

# **IMPACT OF GLOBALIZATION ON DEVELOPING ECONOMIES:**

## **A CASE STUDY OF INDIA**

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### **ABSTRACT**

#### **Introduction**

Globalization is a process of growing interdependence between economies. It entails the free movement of goods and services across the world in an integrated manner. It comprises the exchange of ideas, information, culture, technological knowhow, skilled labour, and development of supply chains and markets that transcend political boundaries. Thus, globalization may be said to mean the deepening of the integration and openness between economies. There is no doubt that global interdependence and interconnectedness makes things possible, from trade to investment, education to job opportunities, and communication between nations. It is driven by cultural, political, economic, financial, ecological, technological, and social divergence between countries and is expected to achieve the well-being of a country in all these aspects. The effects of globalization can be felt from micro level to macro level travelling from individual to community to institutions from local to regional to global levels. A global economy moves faster, and major technological advancements benefit society at large.

Globalization is not a new concept. It has travelled a vast distance in period since ancient times driven by inventions and diffusion, with changing waves from archaic to modern, from technology-led to digital revolution-led globalization, and from anti-globalization to 'slowbalization' or de-globalization. In recent years, new bilateral and regional trade agreements are being witnessed as countries look for a selective approach to globalization with a view to sustainable globalization.

After attaining independence India embarked upon economic planning with the aim of re-establishing the economy. With the limited success of the planning approach, and with the built-up of adverse situations in the domestic economy and poor performance on the external front, the government introduced a gradual phase of liberalization from the mid-1980s onwards,

relaxing the industrial licensing system, promoting foreign trade, and permitting equity capital investment, while relaxing exchange controls and restrictions. Under the compulsions arising out of the balance of payments crisis in 1990-91, the government adopted the policy of liberalization, globalization, and privatization as per the conditions of the structural adjustment programme laid down by the World Bank and the IMF in exchange for their financial assistance.

The government of India introduced several policies to encourage investment in India both by domestic and foreign firms. India also entered into various Regional Trade Agreements (RTAs) and reduced the customs duty on imports. Three decades of initiatives taken by the government of India and other regulatory authorities have crafted the present state of the Indian economy. India's economic parameters, including those related to globalization, have grown in size and depth. With this premise, the present study attempted to examine the nature and extent of globalization in India in its entirety, covering five dimensions, namely, economic, financial, political, technological, and social.

### **Objectives of the Study**

The study addressed three broad objectives. The first objective was to gauge the nature and extent of globalization in India, by analyzing the trends in various indicators of globalization related to economic, financial, political, technological, and social dimensions, and their interlinkages. The second objective was to empirically analyze the globalization-growth linkages, while the third objective related to enquiring into the impact of globalization on socio-economic development in India.

### **Research Methodology**

The study involved extensive review of literature organized thematically into studies on dimensions and indices of globalization, studies on alternative channels of growth-globalization linkages, studies on globalization and socio-economic development of countries, studies on globalization in the Indian context, and lastly, studies on anti-globalization.

The present study used different statistical tools and techniques to investigate the major research questions. An in-depth analysis of indicators of globalization was carried out using tabular and graphical presentation, and calculation of ratios and growth rates. Indices of five dimensions of globalization were constructed based on the Principal Component Analysis

(PCA) using the statistical package SPSS. A composite index of globalization was constructed on 31 indicators using the same methodology as in the case of dimensional indices. The inter-relation between the dimensions was examined using correlation analysis and testing for its statistical significance.

The data on the indicators was sourced from various sources like the Handbook of Statistics on the Indian economy and RBI Bulletin published by the RBI, Economic Surveys, World Bank Database, the website of Ministry of Commerce and Industry, the database package of Statista, website of United Nations (UN) peacemaking missions, etc. The data related to indicators of social globalization was sourced from All India Survey on Higher Education (AISHE) Reports, Education Statistics Reports of the Ministry of HRD and Ministry of Education, annual reports of the University Grant Commission (UGC), annual reports of the Tourism, and so on.

The globalization-growth linkages were established using the Granger Causality test in EViews. Before running the Granger causality, the variables were checked for the pre-conditions of co-integration and stationarity, using the Johansen co-integration test and the Augmented Dickey-Fuller (ADF) test, respectively. The second approach to globalization-growth relationship was estimating models using Ordinary Least Square (OLS) technique. Residual diagnostic tests were conducted which included the Jarque-Bera test of normality, the Breusch-Pagan-Godfrey test of homoscedasticity, and the Breusch-Godfrey serial co-relation Lagrange Multiplier (LM) test. The empirical analysis of the relationship between globalization and socio-economic development in India was undertaken using the Autoregressive Distributive Lag (ARDL) models in the EViews. Finally, the Text Network Analysis (TNA) which is run on InfraNodus, a web based open source tool, was used to gauge the globally prominent connectedness of globalization, anti-globalization, ripple effects of globalization and geopolitics.

### **Major Findings:**

The present study analyzed five dimensions of globalization namely, economic, financial, political, technological, and social globalization encompassing 31 indicators, in the reforms period. The key findings are that there was a visible improvement in each dimension of globalization. Economic, political, and technological globalization demonstrated clear improvement compared to financial globalization which had improved but with a lot of fluctuations. Social globalization exhibited a mixed outcome with some indicators changing favourably, while others unfavourably.

### **Dimensional Indices of Globalization**

The dimensions of globalization have shown a substantial improvement over the years. The index of economic globalization increased from zero in the year 1991 to 100 in the year 2020, growing at a CAGR of 11.1 percent, indicating a steady and continuous improvement in the economic globalization of the Indian economy. India experienced a growth of 37.08 percent on a compound annual basis in its financial globalization index from 1991 to 2020. In the first decade of the study period, the index of financial globalization increased at the CAGR of 145.37 percent which is a remarkable growth that can be attributed to the opening up of the Indian economy to foreign investment flows.

The political globalization index value was zero in 1991, which increased to 67.50 percent in 2020 marking a moderate level of political globalization. Excluding the last two years of the study period, the growth of political globalization of the Indian economy has been at a robust CAGR of 18.69 percent. Over the years, India's engagement with technological globalization had increased consistently and was observed to reach its highest level of 100 in terms of the index number in the year 2019-20. Over the entire study period, the technological globalization index has grown at a high CAGR of 37.14 percent. Social globalization had increased with index value at 4.60 in the year 1991 and 100 in the year 2020.

### **Composite Index of Globalization**

As far as overall globalization is concerned, it was found that the financial dimension had the higher score as the weightage obtained from the PCA technique, followed by the social dimension. As financial globalization involves opening up the economy to inward and outward foreign capital flows, it is strongly associated with political globalization which implies countries coming together to improve trade and investment relations between themselves. Political globalization, which also entails membership to international and multilateral organizations related to trade and investment, and peace and cooperation, reinforce trade and capital flows between countries. Given the strong positive correlation between all dimensions of globalization, improvement in any form of globalization would spillover to all other types of globalization as well. The composite index of globalization – a multi-dimensional index, was found to have improved at the CAGR of 9.16 percent.

## **Globalization-Growth Relationship – Empirical Analysis**

- **Granger Causality**

The results of the Granger causality test revealed that there existed a two-way causality between some indicators of globalization and economic growth, which largely included import and trade related indicators. The Granger causality test conducted for the dimensional and composite indices of globalization and economic growth revealed that the causality ran unidirectionally from economic and technological indices of globalization to economic growth. However, globalization when measured in terms of the indices of financial, political and social globalization dimensions, the causality was found to run from economic growth to globalization. The results substantiated the causality findings with reference to individual indicators of globalization.

Finally, when globalization was measured in terms of the composite index of globalization it was found that the causality ran from globalization to economic growth. These findings are very important for the Indian economy as they suggest that three decades of movement towards globalization of the economy has led to the acceleration of economic growth in India.

### **Regression Analysis**

The globalization-growth relationship was further empirically tested using the OLS technique of regression analysis, based on the results of the Granger causality tests. The first set of models regressed Total Factor Productivity (TFP) on individual indicators of globalization. It was found that increase in capital flows rather than trade flows increased the productivity. This is plausible because of the technology transfers that typically come along with foreign investment. India's participation in trade agreement was also found to have a favourable effect.

The second set of models regressed GDP, as a measure of economic growth, on alternative indicators of globalization. It was found that trade ratio, India's membership in foreign organizations and the index of technological globalization had positive coefficients and statistically significant impact. It was found that models with GDP as the dependent variable had the expected results with better coefficient values of the explanatory variables than in the case of models with TFP as the dependent variable.

## **Globalization and Socio-Economic Development – Empirical Analysis**

With the premise that economic growth is a necessary but not a sufficient condition for any economy to grow in the true sense, the study also undertook an empirical analysis of the impact of globalization on socio-economic development in India. The latter was represented by indicators such as health, education, HDI, gender equality, employment and income equality. Besides examining the trends in these indicators, the study used the ARDL models to test the relationship between globalization and socio-economic development in India. All the models were checked for reliability, such as stationarity, normality, homoscedasticity and absence of serial correlation.

The findings revealed that FDI inflows improved the level of education in India. These results were in line with Park (1996), Ahluwalia (1976), Barro (2000), and Alderson and Nielsen (2002) who have used capital flows and trade ratios as indicators of globalization for gauging their impact on education. Economic and Financial Globalization Indices had contributed positively in lowering gender inequality in India. This could be due to increased employment opportunities and greater gender diversity practiced by MNCs, as also found in Sharma (2021), and Coniglio, et al. (2017).

Globalization when measured in terms of its composite index was found to reduce unemployment in India, based on the short run ARDL model. However, with reference to the particular indicator of trade to GDP ratio and the index of financial globalization it was found that globalization had led to increase in unemployment as indicated by both, the short run and long run ARDL models. The spillover effect of trade and capital flows results in job shifts among the migrants, deterioration of real wage rates, cost controls by firms in the race for competitive advantage, relocation of business to other countries. With a more globalized world financial crises also tends to travel faster resulting in increase in unemployment in the affected countries. These views are also echoed in Yasmin and Khan (2005), Todaro and Smith (2006), Ogunrinola and Osabuohien (2010), Felbermayr, Prat, and Schmerer (2011), and Mike (2020).

Globalization was found to reduce income inequality with reference to the index of financial globalization. The economic and social globalization indices were found to have increased income inequality in India. Some studies (Zhu and Trefler, 2001; Silvio, 2022) have shown that free trade between countries contributed to shifts in global production, job loss, economic and environmental damages, and deplorable working conditions and increased inequality and poverty.

## **Anti-Globalization Traces Across the World**

The final analysis of the present research work was related to the use of text network analysis based on InfraNodus software. The findings of the analysis highlighted the dominant countries, issues, and challenges of globalization and the strong interconnectedness of the economies and geopolitics. The network graphs also brought out the important clusters of connectedness between globalization and geopolitics, and anti-globalization and its issues. The analysis concluded with the discussion on the ripple effects of globalization, ranging from population effects, inequalities, and social unrest to financial and exchange rate crises, pandemics, cyber-attacks, and environmental and cultural impacts.

## **Conclusion**

Globalization in the overall sense has benefitted the Indian economy. It has led to increased flow of capital and allowed India to enhance its production potentials creating new avenues of investments, new job opportunities and brought in modern technology. These developments have helped the Indian economy to accelerate its economic growth and improve its social sectors to a reasonable extent. Partaking in information technology and digital revolution, India has been able to create the physical and public digital infrastructure that has made it a favourable destination for investment and business.

However, increasing globalization has also widened the divide between the rich and the poor, marginalizing some sections of the society. There lies a great distance to be covered for the Indian economy to see that the ill effects of globalization are minimized and the objectives of inclusive and environmentally sustainable development are achieved, through appropriate policy measures. There is also further scope for the economy to globalize. Other emerging and smaller economies such as Mexico, Indonesia, Brazil, Vietnam, and Cambodia, have higher FDI to GDP ratios, for instance, along with higher per capita income levels. It was therefore, recommended that the government should adopt more focused FDI policy to improve foreign capital flows. Likewise, it was recommended that more FTAs with developed economies such as the US, UK, EU, Japan, etc. would lead to greater diversification of markets, beneficial technology transfers, skill enhancement, and other benefits. Such associations would help India gain from increased competition, comparative advantages, enhanced economies of scale, political and financial assistance, etc. At the same time there was a need for the government to aim at inclusive and sustainable growth, with more focused policies for improving public health care infrastructure, education, and social security.