

# Impact of economic performance and Institutional regime on knowledge economy: A study of selected countries

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**Abstract:** *Economic performance and institutional regime is often seen as driving force for sustainable long term knowledge economic growth of any country. Indian economy is one of the rapidly growing economies in this modern globalization world. Indian economy is enjoying the average economic growth of 7% from last two decades, but is this economic growth sustainable or only some short-term phenomena because of increasing consumer market, and increasing information sector. To achieve long-term sustainable growth innovative climate is very important. The purpose of this paper is to study the fundamental pillar of knowledge economy i.e. economic and institutional regime that provides overall framework for directing the economy.*

## Introduction

The efficacy of government departments in encouraging and enforcing strategies that promote a safe, innovative, and competitive business climate is the subject of this pillar. It also includes government-sponsored economic incentives that assist domestic businesses in growing spontaneously and independently (OECD, 2002; World Bank, 2004).

According to the World Bank (2004), weak economic incentives and inadequate institutional structures have resulted in low economic production amid ample natural resources. Finland, Ireland, Singapore, Taiwan, and South Korea, on the other side, have seen rapid growth as a consequence of government-led knowledge economy. Efficient and transparent government, strong and dynamic regulatory frameworks, and according to these small reports, a successful economic opportunities scheme not only facilitates and improves local business development, but also encourages international investment and joint projects essential for new information and technology.

Developing nations, in particular, must put in place new governance systems that are ideally suited to their socioeconomic circumstances. It is not an alternative to adopt best practises from other countries since the transplanted governance model would clearly not operate in the local setting (OECD, 2001). Local policies based on transformative approaches, according to the World Bank, such as the implementation of good governance systems, business legislation and effective and tax-responsive rewards for investors, have contributed to fast growth in OECD countries (2004). Latest policy studies tend to favour small government strategies due to the fact that most developed nations have not seen many strides in these fields (Goh, 2003; Klein, 2004). In addition, in countries where SMEs control the private sector and recruit the majority of the population, the government's participation is important. Many developing countries have found this form of focused government intervention to be highly effective. Reforming the legal structure to put it more in line with current economic realities is also important for developed countries' local economies to change, particularly at this stage of the information economy's growth. Aside from a lack of efficient and competitive regulatory frameworks that adapt to local and foreign business needs, the private sector's vulnerability, Government bureaucracy, overregulation, and knowledge management are frequently cited as reasons for most developed countries' weak economic results, especially in Africa (Yousef, 2004; World Bank, 2004). This is undeniably so, provided that regulations in certain countries were drafted to address traditional business practises and are incompatible with a competitive and agile consumer economy based on information creation, use, and distribution. In neither of these countries, legislation dealing with the changing complexities of the knowledge economy, such as intellectual property protection and encouraging foreign direct investment and development, has been adopted or implemented. As a consequence, there is an increasing focus on the need for legal change in developed countries, as well as the need to increase awareness through international joint projects, creativity, and technology transfer.

The government's position in the information revolution may seem to be at odds with some who claim that the knowledge economy's growth would inevitably lead to the government's function being drastically reduced. The government's position in promoting and engaging in the enhancement of the information economy has become much more important, particularly in developed countries, in a variety of ways.

## Literature Review

(Satti, 2014) analysed the challenges and opportunities on the transition to knowledge based economy in the Arab region. The study uses comparative and descriptive methods of analysis based on the structure and definition of a knowledge-based economy frequently used in the international literature to explore the opportunities and challenges in shifting to a knowledge based economy in the Arab region. Based on findings authors inferred that, the Arab countries need to reinforce investment in four KI pillars: efficient economic and institutional regime and incentives; efficient education and human resources and an effectual science, technology and innovation system and information and communication technologies.

(Sharma, 2017) This paper analyze the status of India as a knowledge economy at national and global level and trace the issues which come in the way of India to become a knowledge based economy. The study was based on the secondary data collected from various international databases. The paper starts with analysing India's knowledge economy in global competition by using knowledge assessment methodology tool developed by World Bank .

(Bratianu & Dinca, 2010) The knowledge economy provides various opportunities at the same and show different ways of large scale production and sale and minimise the cost and identify the customer requirements and education, skills, information and innovation is very essential in knowledge economy. In this focus is shifting towards knowledge process. And economy need a lot of ideas and approaches from experts. Investment in the economic dimensions is being the high success for the economy and develops the economy. The information specialists turned into the primary main impetuses of the new economy, and the significance of intangibles conquer that of physical assets.

(Madhani, 2012) attempts to analyse the changing dimensions of India in the light of growth of knowledge based society by highlighting major initiative taken by government of India. The indicators used in study are development in knowledge sharing infrastructure, knowledge workers, role of library associations and information professionals.

(Jha, 2012) gives an overview of knowledge society in India. The pace of India's progress towards knowledge society is discussed and policies that are framed to make country transition towards knowledge society i.e. National knowledge commission are discussed in detail. The author argued that in urban areas the knowledge society had excited the masses but failed to excite the masses who are still struggling for basic necessities of life.

(Ghosh & Ghosh, 2009) On the basis of global competitive Index ranking 2015-16, author tried to assess the position of India with other benchmarking countries China, Taiwan, Singapore and South Korea by studying three indicators basic requirements, efficiency enhancers and innovation and sophistication in detail. The findings of study shows that Singapore's performance was comparatively good in all key drivers compared to other countries. India's position is low in all the indicators.

(Ghosh and Das, 2006) The present study attempts to analyse the changing dimensions of India in the light of growth of knowledge based economy by addressing initiatives in country that includes information literacy in maximizing the utilization of knowledge resources. The study also dwells upon initiatives taken by government, different institutions and professional societies in this regard.

(Diksha Gupta, 2017) says that this initiative has helped the old fashioned structure of the government to rip into pieces and develop into clear, open and an approachable structure making it easy for the investments to pour in, cultivate creativity and innovation shaping up world class infrastructure well suited for the young entrepreneurs

## Database And Methodology

This paper is analysing the effect of economic growth of India. Time frame of this paper is 10 years' data from 2009 to 2018.

It was difficult to find the data before the chosen time frame because of lack of the resources. World Bank's data bank is the primary source of this research paper. To measure the growth of India in comparison with some leading

economies in Knowledge economy Primary variables in this study are GDP growth rate and Per capita GDP growth rate.

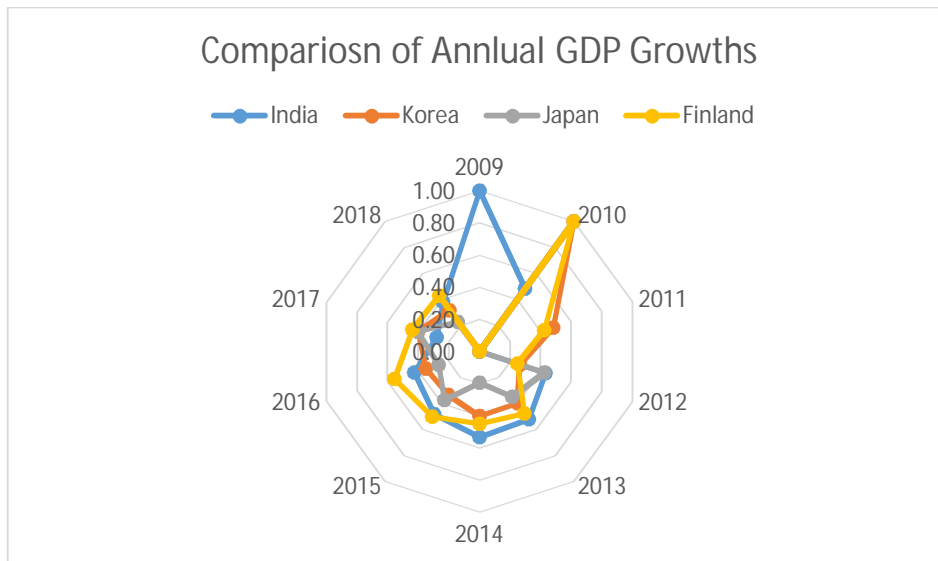
**Data Analysis**

GDP growth rate.

In order to compare the different parameters under study of different countries, the data has been normalised between 0 and 1. The comparison then on is fair and provides the results on comparable scales.

**Economic Performance and Institutional Regime**

Under Economic performance and Economic Regime, the first variable under study is annual GDP growth and GDP comparison. The GDP growth % of all countries are normalised and compared under various stages. The data is compared through scores, charts, descriptive statistics and analysis of variance. Following charts and tables present the results.



**Figure -1**

**Table -1 Annual GDP Growth %Actual and Normalised Scores**

|      | India      |                       | Korea      |                       | Japan      |                       | Finland    |                       |
|------|------------|-----------------------|------------|-----------------------|------------|-----------------------|------------|-----------------------|
| Year | GDP Growth | GDP Growth Normalised | GDP Growth | GDP Growth Normalised | GDP Growth | GDP Growth Normalised | GDP Growth | GDP Growth Normalised |
| 2009 | 4.78       | 1.00                  | 0.8        | 0.00                  | -4.32      | 0.00                  | -8.99      | 0.000                 |
| 2010 | 0.64       | 0.48                  | 6.8        | 1.00                  | 9.61       | 1.00                  | 11.26      | 1.00                  |
| 2011 | -3.26      | 0.00                  | 3.7        | 0.48                  | -4.31      | 0.00                  | -0.42      | 0.42                  |
| 2012 | 0.22       | 0.43                  | 2.4        | 0.27                  | 1.61       | 0.42                  | -4         | 0.24                  |
| 2013 | 0.93       | 0.52                  | 3.2        | 0.40                  | 0.51       | 0.34                  | 0.67       | 0.47                  |
| 2014 | 1.02       | 0.53                  | 3.2        | 0.40                  | -1.63      | 0.19                  | 0.13       | 0.45                  |
| 2015 | 0.59       | 0.47                  | 2.8        | 0.33                  | 0.85       | 0.37                  | 1.13       | 0.50                  |
| 2016 | 0.17       | 0.42                  | 2.9        | 0.35                  | -0.61      | 0.26                  | 2.27       | 0.55                  |
| 2017 | -1         | 0.28                  | 3.2        | 0.40                  | 1.32       | 0.40                  | -0.12      | 0.43                  |
| 2018 | -0.19      | 0.38                  | 2.7        | 0.32                  | -1.14      | 0.22                  | -0.32      | 0.42                  |

**Table – 2 Summary Statistics of Annual GDP Growth %**

| <i>Groups</i> | <i>Average</i> | <i>Variance</i> |
|---------------|----------------|-----------------|
| India         | 0.45           | 0.061           |
| Korea         | 0.40           | 0.062           |
| Japan         | 0.32           | 0.080           |
| Finland       | 0.45           | 0.062           |

**Table – 3: Analysis of variance Null hypothesis  $H_{01}$ : The difference in Annual GDP growth is not significant**

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 0.11      | 3.00      | 0.04      | 0.57     | 0.64           | 2.87          |
| Within Groups              | 2.39      | 36.00     | 0.07      |          |                |               |
| Total                      | 2.50      | 39.00     |           |          |                |               |

On comparison the Annual GDP growth over the period of time from 2009 it is observed that the Annual GDP growth of Korea remained more stable in comparison to other countries. The variance in successive economic growth in minimum for Korea. The highest turbulence in Annual GDP growth is observed in Finland. The variance for Finland is highest and touched a mark of 25.62. However, the highest average growth is witnessed by Korea with 3.17% on an average. India on the other hand did better in comparison to Japan and Finland by keeping the annual GDP growth higher as 0.39% in comparison to 0.19%. of Japan and 0.16% of Finland. The variance of 3.97% in Indian GDP growth is also a matter of worry.

In order to understand the significance of difference amongst the GDP growths of the countries, the null hypothesis is tested in table -2 and it is found that the p-value is above the level of significance and hence the null hypothesis is not rejected and it can be concluded that the difference of annual growth of GDP amongst the countries is not statistically significant. Further, the regulatory quality index is one of the major contributors to the economic performance and economic regime. The good regulatory quality index represents the seriousness of the government towards regulating and regularizing the private sector development. Hence it becomes very important to compare the regulatory quality index of the countries to have a deeper insight about economic performance and economic regime.

### Conclusion

It can be observed that throughout the decade the Annual GDP growth of Finland remained dominating. However, Indian GDP annual growth took a leap in 2009, and 2013. In 2012, Japan and India stayed ahead of the Finland. With the highest standard deviation the Japanese GDP annual growth remained most disruptive amongst all the countries. India's GDP annual growth is most stable with lowest standard deviation.

India may draw its attention to the structure of the administration and shall work on reachability of administration at macro level.

### References

- [1] (Bratianu & Dinca, 2010) Bratianu, C., & Dinca, V. M. (2010). Knowledge Economy Dimensions. *REVISTA DE MANAGEMENT COMPARAT INTERNATIONAL/REVIEW OF INTERNATIONAL COMPARATIVE MANAGEMENT*, 11(2), 210–221.

- [2] Ghosh, M., & Ghosh, I. (2009). ICT and information strategies for a knowledge economy: The Indian experience. *Program: Electronic Library and Information Systems*, 43, 187–201. <https://doi.org/10.1108/00330330910954398>
- [3] Jha, S. (2012). *Developing Knowledge Society in India: Issues & Challenges* (SSRN Scholarly Paper ID 2140371). Social Science Research Network. <https://papers.ssrn.com/abstract=2140371>
- [4] JYOTI SHARMA. (2017, April 5). India as Knowledge Economy: Status, Challenges & Solution. *International Journal of Research (IJR)*. <https://internationaljournalofresearch.com/2017/04/05/india-as-knowledge-economy-status-challenges-solution/>
- [5] Madhani, Dr. P. (2012). Intangible Assets: Measurement And Accounting Practices. *Pankaj M Madhani*.
- [6] OECD (2000). *Is There a New Economy?*, OECD, Paris.
- [7] OECD (2001), *The Wellbeing of Nations: The Role of Human and Capital*, Center for Education Research and Innovation Paper, OECD, Paris.
- [8] Satti, O. M. N. S. (2014). Prospects for transition to a knowledge-based economy in the Arab region. *World Journal of Science, Technology and Sustainable Development*, 11(4), 256–270. <https://doi.org/10.1108/WJSTSD-07-2014-0017>
- [9] World Bank Institute (2002). 'Knowledge Assessment Methodology and Scorecards'. Knowledge for Development Program, World Bank, Washington, DC