meager inflation. Debates involved that when regression to the mean is regulated, proof of IT enhancing performing is no more. Hyvonen (2004) expanded work stated above and discovered that implementation of IT partially caused the convergence of inflation during 1990s. Vega and Winkelried (2005) showed that IT assisted in decreasing the degree of fluctuation in nations that started following this approach. Orphanides and Williams (2003) portrayed that a structured approach to policy that characterizes IT makes it predictable and leads to higher impact in expectations. Levin et al (2004) discovered proof regarding the fact that in countries following the IT mandate inflation perseverance is less, and expectations better anchored.

IMF studies show IT seems to be linked with less inflation, low inflation expectations and low volatility in comparison to those nations that do not follow this mandate. Such achievements in inflation behavior have been accomplished with absolutely no negative impact on output and interest rate volatility. It also included an analysis of the way and manner in which monetary policy frameworks have resulted to be most efficient in anchoring expectations regarding inflation in the backdrop of the oil and food price shocks in 2007, inferring that in economic frameworks which are developing, IT appears to be more successful recently relative to other frameworks in anchoring expectations’. Lately, Rogers (2010) discovered the finding wherein IT withstood the financial shocks and crisis; while Carvalho-Filho (2010) exclaims results such that more apt to deal with shocks and crisis are the monetary policy of nations following IT approach. Therefore, it can be inferred that the enhanced monetary policy results following the
implementation of inflation targeting results in enhanced decisions regarding economic programs and policies.

Next, coming to the growth period. “Transition from growth acceleration to growth spells requires additional efforts than one needed for acceleration, spells can be sustained by fiscal policies whereas accelerations are triggered by external conditions, investments and trade conditions. Overall determinants in sub-Saharan Africa are different from those in the rest of the world.” (IMF working paper WP/17/202)

**Figure-1: Inflation Targeting Around The World**
Source- theaspiringeconomist.wordpress.com

This figure shows the countries, which have adopted the Inflation Targeting policy along with their targeted rate.

**Figure-2: Real Output Growth & Inflation Volatility for Selected IT & Non-IT Countries**
Source- World Bank (2008)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Inflation Target /1982-1992</th>
<th>Post-Inflation Target / 1993-</th>
<th>Avg growth</th>
<th>St dev growth</th>
<th>Avg inflation</th>
<th>St dev inflation</th>
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<tr>
<td><strong>Inflation</strong></td>
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<tr>
<td>New Zealand</td>
<td>1.89%</td>
<td>1.85%</td>
<td>0.68%</td>
<td>2.24%</td>
<td>2.99%</td>
<td>2.02%</td>
<td>0.99%</td>
<td>0.99%</td>
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<tr>
<td>Canada</td>
<td>2.84%</td>
<td>2.57%</td>
<td>5.09%</td>
<td>2.58%</td>
<td>2.81%</td>
<td>1.87%</td>
<td>1.97%</td>
<td>1.15%</td>
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<tr>
<td>United Kingdom</td>
<td>2.42%</td>
<td>1.95%</td>
<td>5.32%</td>
<td>1.45%</td>
<td>2.69%</td>
<td>0.62%</td>
<td>0.51%</td>
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<tr>
<td>Sweden</td>
<td>1.81%</td>
<td>1.72%</td>
<td>6.99%</td>
<td>2.47%</td>
<td>2.71%</td>
<td>1.80%</td>
<td>1.70%</td>
<td>0.94%</td>
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<tr>
<td>Australia</td>
<td>2.76%</td>
<td>2.59%</td>
<td>5.99%</td>
<td>2.94%</td>
<td>3.65%</td>
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<td><strong>Non-inflation</strong></td>
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<tr>
<td>United States</td>
<td>3.02%</td>
<td>2.44%</td>
<td>3.52%</td>
<td>1.65%</td>
<td>3.21%</td>
<td>1.11%</td>
<td>2.15%</td>
<td>0.58%</td>
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<tr>
<td>Japan</td>
<td>3.72%</td>
<td>1.73%</td>
<td>2.00%</td>
<td>0.87%</td>
<td>1.21%</td>
<td>1.59%</td>
<td>0.74%</td>
<td>0.79%</td>
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<tr>
<td>Denmark</td>
<td>2.27%</td>
<td>1.74%</td>
<td>4.63%</td>
<td>2.44%</td>
<td>2.13%</td>
<td>1.53%</td>
<td>0.94%</td>
<td>0.65%</td>
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<tr>
<td>France</td>
<td>2.32%</td>
<td>1.17%</td>
<td>5.10%</td>
<td>3.26%</td>
<td>1.97%</td>
<td>1.21%</td>
<td>1.50%</td>
<td>0.60%</td>
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<tr>
<td>High-income</td>
<td>3.02%</td>
<td>1.40%</td>
<td>4.63%</td>
<td>1.55%</td>
<td>2.58%</td>
<td>0.83%</td>
<td>2.49%</td>
<td>0.39%</td>
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<td>countries</td>
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The table above shows a comparison between the average real output growth in Inflation Targeting countries before and after the adoption of the policy, we can analyze that the average growth in these countries has risen by at least 1%. It also shows a comparison between Non-Inflation Targeting countries whose average output growth shows variability, where some have minorly increased and most have shown a decrease.

**INFLATION TARGETING IN INDIA**

IT in India was incepted through the initiation of the Narasimham & the Rajan Committee felt that Inflation Targeting should be implemented in India, as it would give the RBI the autonomy to conduct its operations and achieve its targets without any interference. Both these committees felt that low and stable inflation would lead to the public being able to take long-term monetary decisions confidently, further leading to an increase in investments thereby leading to long-term growth of the economy. Rajan favored the single variable approach to the then multivariable approach being followed, he also felt the predictability & transparency of IT would let the monetary authorities respond to shocks in a better manner. But there were some who opposed this view, and were against implementing IT in India such as Reddy, Subbarao, Jha and Bimal Jalan. They felt that the multi variable approach in India has been quite successful and also allowed maintenance of low and stable inflation. We also have a weak monetary transmission mechanism & IT can also lead to exchange rate volatility (Jalan). India lacks transmission mechanism as well as a well-defined anchor to be used for inflation targeting. They also felt alleviating poverty should be India’s foremost concern and that there is a lack of proper framework, inadequate financial markets, dependence of fiscal and monetary policies, non-independence of RBI to name a few for implementation of IT in India. There is also uncertainty as to which index to be used for anchoring, however CPI has been chosen at last. India is mainly an agrarian economy, which depends upon external factors such as monsoon, climate etc. which IT will not be able to target.

**Figure-3: India’s Consumer Price Index**


The above figure shows the CPI in India from October 2014 to September 2017. We can infer that the CPI has been rising and then finally falls. This is ambiguous and drawing an inference is tough.
It could be the case that IT after implementation is now leading to stability in its anchor or this could be due to other factors as well. Therefore, this is inconclusive.

The Government has formally inducted inflation targeting in India. The Finance Minister announced the introduction of IT in his budget statement 2016.

Under this statement, the central bank solely focuses on achieving price stability. This sole focus on price stability leads many developing countries to reject the IT framework. There are two reasons for this. Foremost, there are other equivalent important goals to be achieved by developing economies where price stability is just one of them, hence the multivariable approach seems more suitable in such regimes. The other being the conflict between economic growth and inflation stability. Both of these goals cannot be simultaneously fulfilled. Another attribution can be that, in developing countries the real reason behind inflation is not due to monetary action but by other external factors. We can take the example of India, which is mainly an agrarian economy and it's output therefore largely depends on the amount of monsoon in the year. This cannot be changed by any monetary action by the central bank.

The Urjit Patel Committee introduced inflation targeting in India, although introducing it was being considered since many years. The inflation target is set every five years with CPI as it's anchor by the government and RBI. The inflation target has been fixed for the period from August 5, 2016 and ending on the March 31, 2021, as follows:

- Inflation Target: Four per cent.
- Upper tolerance level: Six per cent.
- Lower tolerance level: Two per cent

In India, to avoid the problems stated above it was decided that the growth aspect would also be considered while deciding the targets. The range around the target has been decided so that MPC will acknowledge the short run trade-offs between inflation and growth but allows it to focus on inflation stability in the long run. The policy says that if inflation goes above or below the upper tolerance and lower tolerance level respectively for three consecutive quarters, it will then be considered as unsuccessfulness of RBI's monetary policy. This involves stating the steps to be followed incase of failure, a report needs to be sent to the central government, which includes the causes of such incapacity of the policy and also the remedial action proposed and an approximate time within which inflation target can be achieved through the remedial policy.
Figure 4: Macro-Narrative of Inflation in India

Source: www.rbi.org.in

The above figure clearly shows there has been a decline in output gap once IT was implemented in India and also a decline in CPI, thereby letting us conclude that there has been price stabilization and also output is being efficiently produced.

Figure 5

Source: Livemint: IT in democratic India by V.Anantha
We can clearly see that there has been a decline in all the above indicators once IT policy was initiated resulting in price stability.

However, the results obtained and analyzed must be taken with a word of caution due to lack of adequate data on price stability and behavior of output gap. Specifically, regarding output gap/variability one has to keep in mind that it has been in the negative over that small period following adoption of IT in India.

Though we have claimed that IT caused fall in growth too cannot be made without further data and arguments.

**USE OF MACROECONOMIC MODELS TO EXPLAIN INFLATION TARGETING**

There have been major changes in inflation over time which have led to: long term inflation expectations anchor at inflation target rates, alongside the flattening of the Phillips curve which has led to reduction in the price variability due to domestic monetary policy. The difference is that now imports account for a large share of variability in the consumer price inflation than before. These changes have made CPI inflation a less reliable. Changes in CPI inflation now account less for differences in the domestic economy than for peculiar shocks. The Phillips Curve has flattened, which could be concurrent with the adoption of inflation targeting, has resulted in complexifying recognition of deviations in the output of the economy from the potential and hence predicting inflation has become tougher. Inflationary pressures stemming from disequilibrium between demand and supply are more minute and harder to decompose from peculiar difference in inflation. Two pointers, which have received acceptance, are the dual unemployment-inflation mandates; or to change the target to something which is more intricately associated than CPI to home country's state of economy. Such a framework is usually known as “flexible inflation targeting”. Here, in the long run the major focus is to stabilize inflation but if a chance to stabilize growth or output comes, these variables are stabilized.

The first aspect of this change in performance can be understood as to how variations in inflation are due to long-term inflation expectations. There will only be a response and difference in expectations and variation in the long run if expectations are adaptive, if they are well anchored there will be no response.

To assess this we use the following model of Rational Expectations:

\[
F_t \pi_{t+h} - F_t^{Mar} \pi_{t+h} = \alpha_h + \beta_h \left( F_t^{Sep} \pi_t - F_t^{Mar} \pi_t \right) + \varepsilon_{t+h}
\]

Let us understand this in one of the first countries to implement IT's context i.e. Australia, taking this example, in accordance with the data are available from 1991, so we divide
the sample in two halves, the first one being from 1991 to 2000 which includes the first few years of IT and then 2001 to 2013 which includes the latter experience. An unanticipated change of one standard deviation to present day inflation is shown through its effect on inflation expectations represented by regression coefficient (Beta Term) estimates for every sample period: (2 Terms on the lefthandside) During the first period, in Australia, an unanticipated change of one standard deviation in present day inflation led to rise in inflation expectations of professional estimators for a time length of 5 years, but in the latter half, unanticipated changes have had very minute effects (abstracting from base effects). In comparison with the time when IT was initially introduced, no doubt inflation expectations are better anchored now. The following can also be seen through the diagrams represented below.

**Figure 6: Expectation horizons from 1991-2000, 2001-2013**

*Source: Reserve Bank Of Australia*

Even though, this argument is to the point and can be easily understood, there are numerous ways in which the behavior of inflation is influenced by IT. Let us consider the case regarding the current disputes and discussions about the link between economic slowdown and inflation being changing. If in specific, open economies, which are not large, are being considered, then another discussion is fueled regarding the affect of foreign goods on home country's prices. For improved understanding, we can introduce the New-Keynesian Phillips curve. Through this concept, we can easily understand the level of non-accelerating inflation rate of unemployment (NAIRU), the level of inflation expectation anchoring, and surprises in the slope of the curve.

A.W. Phillips derived Phillips Curve for the economy of United Kingdom, which held that there is an inverse relationship between inflation and unemployment. However, in the US in 1970s this relationship seemed to breakdown due to increased unemployment and increased inflation due to other factors such as non labor costs including oil price rises as well as change in behavior of inflation, which now turned into one from being constant
and passive to one that was continuous and persistent. This changed the way people formed expectations and led to the breakdown of the curve, which was now just a scatter of points. In recent times, many such breakdowns are observed and many economies are still consistent with Phillips Curve. Having mentioned these assumptions and theoretical underpinnings, we can now look at the modern form, which measures the relationship between change in inflation and unemployment.

**FIGURE-7:** Effect Of Fall In NAIRU On Phillips Curve
SOURCE- www.indecolearning.blogspot.com

The figure above is a graphical representation of the Phillips curve both in the short as well as long run. It depicts how a fall in the non-accelerating inflation rate of unemployment is consistent with achieving the targeted inflation rate. It also depicts how a decline in inflation expectations which may be due to deviation, import prices variability etc.

**Figure-8:** Response Of Output Gap To Shocks In Economy
SOURCE- www.ezyeducationuk.com

The above figure describes how output gap responds to shocks in the economy when the nation is following the Inflation Targeting Policy. We can see that a positive shock leads to an excess output being created leading to higher growth and efficiency, it also means the economy is overworking its resources which leads to a positive output gap, whereas a negative shock is unfavorable leads to decline in output and thereby a negative output gap which is undesirable.

Turning to the parameters, it can be noticed that after implementation of IT, inflation is now less anchored on last year’s inflation rate to long run expectations.
The Phillips curve is flatter which means, change in inflation is mostly due to temporary or short run deviations, and now differences in unemployment from its natural rate are tougher to calculate. Excess demand pressures have a higher probability of being overpowered by noise now than before and deviations in output and unemployment have become more incompetent in predicting changes. It means that for IT keeps changes in inflation constant, the changes are mostly observed in unemployment rates.

Another point to be noted is the presence of a non-linear or horizontal Phillips Curve in countries such as India which may have adverse implications and may question the whole idea of adoption of the IT mandate. Deviations from the standard result may lead to ineffectiveness of IT. A.W. Phillips was unable to explain this relationship.

**Figure-9**


FINANCIAL STABILITY AND INFLATION TARGETING

With the help of evidence on emerging economies we find that, most countries who have adopted the IT policy follow a policy in which monetary action is constrained or inhibited whenever there is a rise in financial disparity, such a framework is referred to as ‘flexible’ inflation targeting. In any nation, the central bank reacts to the disparities in financial stability, though this also considers the inflation goal in mind. We also discover
that even though counteractive measures are taken in reaction to the imbalances, the
teams who have not implemented IT’s finance sectors are less prone to disparity than
those who have.

These are clashing views, which lead us to infer the following. At one instance, our
inference regarding the analysis of the monetary policy-make us believe that inflation-
targeting countries do not ignore the financial stability concerns. Actually, a lot of these
central banks seem to care about financial stability when choosing their policy rate. At
the other instance, inferences show that even though this monetary policy response to
financial imbalances, inflation targeting regimes is more financially fragile, which could
mean that a constrained monetary approach could reduce chance of financial losses. By
not considering asset bubbles and other financial developments, IT can lead to
significant chance of losses to economic well being of the nation. However, research has
shown, IT should maintain it’s goal to remove fluctuation in prices, and concurrently
there could be use of macro prudential regulation and other policy tools to ensure
financial stability by policy makers.

The recent financial crisis of 2008 has led to discussion and disputes on the use of “macro
prudential instruments”. These could be more dependable when considering how to
handle financial fluctuations. Much research shows IT is relatively more successful when
considering inflation stability. The main goal of monetary policy should be this, while
financial stability should resolve with the help of “macro prudential instruments”. Many
economists have also held the view of formulating an “integrated inflation targeting
policy.”

We also need to consider the policy propositions with respect to these differences. One
way is to have stricter capital adequacy, liquidity coverage standards. Higher quality
capital will increase resilience to fluctuations. Second, to include macro prudential tools.
Third, increasing transparency of banking sector. Without any financial considerations,
would lead to the simple application and targeting of the inflation rate.

INFLATION TARGETING & EXCHANGE RATE VOLATILITY

Inflation targeting results in exchange rate stability and decline in exchange rate
volatility. Inflation is influenced by many factors domestic and abroad if the real
exchange rate depreciates and the economy becomes open, the exchange rate
depreciation as an effect of rising import prices becomes worse. Then, financial
authorities do not want to allow inflation. They feel it would be better if the inflation rate
were kept more flexible. Making the rate of inflation flexible allows their exchange rate
to change in a desirable direction. However, when the inflation rate is high, it is
ambiguous whether or not this case is applicable. However, some economists in India
felt that introduction of inflation targeting could lead to exchange rate volatility here.
Exchange rate volatility poses questions regarding acceptance of flexible exchange rate as the exchange rate system in the economy. There is greater foreign exchange risk, may lead to destabilization due to changes in import-export prices through repercussion effect and can also lead to greater inflationary pressures for the home currency. It even changes the structure of the economy by impacting imports and exports. The impact of flexible exchange rate is different for different nations depending on their impact on the output and financial stability.

**TRENDS, STATISTICS IN INFLATION TARGETING**

**FIGURE- 10: Countries, Which Follow The IT Policy**

**SOURCE- SELF-MADE**

The above figure is a representation of the fact that 27 countries out of 195 have adopted inflation targeting whereas the rest 168 have not.

A number of developing nations use WPI to measure inflation, however, new CPI is now announced as the standard to measure it. In India, rates are generally stated by the means of changes in WPI including each & every good in the economy. How the following have been affected post IT in India are shown as follows:

**Figure-11: CPI & WPI Based Inflation**

Source- Statistics of Ministry of Commerce & Industry

The above figure shows CPI and WPI for India over the time horizon from November 2014 to February 2017.

**Figure-12: Inflation & Inflation Expectations in India**

Source- www.rbi.org

The above figure shows the level of actual inflation as well as the inflation expectations. We can visually interpret with the help of the graph how inflation expectations differ from the actual inflation levels. IT has succeeded in anchoring inflation expectations to policy target. It, however, is too short a period for definite conclusion apart from the fact that it is a period during which inflation and inflation expectations have declined due to various factors such as
Oil prices

Adroit Management: Demonetization led to “fire sales” by farmers, improved storing facilities and minimum prices have helped keep prices stable is the view of some economists.

New Base: A new base has been chose for calculation of WPI, which may lead to stability in wholesale prices.

Food prices are the core reason behind the decrease, prices of vegetables witnessed a fall

Figure-13: Inflation Expectations of Professional Forecasters
Source- Survey of Professional Forecasts, RBI

The above 2 figures show the CPI inflations for India. We can see that CPI Inflation as well as its expectations are becoming stabilized from mid 2015, indicating that this may be a result of adoption of the IT Policy.
Figure-14: Output & Inflation Smooth
Source- www.imf.org

The above figure shows the variation of growth in output of the economy. We can interpret that the decline in variability is greater in nations that have implemented the IT mandate versus those that haven't. However, there are also certain other factors that must be taken into account that could have caused the same decline such as increase in productivity of capital etc.

Figure-15 Inflation In Developing & Advancing Nations
Source- www.imf.org

The above graph shows that inflation has declined after adoption of the inflation-targeting mandate for both developed and advanced nations.

The above graph shows that the percentage point decline in inflation is greater in countries, which have adopted the inflation targeting policy than those who haven't for both developed and advanced nations.

We must note an additional point here that even though there is a greater percentage decline in the countries, which have adopted IT, there has been higher inflation experienced by them. Therefore, we must draw our attention to another inference that can be drawn that IT does not only lead to positive changes but can also lead to increase in prices and thereby inflation even if rate of inflation is slowing. This can have major impact on the labor and goods market and hence must not be ignored, affecting the economy.
CONCLUSIONS

First, various economists have presented their views regarding the adoption of Inflation Targeting. In general, the view is that adoption of IT helps in reducing inflation rates successfully and achieving price stability. It also increases transparency and credibility of the monetary system of the economy.

Second, Inflation Targeting also helps to stabilize inflation expectations. Since inflation rates are fairly stable thereby expectations also tend not to change even during shocks unless they are adaptive.

Third, But the implementation and success of IT depends on a number of factors some of which are systematic framework, adequate financial markets, independence of monetary authority or central bank, flexible exchange rate. Many developing nations lack all these parameters, which may be a reason for the few number of countries who have adopted this policy.

Fourth, IT has worked successfully for almost all the countries that have adopted it, initial ones being, New Zealand & Canada, however, post the 2008 crisis, inflation rates haven’t been as stable as before in Canada and there is underutilization of resources there. Therefore, it fails to take into account financial stability, but only considers price stability.

Fifth, We can also infer that there is ambiguity about its effectiveness in developing economies not just due to lack of a proper framework but because these economies are mainly agrarian in nature which is highly dependent on external factors such as geography, climate, monsoon etc. which IT unfortunately cannot target.

Sixth, Most developing economies do not have an efficient transmission mechanism imperative for successful implementation of IT.

Seventh, India, before the adoption of IT used to follow a multi-indicator approach which was quite successful where price stability, financial stability and output growth are considered for decision making. Various economists felt that India should stick to this multi-indicator approach because it has worked well in the past and a change could be that there could be increasing emphasis on price stability in this approach. Single variable approach may lead to economic slack as shown by many economists. However, some other economists are of the view that IT will give the RBI the autonomy it needs to take individualistic decisions.

Eighth, in a broader sense we can infer that the decline in variability is greater in nations that have implemented the IT mandate versus those that haven’t.
Ninth, CPI has been chosen as the nominal index, the New CPI includes not only goods but also services such as hospitality and also value of imports. This means that it represents a more realistic scenario in India.

Tenth, there are conflicting views regarding financial stability and inflation targeting. General consensus leads us to believe, inflation-targeting countries are more vulnerable to financial risks, and resolution of financial stability concerns should be left to “macro prudential tools”.

Eleventh, Inflation targeting results in exchange rate stability and decline in exchange rate volatility.

Twelfth, policy prescriptions suggestions have been analyzed depending on the differences of considerations of financial stability within the IT framework.

Thirteenth, IT implementation leads to a decline in inflation rate but may lead to an increase in inflation. Hence it may also be undesirable.

Fourteenth, its undesirability has also been analyzed on the basis of differential Phillips curves observed in different nations and also the flexible exchange rate system that needs to adopted and may lead to foreign exchange risks and pose adverse changes in economic structures and destabilize the economy by expenditure switching.

Examination and analysis on the basis of our research has made us infer the aforementioned conclusions. The impact of Inflation Targeting on each economy varies significantly from the other depending upon various parameters. Hence, it is very difficult to ascertain what exactly will be the impact of the policy on the economy however we can try to interpret that through the various factors affecting IT, the level of development in the economy and through macroeconomic models.

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20. Ministry of Statistic & Programme Implementation Data collection, India
Agricultural Loan Relinquishment: An Economic Distress?

This research paper critically analyses the recent upheaval in the agriculture sector and its catastrophic impact on our Indian economy which has been mainly fuelled by the loan waiving schemes initiated by the State Governments of the likes of Uttar Pradesh, Maharashtra, Punjab and Karnataka. The backdrop of these schemes dates to the period when riots broke out in the states of Madhya Pradesh and Maharashtra. The dataset presented in the main research paper provides a base for understanding the bizarre situation by developing a relationship between different variables since the inception of such schemes in the economy. Although these schemes seem to benefit the farmers, it creates a logjam in the economy and ultimately ends up distressing their lives. In the end, we also try to provide some plausible solutions for correcting the present situation.

INTRODUCTION

A 'Waiver' is a voluntary action of a person or a party that removes that person's or party's right or particular ability in an agreement. It essentially removes a real or potential liability for the other party in an agreement.

Loan Waiver has been dubbed as one of the essential tools to foster the political objectives and therefore, previous governments had also provided a similar package to fool the farmers. The first loan waiver was announced in 1989-90 by the then Prime Minister V.P. Singh worth Rs. 10,000 crores. Then, crores of
rupees were vent out in the form of Agriculture Debt Waiver and Debt Relief Scheme (ADWDRS) just before the 2009 general elections in the country. The trend didn't seem to stop and in 2014 again, loans of Telangana farmers were waived off by the State Government followed by the recent bunch of waivers in 4 states in 2017. This flurry recently began in the month of June when the riots broke out in the Mandsaur district of Madhya Pradesh due to plummeting prices of their agricultural produce. Infuriated by the nonchalant attitude of the governments at both the state and the central level, the agriculturalists started dumping their produce on the roads demanding a loan waiver package from the government along with a rise in the MSP so that the farmers can also earn some profits. Various farmers' organizations mushroomed and collectively began demanding 'Loan Waiver' scheme. Clashes happened between the police and the farmers and 6 people had to forego their lives amidst the police firing that took place to control the mob. But why did the prices of their produce fall in the first place?

This sudden price slide was a consequence of an amalgamation of various factors which included a bountiful crop production in the season because of abundant rainfall in the country and also the import of pulses from countries like Tanzania, Mozambique, Malawi and Myanmar. This caused a glut on the market and the prices crashed. Farmers were not able to sell the foodgrains even at the MSP because of excessive supply over their demand. Demonetization further aggravated the plight of the farmers by leaving them cash-starved by sucking almost 86% of the liquidity from the economy. India carried over the last year stock of foodgrains as exports took a hit because of an appreciating rupee in the international market making exports relatively expensive. Also, global oil price slump and restriction on overseas shipments made the matters worse for the farmers.

**BACKDROP OF THE PRESENT SITUATION**

Agriculture has always been an area of concern for the Indian economy primarily because of the problems it has faced perennially and a myriad of schemes that have been launched to counter these problems. But still, the cost of implementation of these schemes exceed far away from the benefits that we've reaped till now. Investment in the agriculture sector continues to be abysmally low even though the budgetary allocation in the 2017-18 Budget has increased by 24%.

According to 2011 Census, 54.6% of the Indian population is engaged in agriculture and its allied activities which only contribute a meagre 17% to the total Gross Annual Value (GAV) of the country. The declining contribution of the agriculture sector in the Indian GAV explains the distress situation in the farming sector. Figure-1 shows the deteriorating condition of agriculture in respect of their contribution towards the country's GAV.
TABLE-1: Share of Agriculture & Allied Sectors in Total GVA (in Rs. crores)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GVA of Agriculture and Allied Sectors</td>
<td>1680797</td>
<td>1902452</td>
<td>1995251</td>
<td>2093081</td>
</tr>
<tr>
<td>% of total GAV</td>
<td>18.2</td>
<td>18.3</td>
<td>17.4</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: CSO, Ministry of Statistics and Programme Implementation, Govt. of India.

India received a normal rainfall in 2016 which was just 3% less than the 100-year average after being reeled over by the droughts for the past 2 years. In fact, the geographical region of Central India received rainfall in excess of 6% over the 100-year average but this didn't bring any change in the fortunes of the farmers especially hailing from Madhya Pradesh and Maharashtra. The trouble started when the farmers ended up with a bumper crop production; all thanks to the brimming monsoon during the year. This coincided with the excess supply of the agricultural produce in the market which caused a glut in the market. The Minimum Support Price set by the government was quite low and it didn't provide any relief to the farmers. So, in June, farmers of Madhya Pradesh went on a 10-day hunger strike demanding a better price for their produce which later turned violent leading to the death of 6 farmers in an open police firing. Similar riots came out in the state of Maharashtra where the farmers started dumping their produce on the road. In Uttar Pradesh, the Chief Minister announced the loan waiver scheme of Rs. 36359 crores in a bid to fulfill his election manifesto. This stirred similar demands in the states of Maharashtra, Punjab, Madhya Pradesh, Karnataka, Rajasthan and many more.

TABLE-2: Waivers Demanded in Various States

<table>
<thead>
<tr>
<th>State</th>
<th>Waiver being demanded (in Rs. crores)</th>
<th>Small &amp; Marginal Farmers In The State (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttar Pradesh</td>
<td>36,359</td>
<td>9.4</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>30,000</td>
<td>3.4</td>
</tr>
<tr>
<td>Punjab</td>
<td>36,600</td>
<td>1.7</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>56,047</td>
<td>6.3</td>
</tr>
<tr>
<td>Gujarat</td>
<td>40,650</td>
<td>3.2</td>
</tr>
<tr>
<td>Haryana</td>
<td>56,000</td>
<td>1</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>7,760</td>
<td>1.9</td>
</tr>
<tr>
<td>Karnataka</td>
<td>52,500</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Source: A 'Business Standard' article titled "India faces Rs 3 lakh cr farm loan waivers-16 times 2017 rural roads budget" published and updated on June 17, 2017.
In response to the demands made by the farmers in Madhya Pradesh, the Chief Minister has created a Price Stabilization Fund worth Rs. 1000 crores. After Uttar Pradesh, the states of Maharashtra and Punjab have joined the bandwagon by announcing the loan waiver schemes. The Central Government has refused to intervene and help the States in any monetary form for successful implementation of these schemes.

HISTORY AND EFFECTIVENESS OF LOAN WAIVER

The history dates back to the period of 1989-90 where farmers' loans worth Rs. 10000 crore were waived off. A report by Indian Council for Research on International Economic Relations (ICRIER) titled 'Credit Policy for Agriculture in India – An Evaluation' unfolded the catastrophic impacts of this scheme which stated that the farmers defaulted with impunity which led to a very slow and sluggish recovery of money for the financial institutions. Rural credit tumbled down and normalcy was restored in about 9 years.

The biggest ever loan waiver in India took place in May 2008 worth Rs. 52000 crores. But the implementation came with many loopholes. According to a report by Comptroller and Auditor General (CAG), 13.46% of the beneficiaries under the scheme were not included by the lending institutions. In addition to this, loans for non-agricultural purposes were also waived off. Moreover, 8.5% beneficiaries weren't to be allowed loan waiver but their amount was also done away with. The government had no record of loan application receipts and also debt waiver certificates weren't issued in 34.28% of eligible beneficiaries. In a nutshell, there was much haphazard in the implementation part of this scheme at such a large scale.

The next waiver came in the state of Andhra Pradesh and Telangana in 2014 which was especially aimed to benefit those who suffered in a cyclone named 'Phailin'. However, the farmers' suicide rate unexpectedly rose by 222% and 50% in Andhra Pradesh and Telangana respectively from 2014 to 2015 according to National Crime Bureau Records (NCBR). But the most recent bunch of waivers came in 2017 in 4 states. Shawn A. Cole of the Harvard Business School in a 2008 paper titled "Fixing Market Failures Or Fixing Elections? Agricultural Credit In India" showed that agricultural credit extended by government-owned banks as well as defaults goes up in an election year. This highlights that political intervention distorts the credit market and it leads to a self-fulfilling cycle where defaults would cause loan waivers and consequently waivers will lead to more defaults.

LOAN WAIVER BENEFITS: ILLUSIONARY OR NOT?

Generally, the benefits associated with loan waiver schemes are illusionary. We often tend to overestimate the benefits of such schemes but in a realistic situation, various
problems emerge out which don't address the deeper malaise gripping our agriculture. So, some of the benefits and their counter-measures are cited below:

- Farmers' revival in case of indebtedness: People often think that the farmers who had suffered due to various exogenous factors such as weather conditions and market risks should be compensated primarily on humanitarian grounds in the form of partial or full loan waivers by the government. But farmers who have relied on informal sources of credit such as moneylenders, relatives and friends etc. don't fall under the purview of Loan Waiver Schemes. The poorest farmers have to borrow from the informal sources of credit because of a low credibility. So, a farmer borrowing from a bank and not being able to pay back part or the whole loan amount is at a greater footing than with the same farmer borrowing from a moneylender and being able to pay the whole amount. Loan in connection with a financial institution would be waived off irrespective of the repaying ability of the farmer.

**FIGURE-1: Institutional and Non-Institutional Sources of Borrowing the Loans**

![Graph showing institutional and non-institutional sources of borrowing loans](image)

This graph shows the source of loan taken on the basis of the size of their land holdings for Jan 2013-Dec 2013. Land area is given in hectares and the values are given as a percentage.

*Source: Key Indicators of Situation of Agricultural Households' in India, NSSO*
Most of the small and marginal farmers are compelled to borrow from moneylenders for agricultural activities because of lack of credit-worthiness and collateral in case of a default. Hence, these farmers who borrow from moneylenders and other non-institution sources of credit are left out under this scheme who seem to be the true and the most deserving beneficiaries.

- Lower Suicidal Tendency amongst the Farmers- People tend to observe that once farmers' loans would be waived off, the suicidal tendency inherent in them primarily because of financial indebtedness would be uprooted. Any financial burden upon them would cease to exist and they would live freely. But this may not be always true. Farmers' suicide rate may rise in a particular area even if loan waiver has been implemented in that area.

**FIGURE-2: Number of Suicides of People Associated with the Farming Sector in 2014 & 2015**

<table>
<thead>
<tr>
<th>States with highest number of farmer suicides in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Maharashtra</td>
</tr>
<tr>
<td>Telangana</td>
</tr>
<tr>
<td>Karnataka</td>
</tr>
<tr>
<td>Chhattisgarh</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
</tr>
</tbody>
</table>

Source: A ‘Times of India’ article titled "Farmer Suicides up 42% between 2014 & 2015" published and updated on Jan 6, 2017.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>160</td>
<td>472</td>
<td>632</td>
<td>516</td>
<td>400</td>
<td>916</td>
<td>44.9</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>826</td>
<td>372</td>
<td>1198</td>
<td>581</td>
<td>709</td>
<td>1290</td>
<td>7.7</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2568</td>
<td>1436</td>
<td>4004</td>
<td>3030</td>
<td>1261</td>
<td>4291</td>
<td>7.2</td>
</tr>
<tr>
<td>Punjab</td>
<td>24</td>
<td>40</td>
<td>64</td>
<td>100</td>
<td>24</td>
<td>124</td>
<td>93.8</td>
</tr>
<tr>
<td>Telangana</td>
<td>898</td>
<td>449</td>
<td>1347</td>
<td>1358</td>
<td>42</td>
<td>1400</td>
<td>3.9</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>63</td>
<td>129</td>
<td>192</td>
<td>145</td>
<td>179</td>
<td>324</td>
<td>68.8</td>
</tr>
</tbody>
</table>


This table testifies the fact that loan waiver schemes had been ineffaceable to control the suicides among the farming sector. In fact, the suicide rate in Andhra Pradesh and Telangana surged dramatically despite receiving a loan waiver package from the state government in 2014. So, this rules out the common assumption or the illusion in our minds that loan waiver phases out the chance of suicides from one's mind. Another data table would help in strengthening this proposition.

TABLE-4: Suicides in the Farming Sector Divided on the Basis of Land-Holdings in 2015

<table>
<thead>
<tr>
<th>State</th>
<th>Marginal Farmers\textsuperscript{ii}</th>
<th>Small Farmers\textsuperscript{iii}</th>
<th>Medium Farmers\textsuperscript{iv}</th>
<th>Large Farmers\textsuperscript{v}</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>202</td>
<td>163</td>
<td>149</td>
<td>2</td>
<td>516</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>154</td>
<td>289</td>
<td>134</td>
<td>4</td>
<td>581</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>834</td>
<td>1285</td>
<td>899</td>
<td>12</td>
<td>3030</td>
</tr>
<tr>
<td>Punjab</td>
<td>18</td>
<td>70</td>
<td>111</td>
<td>1</td>
<td>00</td>
</tr>
<tr>
<td>Telangana</td>
<td>301</td>
<td>605</td>
<td>373</td>
<td>79</td>
<td>1358</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>49</td>
<td>56</td>
<td>30</td>
<td>10</td>
<td>145</td>
</tr>
</tbody>
</table>

We can clearly see from the table that most numbers of suicides in the farming sector belonged to the category of Marginal and Small Farmers. From Figure-1, we were able to analyze the fact that marginal and small farmers have to depend upon non-institutional sources of credit for fulfilling their requirements. Since the non-institutional funding is not covered under the Loan Waiver Scheme, marginal and small farmers are severely affected because they have to take multiple loans from various moneylenders to pay back their previous loans because they lack other collateral resources such as land-holdings. These Marginal and Small farmers comprise about 32.5% of the total farming population on an average. They get trapped in some sort of a vicious cycle. Disheartened by their way of living under constant threat and fear with no respite in the near sight, they end up taking up their lives. The irony here comes into the fact that the scheme which has been designed to assist the poor farmers actually help the large farmers who are quite rich; and doesn't even take into consideration the interests of poor farmers since they are excluded under the scheme due to their reliance on non-institutional sources of credit.

Also, providing loan waivers on the basis of the size of the land holdings proves out to be of little economic significance. According to Sharad Joshi, "If agriculture is a losing proposition, the smallholder should logically be a small loser than the large holder." Because a small land with good irrigation and other facilities may be much better than a large land with no such basic amenities. Thus, we can safely propose that loan waiver schemes don't help substantially in reducing the suicide rate amongst the farmers and agricultural labourers.

• Boosting Farmers’ Produce- Farmers will have an option to restructure their agriculture process again due to their loan relinquishment. It may provide a boost to the farmers to produce more by taking a loan in the next season. But its ends are only limited to a short period of time. Loan Waiver cannot be used as a tool to restructure and reshape the agricultural operations of our country considering the long-term perspective. Since agriculture is dependent upon various exogenous factors, taking another loan after getting the waiver again is a risky thing. The same problem of indebtedness might arise in the next season also because the need for credit never ends.

**LOAN WAIVER COSTS**

The loan waiver schemes are a temporary measure to provide relief to some of the farmers and have many costs associated with it which can chronically affect the banking sector of the country and the economy. Let's look at some of the major costs of loan waiver schemes:
• Moral Hazard- According to Bengt Holmström, "It has long been recognized that a problem of moral hazard may arise when individuals engage in risk sharing under conditions such that their privately taken actions affect the probability distribution of the outcome." In simple terms in the context of the Loan Waiver Schemes, Moral Hazard is a situation in which the farmers who are capable enough to repay their loan amount to banks or other financial institutions don't opt to pay in an anticipation to get a loan waiver package from the government in the near future. Moral Hazard disrupts the honest credit culture in the economy. Although the government reimburses the concerned amount to the banks, the trust factor between the borrower and the banks is jeopardized. Any delay between the government's reimbursement of the loan and borrower's refusal to pay their loan gives a heavy blow to a bank's liquidity. Since cooperative banks use their entire deposit as a base for lending purposes, it especially hurts them as they mostly depend upon their recovery of loans for their operating activities. According to Urjit Patel, the present RBI Governor, loan waiver schemes crowds out private borrowers as the high cost of government borrowing tend to impose an increasing cost for others.

• Farmers also find it difficult to procure further loans from the banks in the future. Xavier Giné and Martin Kanz of the World Bank have shown in their study titled "The Economic Effects Of A Borrower Bailout: Evidence From An Emerging Market" that bank lending moved away from districts with greater exposure to the loan waiver. Banks are reluctant to give loans, especially to marginal and small farmers fearing that they may have to again experience the ills of loan waivers in the future. This can give a deflationary shock to the economy as it can inhibit further capital expenditure or investment in agricultural infrastructure.

• Unjustified Towards Farmers- Loan waivers are not on equal footing for each and every farmer. Farmers who invest out of their savings or borrow from informal sources are excluded from the scheme despite the fact that they are equally vulnerable to weather and market risks. It only provides a partial relief to them as only a part of the loan is spent on agricultural purposes on an average. So, it's not a complete waiver in its practical sense. Moreover, agricultural laborers are not covered under this scheme. In many cases, multiple loans in the name of different members of a single family may also give rise to multiple loans waiving for the same family. Hence, taking into account these factors, loan waivers can't be acknowledged as providing justice to every farmer on an equal basis in an unbiased manner.

• Opportunity Costs- Loan Waivers lead to State Budgetary Misallocation resulting in high opportunity costs. Investment in growth-oriented long-term schemes in agriculture remains stagnant as the need for agricultural credit burgeons
exponentially. It was found that agricultural credit grew at 547% during 2004-05 till 2014-15 while the investment in rural roads infrastructure grew only by 10.5%. This reflects the misplaced priorities in States' budgets.

Only 47.6% farms in our country are irrigated and rest of them remain vulnerable to weather fluctuations while the decadal growth in the net-irrigated area till 2010 was reported at 0.3%. Loan Waivers seem to be flagrant wrong considering the fact that the money which would be spent on the implementation of these schemes could have been used on these fronts for better development prospects. The role of Credit seems to be over-emphasized. We need to understand that credit alone can't alone help us to get rid of the structural agrarian problems. There must be a step forward to invest in technology and agrarian infrastructure for raising agriculture income and making it a viable option.

**FIGURE-3: Increase in States' Interest Payments due to Loan Waiver Schemes**

This graph shows us the infrastructure spending (including irrigation and road development only) in 2016-17 versus the interest payments (including the additional interest payment burdens due to loan waiver). The amount is in Rs. Billions.

*Source: CMIE States of India and Mint.*

Funding the loan waivers amount to foregoing many of the country's developmental expenditure which has a large multiplier effect on our economy. So, it can be concluded that the opportunity costs of implementing these schemes are very high.
PLAUSIBLE SOLUTIONS

If not loan waivers, then what? Well, the need of the hour is to plan for the long-term and restructure the agriculture sector for benefitting the farmers. Several measures can be adopted to minimize farmers’ melancholy and make agriculture a profitable venture which are as follows:

- Minimum Support Price for all Crops- The State Governments should try to fix a minimum support price for all the agricultural produce which would at least give the farmers an assured price in case of losses as well. Currently, the MSP is primarily limited to foodgrains and doesn't cover other crops. So, it would be in the best interests of the farmers to have an MSP for all the agricultural produce. Also, according to M.S. Swaminathan, a renowned agricultural scientist, MSP should be set at 150% of total production costs incurred by the farmers so as to mitigate their losses. Although a rise in the MSP level may lead to a rise in the inflation rate, the government must sought a balance between the desired rate of inflation and the interests of the farming community.

- Developing Allied Sources of Agriculture- Farmers should be encouraged to try hands-on allied sources of agriculture such as anima; husbandry, poultry farming, fisheries, apiculture, dairy farming etc. as it can supplement farmers' main agricultural income. In times of distress, these supplementary incomes can even provide subsistence to farmers’ families. So, the government must make positive investments in developing the required infrastructure for undertaking the allied activities. Warehousing and Irrigation facilities should be more developed in order to increase production.

- Change in Loan Disbursement- Farm loan period should be extended further up to 4-5 years taking into consideration the fact that rainfall in the country is highly erratic on an average every year. So, even if farmers lose out in a year, they can compensate in the next year by earning more income. Also, provisions regarding the restructuring of loans and one-time settlement of farm loans should be considered.

- Short-Term Measure- For providing instant relief to the sufferers, the government should be a bit more specific in providing loan waivers rather than announcing and implementing a general loan waiver. The loan waived should belong to a particular group of people in a defined area growing a particular crop. This can reduce the overall damage that a general loan waiver can instigate in a more responsible manner. In case of excess production, we can also look at the demand side of the problem by making it a bit inflationary by raising public expenditure on developmental projects.
• Promoting Formal Sources of Credit- According to National Sample Survey-Situation Assessment Survey of 2012-13 Schedule 33, farmers borrowing from formal sources of credit earn 17% more than those who borrow from the informal sources of credit. The Net Return of farmers borrowing from formal sources is Rs. 43740 per hectare of land area and that of farmers borrowing from informal sources is estimated at Rs. 33734 per hectare. Also, more borrowings from formal sources of credit facilitate more monthly consumption expenditure. Hence, the need arises to promote the formal lending in the agricultural sector which would require proper planning and execution on the part of rural agricultural banks and NABARD.

CONCLUSION

Taking into account the costs and the benefits that we looked upon in this paper, we can conclude that Loan Waivers are a 'Curse in Disguise' rather than a blessing. It neither brings a positive outlook to our economy nor helps the actual and the neediest beneficiaries of all times. It jeopardizes any scope of growth and development not only in the agricultural sector but also hinders the way of development for infrastructural projects and initiatives. Mostly guided by ignominious political intentions, loan waivers are just implemented to woo the farmers and seize their large vote bank in order to retain or regain power and authority. The implementation of this scheme in Uttar Pradesh where farmers are getting waivers of as low as Re.1 is a mockery of the efforts put in by the farmers to feed the country.

The most pressing issues in the agrarian sector include the lack of adequate investment in various agrarian infrastructure such as irrigation, warehousing, poultry farms etc. The government must step in and implement these pending policies in order to resurrect the agriculture sector. The dwindling incomes of the farmers is a testimony to the fact that something is going wrong in the sector. If we choose to turn a blind eye towards agriculture, it would lead to a more intense agitation coupled with hate and disgust towards the government which would not be in the best interests of anyone. Being optimistic, one can still hope that government will initiate some long-term restructuring plans for reviving agriculture casting aside their political and personal objectives.

ENDNOTES

i Normal Monsoon Season is when the total amount of rainfall in the country between June and September is within 10% ± of the average rain over a long period of time.

ii Marginal Farmers here means having a land-holding less than 1 hectare.

iii Small Farmers here means having a land-holding greater than or equal to 1 hectare but less than 2 hectares.
Medium Farmers here means having a land-holding greater than or equal to 2 hectares but less than 10 hectares.

Large Farmers here means having a land-holding greater than or equal to 10 hectares.

Founder, Shetkari Sanghatana and former Member of Parliament, Rajya Sabha.

In this table, South represents Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu whereas Central-West includes Madhya Pradesh, Uttar Pradesh, Chattisgarh, Gujarat, Uttrakhand and Maharashtra. Additional interest burden due to loan waiver is Rs. 88.53 Billion and Rs. 71.37 Billion in South and Central-West which has been calculated on the assumption that the state waives off only 25% of the loan amount.

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RELEASE OF FOUNDATION ISSUE OF STRIDES

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