

COMMENTARY ON INDIA'S ECONOMY AND SOCIETY SERIES

12

DIMENSIONS OF INDIAN ECONOMY

**As seen through the Economic Survey 2019-20
and
the Union Budget 2020-21**

**M Parameswaran
Thiagu Ranganathan
Sunil Mani
Sudip Chaudhuri
Manikantha Nataraj
Tirtha Chatterjee
Ritika Jain**



CDS

Thiruvananthapuram

India's Economy and indeed its society has been undergoing a major change since the onset of economic reforms in 1991. Overall growth rate of the economy has increased, the economy is getting increasingly integrated with the rest of the world and public policies are now becoming very specific compared over arching framework policies of the pre-reform period. Over the past few years, a number of important policies have been enunciated, like for instance the policy on moving towards a cashless economy to evolving a common market in the country through the introduction of a Goods and Services Tax. Issues are becoming complex and the empirical basis difficult to decipher. For instance the use of payroll data to understand growth in employment, origin-destination passenger data from railways to understand internal migration, Goods and Services Tax Network data to understand interstate trade. Further, new technologies such as Artificial Intelligence, Robotics and Block Chain are likely to change how manufacturing and services are going to be organised. The series under the "Commentary on India's Economy and Society" is expected to demystify the debates that are currently taking place in the country so that it contributes to an informed conversation on these topics. The topics for discussion are chosen by individual members of the faculty, but they are all on issues that are current but continuing in nature. The pieces are well researched, engages itself sufficiently with the literature on the issue discussed and has been publicly presented in the form of a seminar at the Centre. In this way, the series complements our "Working Paper Series".

CDS welcomes comments on the papers in the series, and these may be directed to the individual authors.

DIMENSIONS OF INDIAN ECONOMY
As seen through the Economic Survey 2019-20
and
the Union Budget 2020-21

M Parameswaran
Thiagu Ranganathan
Sunil Mani
Sudip Chaudhuri
Manikantha Nataraj
Tirtha Chatterjee
Ritika Jain



CENTRE FOR DEVELOPMENT STUDIES

(Under the aegis of Govt. of Kerala & Indian Council of Social Science Research)

Thiruvananthapuram, Kerala, India

March 2020

Contents

		<i>Pages</i>
1.	Estimation of GDP Growth in India	<i>M. Parameswaran</i> 05
2.	“The Invisible Hand” – A Proposition or a Superstition?	<i>Thiagu Ranganathan</i> 07
3.	Entrepreneurship and New Firm Creation	<i>Sunil Mani</i> 12
4.	Government Intervention and Markets	<i>Sudip Chaudhuri</i> 17
5.	Creation of employment through GVC integration in India. Prospects and Challenges	<i>Manikantha Nataraj</i> 20
6.	The Economics of a Plate of Food in India	<i>Tirtha Chatterjee</i> 27
7.	Privatization and Wealth	<i>Ritika Jain</i> 30

ESTIMATION OF GDP GROWTH IN INDIA

M. Parameswaran

Chapter 10 of the Economic Survey deals with the question of over-estimation of GDP growth in India during the post-2011-12 period. Though a number of papers like Dholakia, Nagaraj, and Pandya (2018) contributed to this debate, the chapter exclusively focuses on the issues raised in Subramanian (2019a, 2019b). Subramanian (2019a) argues that the GDP growth figures produced by the CSO for the post 2011-12 period, based on the new methodology, are not consistent with other important macroeconomic indicators. During the period 2002-03 to 2010-11, GDP growth rate was 7.7 percent and other important macroeconomic indicators also recorded similar growth rates. For instance, real credit to industry grew by 16 percent, export by 15 percent, overall credit by 13 percent and import by 17 percent. On the other hand, during 2011-12 to 2016-17 GDP growth rate was 6.9 percent, slightly lower than the previous period, and same macroeconomic indicators recorded poor performance. Real credit to industry declined by 1 percent, real export grew by 3 percent, overall credit grew by 3 percent, and real imports by 1 percent. Note that these macroeconomic variables are not produced by the agency that compiles national income accounts, and hence help us to validate GDP growth figures. Subramanian (2019) argued that the nature of inconsistency of GDP growth rates with other macroeconomic indicators gave the impression that GDP growth was overestimated. The paper also attempts to estimate the extent of overestimation GDP growth rate using a cross-country regression and a set of variables that usually co-move with GDP growth and are not produced by the national income accounting agency. The paper uses following variables; (1) credit growth, (2) electricity growth, (3) export growth, and (4) import growth. The econometric model also includes an India-dummy to capture the outlier status of India's GDP growth. The paper shows that during 2002-03 to 2011-12, India's GDP growth rate was not an outlier, while it was an outlier during 2012-13 to 2016-17. India dummy is positive and significant, which implied an over-estimation of India's GDP growth by around 2.5 percentage points. The paper also estimates different variants of the base model to check for the robustness of the results. Economic Survey focuses exclusively on the robustness of methodology of arriving at the extent of overestimation of GDP growth. It first examines the validity of the underlying assumptions of the methodology of Subramanian (2019) and argues that the underlying assumptions are not valid. Second, the Survey augment the regression model by including additional variables, namely growth rate of services and agriculture and shows that India dummy is not significant. However, this is not a correct procedure because if growth rate of services and/or agriculture is overestimated, India dummy naturally becomes insignificant. Lastly, the Economic Survey also shows

the insignificance of the India-dummy when the regression is estimated using fixed-effect methods. The major issue here is that Economic Survey is completely silent on the core issue raised by Subramanian (2019) that there exists severe inconsistency between GDP growth rate figures produced by CSO and other major macro-economic indicators, which is casting strong doubt on the GDP growth numbers. And it completely ignores the points raised by many others in the profession in this regard.

References

- Dholakia, Ravindra. R. Nagaraj, and Manish Pandya. 2018. 'Manufacturing Output in the New GDP Series: Some Methodological Issues', *Economic and Political Weekly*, Vol. 53, No. 35, pp. 10-13.
- Subramanian, Arvind. 2019a. *India's GDP Mis-estimation: Likelihood, Magnitudes, Mechanisms, and Implications*, CID Faculty Working Paper, No. 354, Centre for International Development at Harvard University.
- Subramanian, Arvind. 2019b. *Validating India's GDP Growth Estimates*, CID Faculty Working Paper, No. 357, Centre for International Development at Harvard University.

“THE INVISIBLE HAND” – A PROPOSITION OR A SUPERSTITION?

Thiagu Ranganathan¹

The Economic Survey 2020 starts with a chapter on the defence of wealth creation and argues for the operation of “the invisible hand” which will bring back India’s glorious past. This note is a critique of the chapter titled “Wealth Creation: The Invisible Hand Supported by the Hand of Trust” presented in the Economic Survey 2020. This note first provides a summary of the points made by the survey and then a critique of it.

1. Economic Survey on the “Invisible Hand”

According to the Economic Survey 2020, India has been a dominant economic power in historical times and this dominance was largely due to “design” which encouraged wealth creation. Having deviated from this model in the post-independence period, India missed out on wealth creation for a while. As soon as India went back to the same “design” post-liberalisation, it has started creating wealth which has resulted in an exponential growth in India’s GDP, its GDP per capita, and the Sensex. The survey also finds that during the period between March 2009 to March 2019, the growth in wealth created by entrepreneurs (excluding those with “tainted” wealth²) is found to be highly correlated to employee salaries, wealth created by suppliers to these firms, capital expenditure made by firms, foreign exchange revenue of the firms, and direct tax payments. The survey posits that the single most reason for wealth creation across time periods is the presence of an “invisible” hand. According to the survey, this philosophy has been advised by ancient Indian text like Arthashastra. The survey then provides examples of sectors which have done well post-liberalization including the banking sector, mutual funds, small ports, cement, steel, and roads compared to closed sectors like large ports, coal, and railways. It is in this background that the number of new firms has been going up since 2014 and a “Pro-business” environment has been created as against a “pro-crony” environment in the past. There have been efforts to improve this by working on the “Ease of doing Business” index where India has moved from 142nd rank to 63rd rank in five years. But, the survey feels this is not enough and India should target moving to 50th rank. The survey also argues for a need to be expanding

1 I acknowledge the comments provided by the participants of the review of the economic survey and the budget 2020 held in the Centre for Development Studies (CDS), on 25th February, 2020.

2 The survey does not mention how the authors identified and excluded “tainted wealth”

the financial sector. According to the survey, privatisation of PSUs will also provide impetus to this growth. The survey compares stock prices of HPCL and BPCL where it observes that the prices of BPCL moved similar to HPCL for 9 months in 2019, but it soared much higher than HPCL since the announcement of BPCL's disinvestment in September 2019. The chapter finally mentions the importance of trust in wealth creation. The lack of trust is what causes problems for wealth creation. In this regard, the survey identifies some issues related to trust and breakdown of trust in recent times. The corruption perception index in India was very bad in the aftermath of the 2011 CAG report on 2G auctions. The survey mentions the improvement since then and the corresponding improvement in BSE Sensex after that as evidence for improvement in trust. The survey then makes a mention of the NPA crisis and lack of trust that has evolved due to the same. The chapter finally mentions certain measures to improve trust in such a scenario.

2. The “Invisible Hand” – From a Proposition to a Superstition

The chapter's staunch defence of wealth creation and a strong push for the “invisible hand” and “hand of trust” has to be evaluated critically. It would be difficult for anybody to oppose wealth creation itself. There could be concerns related to sustainability which might make someone oppose wealth creation or the pace of wealth creation. But, the survey is in no way addressing those concerns. The survey actually seems to be defending the distribution of wealth and not wealth creation. This has been the concern of contemporary capitalism and the survey is trying to justify this. It is doing so without mentioning the word “Inequality”, which appears only once in the whole survey.

The question then of interest is not whether it is good to create wealth but who holds the created wealth or who all gets what from the wealth that is created by the “firms”. The survey argues that the wealth created by firms has increased the wages of the population thus benefitting the workers who work in the firm. The survey does this by finding a positive coefficient for profits on a regression with employee salaries and that a 1% increase in wealth was creating 0.68% increase in employee salaries. A typical measure in such a scenario would be to look at the wage-profit shares over time, and not the correlation between wage and profits. Figure 1 provides the wage-profit share from the year 2000 to 2019. The period between 2009 to 2019 was actually the period when the share of corporate profits in total income grew rapidly compared to the wages. For two decades since 2000, the quarter-on-quarter wage growth averaged less than 4% while the profits grew at 6.5%. At its peak in 2007, wages accounted for only 46% of the corporate profits³. This is appalling in a labour-surplus country like India. There has seen a dip in share of profit in the last few years and ES could have tried to explain this trend a bit more. The concerns related to reduction in wage share, particularly in the industrial sector during the post-reform period have been an area of concern that has been raised by various authors (Goldar, 2013; Abraham and Sasikumar, 2017 among others). The ES could have analysed the wage-profit share to explain distribution, but it uses correlation to justify wealth “creation”.

3 <https://www.cmie.com/kommon/bin/sr.php?kall=warticle&dt=2019-11-26%2010:22:23&msec=586>



Figure 1: Wage-Profit Share in Corporate India from 2000 to 2019

Source: CMIE.

The array of correlations do not end with profit-wage correlations and the ES reports various other correlations to suggest the inclusive consequences of wealth creation to suppliers, capital expenditure, foreign exchange revenues, and direct tax inflows. The outcomes related to rural India is not considered even for the sake of correlations. When 44% of the population is still employed in agriculture, what have been the consequences on their income when the wealth grew and Sensex went up does not seem to something of interest to the economic survey. Also, even if we assume salaries of those employed in the firms have gone up, what is happening to those in the unorganised sector and how it has worked does not seem to interest the ES 2020. At a time when we are witnessing highest unemployment rate in 45 years and an agrarian crisis of enormous magnitude, an analysis based on correlations is at the least, insensitive. Interestingly, the survey itself mentions the drawbacks of correlation in chapter 10 of the survey when it starts the chapter with the following quote by an anonymous: *Correlation is the basis of superstition and causation the foundation of science*. If the authors of the survey were aware of this issue and still went ahead with analysis based on correlations, it is probably indicative of some superstition⁴. A superstition is a blind belief about the magic of some phenomenon and in this regard, the survey seems to blindly believe the magic of the working of the invisible hand. Many of the inferences in the chapter and the survey can be attributed to this superstition. A belief in superstition makes you overlook evidence or look for confirmatory evidence and the survey's lookout for correlations could be seen in this background.

4 Cambridge dictionary defines superstition as belief that is not based on human reason or scientific knowledge, but is connected with old ideas about magic, etc.

An important requirement of the invisible hand to work is that *the hand withdraws from the sphere of pursuit of self-interest those possibilities that do not harmonize with the public good* (Robbins, 1952). For instance, it is in self-interest that various firms borrowed loans and defaulted wilfully. Such pursuit of self-interest does nothing good to wealth “creation”. Such activities need to be withdrawn from the sphere of pursuit of self-interest. The survey ignores these aspects and pushes for a mythical “invisible hand” which will operate its magic under most conditions. The survey does moderate its enthusiasm by identifying that there is a need for a hand of trust for the invisible hand to operate. It is to be noted that as important trust is to functioning of the markets, trustworthiness, and reciprocity are equally important. Trust and trustworthiness can be maintained by appropriate punishments which will take away pursuit of certain activities in the realm on self-interest. In the functioning of markets, an appropriate punishment of wilful defaulters could have been such a thing. The survey does mention this problem and figure 2 and figure 3 show the growth in non-performing assets and wilful defaults over the recent years. Without appropriate action on these activities, expectation of magic from the “invisible hand” is more likely to be a superstition than a proposition.

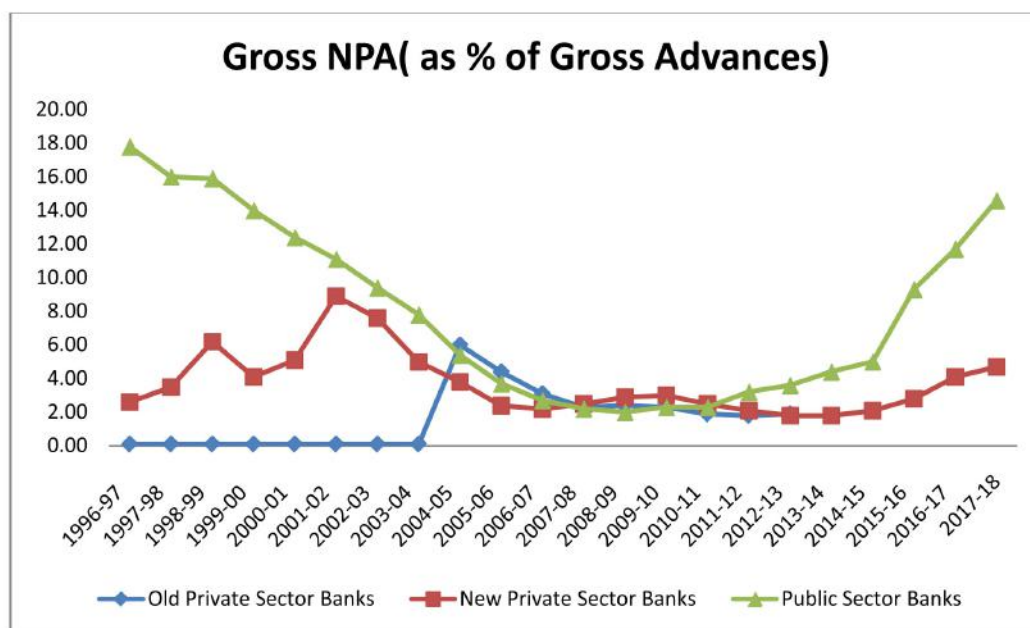
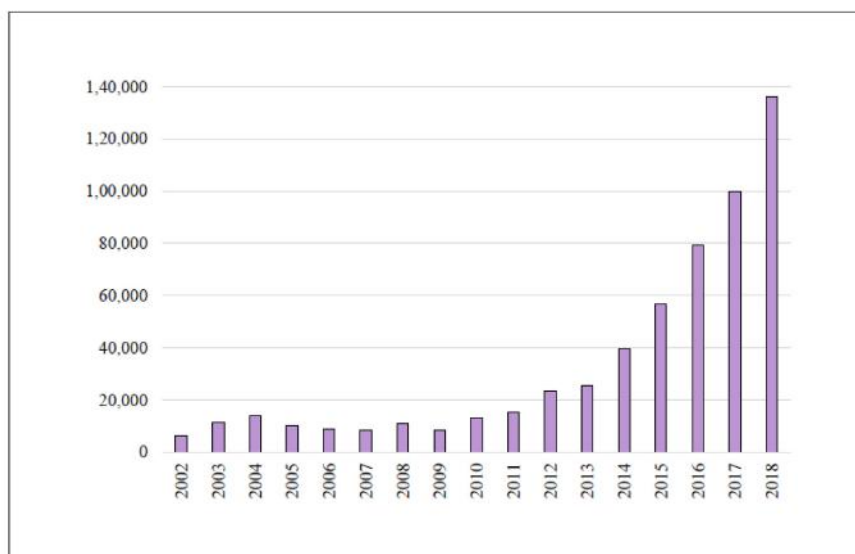


Figure 2: Gross Non-performing Assets (as a % of Gross Advances)

Source: Indiastat.



Source: TransUnion CIBIL Suits Filed database

Figure 3: Amount owed by Wilful Defaulters (Rs. Crores)

Source: Economic Survey 2020.

References

- Abraham, V., and Sasikumar, S.K. 2017. 'Declining Wage Share In India's Organized Manufacturing Sector: Trends, Patterns and Determinants'. ILO Asia-Pacific Working Paper Series. Available at https://www.ilo.org/wcmsp5/groups/public/—asia/—ro-bangkok/—sro-new_delhi/documents/publication/wcms_614777.pdf. Last accessed on 1 March 2020.
- Goldar, B. 2013. 'Wages and Wage Share in India During The Post-Reform Period.' *Indian Journal of Labour Economics*, 56(1): 75-94.
- Robbins, Lionel. 1952. *The Theory of Economic Policy in English Classical Political Economy*. London Macmillan. Referred in Medema, S.G. (2009). *The Hesitant Hand*. Princeton University Press.

ENTREPRENEURSHIP AND NEW FIRM CREATION

Sunil Mani

The promotion of entrepreneurship in India has received a fillip with the articulation of the policy on startup which occurred in January 2016. Ever since both the central and a number of state governments have put in place a number of policies and support systems essentially improving the ease of setting up new firms. New firm creation is one way of promoting innovations in the country as a number of new firms set up recently are technology-based. Earlier research by Mani (2011) had shown that knowledge-intensive entrepreneurship has been on an increasing trend since the onset of economic liberalization of 1991. The most important factor is the window of opportunity thrown up by changes in IT services technology which seems to have reduced the technological barriers to entry. Over time such opportunities may have increased and simultaneously with an improvement in the ease of doing business, opportunities are ripe for new form creation in the country. In the context, Chapter 2 of the economic survey of 2019-20 Chapter examines the content and drivers of entrepreneurial activity (EA) at the bottom of the administrative pyramid – namely the districts.

The chapter has six main findings with respect to EA at the district level. In the following, we undertake a critical analysis of all the six findings by confronting each of them with fresh empirical data.

- **Finding 1:** Employing World Bank's Data on Entrepreneurship, the study confirms that India ranks third in the number of new firms created especially since 2014. The survey considers the period 2006 through 2018 which subdivided into two: first sub-period is from 2006 through 2014 and the second sub-period is from 2014-2018. Employing the MCA-21 database on new form creation, it then shows that the rate of growth of new form creation on the second sub-period (namely 2014-18) increased significantly to 12.2 per cent per annum compared to just 3.8 per cent per annum during the first sub-period. Data on new form creation (Figure 1) does indeed show that there has been a spike in it since 2015.

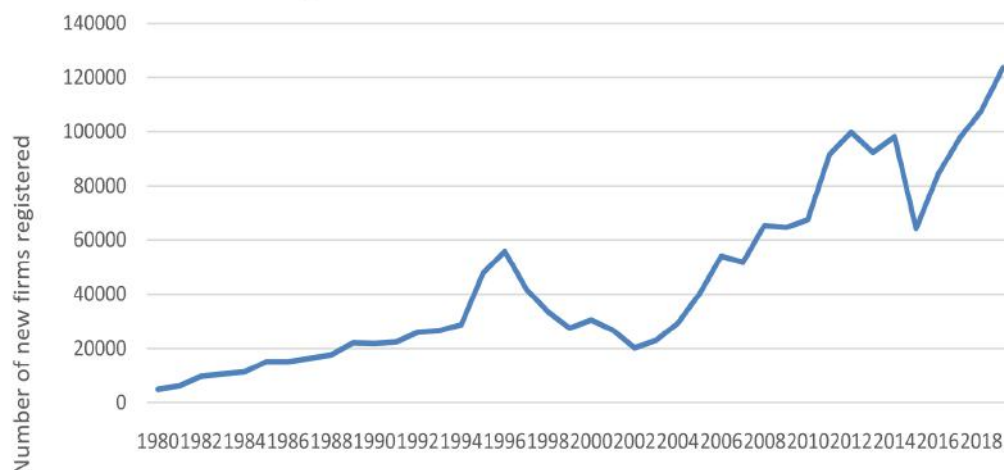


Figure 1: Trends in the Number of New Firm Creation, 1980-2018

Source: Ministry of Corporate Affairs, Government of India (various issues).

However, in order to test it more scientifically, we first computed the annual percentage change in new firm creation during the period 1980 through 2018 (Figure 2). The resultant analysis showed that that new firm creation fell by 53 per cent in 2015 compared to 2014 and the annual percentage change during 2014 through 2018 was a mere 1.3 per cent. In order to test this more scientifically, we estimated the structural breaks in new firm creation during the entire period (Table 1).

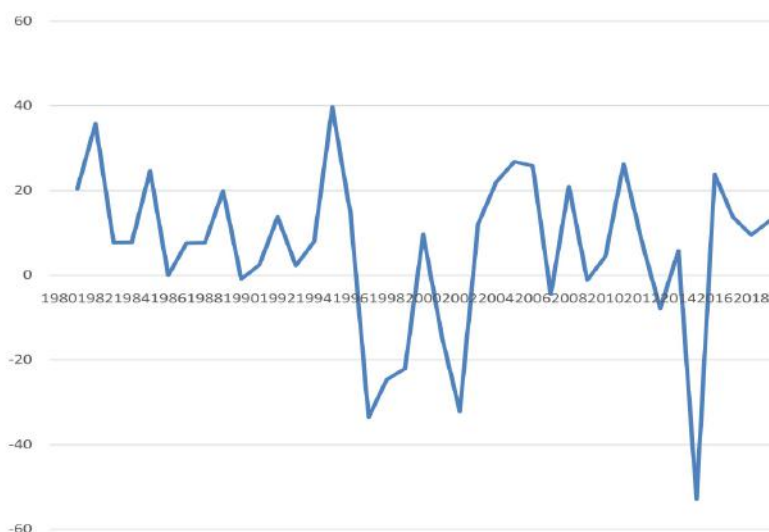


Figure 2: Annual Percentage Change in New Firm Creation, 1980-2018

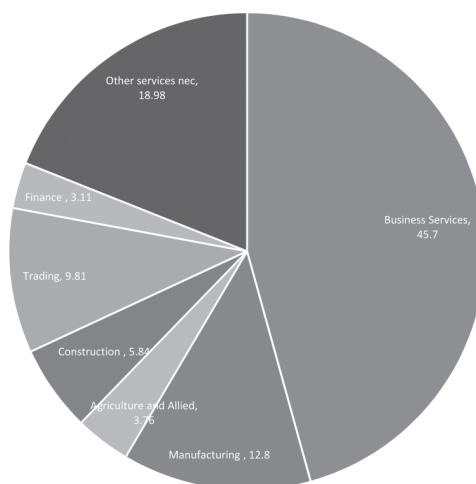
Source: Computed from Ministry of Corporate Affairs.

Table 1: Structural Breaks in New Form Creation

Period	Average growth rate (in per cent)
1980-1985	20.15
1986-1994	11.96
1996-2003	-2.9 (not significant)
2004-2013	12.42
2013-2019	1.3 (not significant)

The latter exercise shows that the period is characterised by 5 structural breaks¹. The most recent break is observed in the period since 2013, however, there is no growth during the period. In short both the exercises show that contrary to the claim made by the survey, there is no growth in new firm creation during the most recent period.

- **Finding 2:** New firm creation is significantly higher in services than in other sectors

**Figure 3: Industry-wise Distribution of New Form Creation**

Source: Computed from Ministry of Corporate Affairs.

However, according to a recent survey report by the National Sample Survey Office (NSSO),² it was found that as much as 37.8 % of the companies that are part of the MCA-21 database of companies and are also used in India's GDP calculations could not be traced or were wrongly classified. Considering this fact, it is doubtful that a number of new service sector firms are

¹ Sengupta and Singh (2019) has also estimated similar structural breaks.

² Technical Report on Services Sector Enterprises in India, NSS 74THRound, http://mospi.nic.in/sites/default/files/publication_reports/Final%20TR%2074th%20Round_compressed.pdf (accessed on March 5, 2020)

actually in existence. The survey does not make any reference to the doubtful nature of service form registration. The data on new firm creation will have to be adjusted for dormant and non-traceable firms to get a correct picture of the growth in entrepreneurship.

- **Finding 3:** Grassroots entrepreneurship is not driven by necessity as a ten percent increase in registration of new firms in a district yields a 1.8 per cent increase in Gross District Domestic Product (GDDP). This is obtained by an OLS specification that regresses the district GDP (at current prices in natural log) on the number of new firms (once again natural log) as the primary independent variable.

Unless the data are corrected for active new firms, seeking a relation between new forms and GDDP may be misleading. On an average, most of the firms are in services where measurement of GDP is itself is based on the amount of money that is expended in providing that service- so it is more of a statistical artifact ? So, the present exercise does not prove that entrepreneurship at the bottom of a pyramid has a significant impact on wealth creation at the grassroot level.

- **Finding 4:** Birth of new firms is very heterogeneous across districts and across sectors – this is mapped using an index of relative entrepreneurial activity (IEA).

The IEA = District i^{th} share of new firms in sector 'j'

District i^{th} share of all new firms in all sectors

IEA for manufacturing and services are concentrated in certain districts while those of agriculture is more evenly distributed. The states in the highest quintile of IEA in agriculture are in the North-Eastern states of Assam, Manipur, and Meghalaya and MP and Orissa. IEA in manufacturing is highest in the regions of Gujarat, Meghalaya, Pondicherry, Punjab and Rajasthan. Within Gujarat, most active districts are Surendranagar, Rajkot, Bhavnagar and Surat. Agglomeration economies – incumbent industrial structures for input and output and specialized labour in a region are strongly correlated with IEA in that region. However, this finding of Ghani, Kerr and O'Connell (2013)³ and from that point of view there is nothing new in this finding.

Gujarat, Punjab and Rajasthan were classified as states with flexible labour laws. In other words, the survey makes a positive correlation between states having flexible labour laws and entrepreneurship. However, the most influential and much cited paper linking labour and manufacturing performance was the Quarterly Journal Article (QJE) article of Besley and Burgess (2004). Their article provides econometric evidence that pro-worker regulation resulted in lower output, employment, investment and productivity in India's registered manufacturing sector. However, Storm (2019) reviews existing critiques of Besley

3 For some reason this specific paper of Ghani, Kerr and O'connell 2013) is not cited here.

and Burgess (2004), which highlight conceptual and measurement errors and uncover econometric weaknesses. In short, the relationship between flexible labour laws and industrial performance is a hotly debated one and therefore drawing firm conclusions about this relationship is unwarranted.

- **Finding 5:** Literacy and education in a district foster local entrepreneurship significantly. So the Eastern region has the lowest level of entrepreneurship as the region has the lowest level of literacy. But then new firm creation depends on a number of factors, literacy level being only one such.
- **Finding 6:** Level of education and quality of physical infrastructure influence new firm creation significantly. This is just a corollary of the previous finding.

Conclusions

The chapter is empirically weak- cannot be used as an instance of evidence-based policy making as the evidence on new firm creation presented is questionable. The chapter does not engage systematically with the existing literature on entrepreneurship in India. An important instance of entrepreneurship is the emergence and growth of startups in the country especially since 2016. But alas the present chapter makes no mention of it at all. There is no systematic discussion of the factors affecting entrepreneurship. One of the most important factors is the changes in technology which has lowered the barriers to innovation. A window of opportunity framework would have improved the analytical rigour of the chapter rather than the crude empiricism.

References

- Ghani, Ejaz, William R. Kerr, and Stephen O'Connell. 2013. 'Spatial Determinants of Entrepreneurship in India.' Special Issue on Entrepreneurship in a Regional Context, *Regional Studies* 48, No. 6.
- Ministry of Corporate Affairs (various issues), *Annual Report*, Government of India, <http://www.mca.gov.in/MinistryV2/annualreports.html>
- Sengupta, Rajeswari and Manish Singh (2019), Firm formation in India, Ideas for India Blog, <https://www.ideasforindia.in/topics/macroeconomics/firm-formation-in-india-the-last-40-years.html> (accessed on February 25, 2020)
- Storm, S (2019) 'Labor Laws and Manufacturing Performance in India: How Priors Trump Evidence and Progress Gets Stalled' Working Papers Series, no. 90, Institute for new economic thinking, pp. 1-34.

GOVERNMENT INTERVENTION AND MARKETS

Sudip Chaudhuri

The objective of this note is to critically examine briefly Chapter 4 of the *Economic Survey, 2019-20, Volume 1* (ES) on “**Undermining Markets: When Government Intervention Hurts More Than it Helps**”.

The role of government intervention in a capitalist economy is not to replace the market or the private sector. The role is rather to achieve some desired social and economic objectives which may not be possible in the absence of government intervention. But if government intervention does not help to realize these objectives, in fact, if it makes the situation worse, then, of course, the failure of the government needs to be properly analyzed and corrective action taken.

The Chapter begins with the quotation: “Every moment one should learn” and ends with the recommendation that, “.... each department and ministry in the Government must systematically examine areas where the Government needlessly intervenes and under-mines markets”. Thus, it might appear that the ES is stressing the need for proper learning from experience to bring about the desired changes in the role of the government. But a closer look at the chapter suggests that though the chapter claims that it is not against government intervention, it is actually suggesting its abolition on the basis of insufficient understanding and inadequate economic analysis. It wants legislative changes to reduce government intervention. In fact, it wants some of the key Acts to be repealed by “one stroke of the pen” (p. 93).

The ES makes some general points about the link between government intervention and economic development and then undertakes four case studies of “anachronistic government interventions.”

The ES provides some neatly drawn graphs to show the cross-country correlation between the economic freedom index and variables such as GDP per capita, patents applied and granted and Index of innovation. It concludes that India’s disappointing economic performance is due to lack of economic freedom and prescribes that the government must intervene less if the country is to develop economically. The ES confuses causation with correlation. If different countries at different stages of development are to be compared, which time periods need to be considered for such comparison? Should India of today be compared with USA of today or with USA at the corresponding stage of development? It assumes that developed countries have developed relying on market rather than on

government intervention. But there is a huge literature which suggests that countries such as the United States, Japan, South Korea, Taiwan did not rely passively on market to develop economically. Governments consciously intervened and compromised with “economic freedom” to influence the outcomes (see, for example, Amsden, 1989; Wade, 1990; Evans, 1995; Reinert, 1999 and Chang, 2002). The ES has ignored this literature and mistakenly equates economic freedom with economic development. Even today in areas where the private sector typically under-invests as in R&D, the government in the US intervenes to promote innovation (see for example, Mazzucato, 2013).

The ES has also ignored the post-1991 literature and experience in India. Not unexpectedly, it approvingly refers to the liberalization measures taken after 1991 in India. Despite all the problems associated with government intervention before 1991, an industrial base was created and new industries did develop. How has the industrial sector performed after 1991? Were the stated objectives realized? It is about three decades since then. Rather than these correlation exercises, it would have been much more useful if the ES had attempted a concrete analysis of where the Reforms have worked and where it did not, and why?

ES has undertaken four cases studies to study respectively the impact of imposition of stock limits on commodities under the Essential Commodities Act; regulation of drug prices through Drug Price Control Order, 2013 (DPCO); intervention in grain markets and debt waivers. The common element in these case studies is that these try to show that government intervention has often not worked – in fact, that these have led to unintended negative outcomes. The case studies, however, are highly uneven in terms of the quality of analysis provided. In this brief note, let us consider debt waivers and drug price control.

In the case of debt waivers, an attempt has been made to use and learn from the existing literature (including from a paper where the Chief Economic Adviser is a joint author). And interestingly, the ES does not recommend discontinuation of debt waivers. It suggests limited use of such relief as “emergency medicine to be given in rare cases after a thorough diagnosis and identification of illness and not a staple diet”. On the other hand, in the case of drug price regulation, the ES provides some data such as that prices of regulated drugs have increased more than that of others and concludes not only that the objectives of DPCO have not been realized, but that the latter must be abolished. Drug price control has been in operation in India since 1970. There is a huge literature on it (see Chaudhuri, 2019 for a brief review). No attempt has been made to understand how the drug markets function in India including the small part under price control. There is no discussion of why it is not working the way intended, and whether reforming it or abolishing it is a better option. India is not the only country where the prices of drugs are controlled. And prices can be controlled in different ways as the experience of other countries suggest. Recommending such a drastic action without any creditable economic analysis by the top economic research unit of the government is disappointing, to say the least.

References

- Amsden, Alice H. 1989. *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press.
- Chang, Ha-Joon. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*, London: Anthem Press.
- Chaudhuri, Sudip. 2019. 'How Effective Has been Governments Measures to Control Prices of Ant-Cancer Medicines in India?', Working Paper No.490, Centre for Development Studies Trivandrum.
- Evans, Peter. 1995. *Embedded Autonomy: States and Industrial Transformation*, Princeton: Princeton University Press.
- Mazzucato, Mariana. 2013. *The Entrepreneurial State: Debunking Public Vs Private Sector Myths*, London: Anthem Press.
- Reinert, Erik. 1999. 'The Role of State in Economic Development,' *Journal of Economic Studies*, Vol. 26, No. 4/5.
- Wade, Robert. 1990. *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*, Princeton: Princeton University Press.

CREATION OF EMPLOYMENT THROUGH GVC INTEGRATION IN INDIA. PROSPECTS AND CHALLENGES

Manikantha Nataraj

India has been experiencing persistent employment crisis since the 1980s, however the nature of the crisis varied from jobless growth in the organised manufacturing sector till 2004-05 (Kannan and Raveendran, 2009) to overall jobless growth till 2011-12 (Mehrotra. et al, 2014) and finally to a job-loss growth which is perhaps a completely new experience for independent India (Abraham,2017; Kannan and Raveendran, 2019). Under this background, the Economic Survey (ES) 2017-18 and the latest ES-2019-20 have attempted to address this crisis via reforming the trade policies, particularly by promoting export activity and emphasising on integrating into Global Value Chains (GVC). Here, I will attempt to analyse the Government's approach in addressing the rising employment crisis by critically reviewing Chapter 5 of Economic Survey-2019-20 titles "Creating Jobs and Growth by Specializing to Exports in Network Products". The review is in two parts. Firstly, I will briefly summarise the major arguments of the chapter. Secondly, I will discuss the implication of the arguments for the Indian employment scenario.

Part 1: Summary

The chapter makes the following arguments.

1. The current world trade environment, highly influenced by USA-China trade war, labour shortages in China and increasing wages in the Chinese labour market, is opening up an opportunity for the Indian economy to enhance its export performance and reap benefits from it.
2. Since liberalisation, Indian export performance though have shown improvements, but its market share of the global export is significantly low in comparison to China. The share of merchandise export is drastically low in comparison to the world average and is experiencing a trade deficit. However, the service sector export is performing at par with that of the world average and also generating trade surplus thus reducing the current account deficit to some extent.
3. India's under performance in the global trade of merchandise products vis a vis China is driven by specialization effect rather than diversification effect. In other words, India is almost catching up with China in the varieties of goods exported, but falls far behind in terms of the value of the

goods exported. This value is low for India especially due to exporting of fewer quantity than for exporting at a lower price. Further, China's better market share in export is found to be due to their timely participation in GVCs which led to higher market penetration into the high-income OECD countries in comparison to India.

4. Within the non-oil merchandise export, India's share is highest in the capital-intensive commodities. From the point of view of employment creation, the concern is the fall in export share of traditional labour-intensive commodities. China, on the other hand, has a strong export share of labour-intensive commodities till 2000. Besides, although Chinese export share has witnessed a transition to capital-intensive commodities, it covers a significant proportion from the labour-intensive task, like assembling of parts and components, due to their early entry into GVCs.
5. India in spite of being a labour abundant country, has not been able to export labour intensive merchandises. Integrating into the GVC can be a way to resolve this issue. By opening up the economy to import of intermediate goods, India can integrate into the GVC. By participating into the upstream activities like assembling of the imported parts and components, India can create employment and increase its share of domestic value added in the gross export. This is a potential path to address her lower share in the export market.
6. Prioritising assembling of "network products" (NPs) like office machines and equipment, telecommunication and allied equipment, electrical machinery, road vehicles, professional and scientific equipment and photographic apparatus along with production of traditional products like textiles, clothing and footwear, in GVC participation is expected to create jobs along with improved export performance.
7. NPs export cover a significant share of total export for many Asian countries like Japan, Korea, Vietnam, and China. However, India's export share of NPs is not only drastically low it also is undergoing a trade deficit. Even within NP export, India is behaving anomalously. For majority of the Asian countries, NP export is led by assembling then followed by production of parts and component. But India's export is led by parts and components. To reap benefits from GVC, India needs to reverse the order, especially because India is at a neonatal stage in GVC activities. However, the NP export performances of these countries have followed a "flying geese" model. For instance, the falling export of Japan from 1994 was accompanied by a rising export of China. From 2010, China is showing a downturn that is where India can become prominent. Though NP export is low, but if the current global trade environment prevails and the pattern of the global NP export persists, then India can exploit the situation and reap benefits from it in terms of improving export share as well as creating jobs.

Part 2: Review

It's been an ongoing trend since the ES 2017-18 where employment crisis is not been explicitly acknowledged in spite of numerous reporting revealing its severity. Though this latest ES has addressed the employment situation through the medium of promoting export and growth performance, which is, to me, a skewed approach. The argument, from the point of view of employment, in this chapter was confined to- can GVC create jobs? The major effort in the paper was directed towards finding a solution to enhance the export performance of the country, and as a corollary-job will be created. This is a narrow approach as it is not a comprehensive attempt to consider all the possible ways to address the employment crisis.

The chapter proposed to imitate “China-like” labour intensive export promoting policy. However, China since its reform period has undertaken public policies in capital creation and distribution, infrastructure and R&D much aggressively than what India did (see Figure 1, Figure 2 and Figure 3).

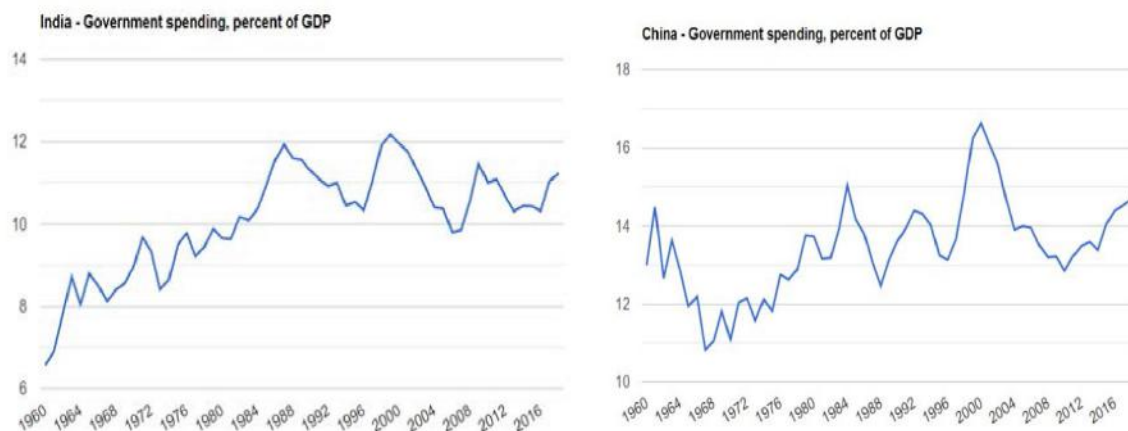


Figure 1: Government Expenditure as a Percentage of GDP

Source: World Bank.

This provided them with a stronger domestic economy, a crucial foundation with which they entered the global market with both diversification and specialization at their repertoire. India on the other hand, dwindled by high poverty, inequality and unemployment is suffering from a severe demand-side crisis. Lack of domestic demand is a major reason behind the draught in the job market. The proposal to create jobs via export promotion is to substitute the weak local market with the relatively stronger global market. China's entry into the global market was not for lack of domestic demand but for expansion of their local market into the global economy and they were much better prepared to compete globally than what India is even today. To reap benefits from global competition, public investment to strengthen the domestic macroeconomic situation should be prioritised.

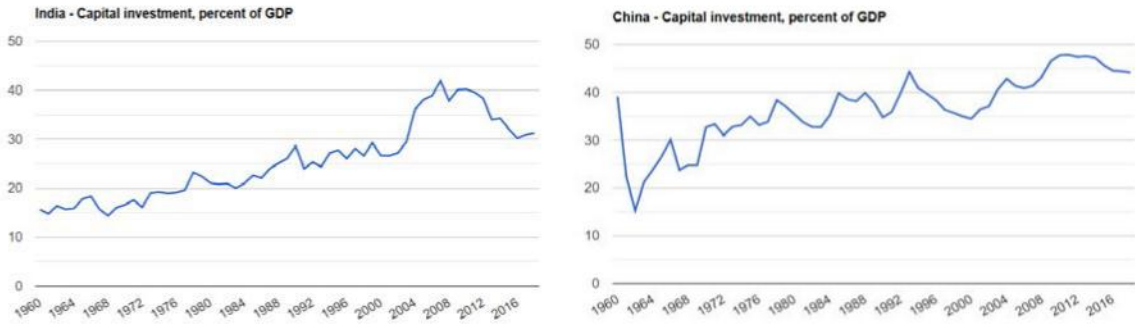


Figure 2: Capital Investment as a Percentage of GDP

Source: World Bank.

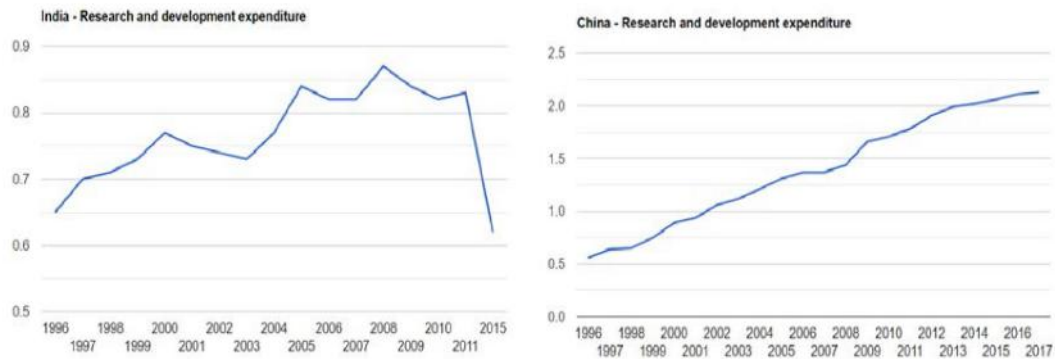


Figure 3: R&D Expenditure as a Share of GDP

Source: World Bank.

China's remarkable performance has been credited to its strategic entry into GVCs. There is a false convention to measure GVC participation only via the backward or import channel which is adopted by the ES also. This holds true mainly for the countries focussed on downstream or post production activities like marketing and advertising who are mainly the "developed" north. For "developing" countries like India the backward channel is of a much smaller length as they perform the upstream activities like manufacturing. If we see China only, their marvellous performance in the GVC is driven by higher performance of domestic value addition in export (DVA/GE). This ensures not only increasing integration into GVC but also capturing the gains from it (Figure 4). This figure also reveals that China's forward participation or contribution in export was not led by import content..

This strategy of integrating into GVC via a backward channel with comparative advantage at the upstream tasks can have a negative impact on employment creation by tying the economy at the low value adding activity. This is because import basket for upstream activity will include intermediate

goods like semi-finished products, parts and components. There remains little scope to add value over them by assembling only as compared to manufacturing the assembled parts too. After all, the high value-added activity falls outside the manufacturing activity altogether and lies in packaging, managerial, marketing and branding activities where India is incompetent. This is mainly because of the unequal global capital endowment. Under this condition, focusing only on assembling is a missed opportunity especially if we consider the fact that Indian manufacturing of parts and components is already performing better than assembling. In other words, I will argue, diversification of activities is not a problem, but a required strategy at the upstream level. Besides, diversification is not the cause for lack of specialization. It is the lack of public investment and that is where the immediate priority should be given.

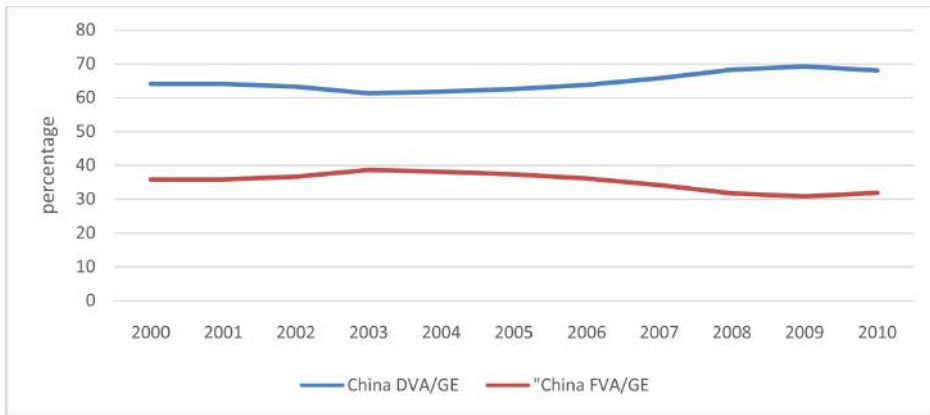


Figure 4: China's GVC Participation Driven by Domestic Value Addition Since 2000

Source: OECD TiVA, 2016.

Increasing the import of intermediate goods and assembling them will for sure create jobs as assembling of parts is a highly labour-intensive activity, but on the other side, importing will destroy jobs as it is basically substituting local production with foreign production. The net effect can be positive provided the scale of activity is sufficiently large. The ES also mentioned that there is a potentiality of job loss estimated to be around 2% per year and acknowledged it to increase in labour productivity. However, it is a much clearer option if the focus is on traditional manufacturing sector like textiles and footwear which is labour intensive and India's dependence on foreign import is lower. Besides, being a traditional sector India has some default advantage in terms of labour capability, experience and skills. If sufficient investment is done along with market enabling policies in this sector, then the potential gains are probably higher than that of NPs.

The chapter has acknowledged this traditional sector but has not emphasised it. It can be argued that the possible reason for emphasising NPs over the traditional sectors is that the latter is buyer driven in GVCs and the global market is oligopsonistic in nature which hinders the possibility of

industrial upgrading. This is a deeper concern which bothers every decision regarding GVC participation. The potential solution to prevent the creation of market power in GVCs is not avoiding the buyer driven sectors but to create regional value chains and domestic value chains. This will reduce the overall dependency on the GVC and also create a competitive pressure on the buyers of the north. However, the paper has expressed a contradictory desire to integrate into GVCs exclusively thus eliminating the possible gains from integrating traditional sectors into the value chains altogether.

The usual argument which is put forward behind explaining when a GVC will be buyer driven or seller driven is the requirement of skills and complexity of the task (Gereffi, 1999). But what should also be considered is how much the possibility remains to automatize and standardise the process of production. If a task can be technologically substituted then the determinant of the driver will be ownership of capital. There is no guarantee that manufacturing of NPs is secured from this transformation. This is a broader concern and we should be prepared for it if we want to exploit GVCs to our benefit.

We can learn from China here as well. Firstly, Chinese upstream activities are diversified into both manufacturing and assembling activities. Secondly, their stronger domestic economy and better capital ownership is keeping them more competent to tackle the situation of a potential transformation in production process. The ES tried to argue that India is nearly as diversified as China in terms of trade performance but lacks behind in specialization and came to a conclusion to substitute diversification with specialization. The need is specialization at diverse activities especially because Indian activities are in the upstream like limited account manufacturing. If the focus is pinpointed at industrial upgrading then advanced account manufacturing and innovation activities have to be brought into the purview. But these sectors have lower labour absorbing capacity and also requires higher investment in R&D, education and skill development. By binding the condition of employment creation via GVC and then only focussing on assembling will possibility neither create sufficient employment nor result in industrial upgrading.

A final concern which the paper puts us into is the brave assumption of the prevalence of “usual scenario” till 2030, which will ensure creation of 148 million jobs via export promotion of NPs. Firstly, just like India, countries like Vietnam, Thailand, Indonesia and Hong Kong can exploit the changing scenario in the world trade environment. In fact, many of them have already a head start. Secondly, even if the growth rate of world export increases at an “usual way” it does not necessarily mean that the “usual” process of production with the “usual” capital-labour ratio will also continue. Then export share even if rises will not raise employment. Thirdly, we cannot expect the global trade also to follow the same trend as it did from 2010 to 2018 because of the gradual weakening of the WTO, creation of new bilateral and multilateral trade agreements and closing of old ones. This makes us sceptical to the hasty projected figures on future employment in a chapter where no statistics on the present and the past employment is mentioned.

Conclusion

India has a long run persistent employment crisis which needs to be resolved to reap the benefits of the demographic dividend. GVC can be a potential solution to this problem. But to capture the gains from GVC India can enter the global market only after strengthening its local economy. China like India has a huge labour force. But before entering into GVC they made strategic government intervention by investing in labour-intensive sector, capital formation and technology. India, on the other hand, believes to utilise the GVC to strengthen their local economy. But unlike free market-if there is any, GVC is influenced by market power and unequal capital endowment. Under this circumstance, entering into GVC will most probably make India tied at a low value-added activity and reduce the scope for industrial upgrading. Besides, the transformation of production process with automation and technology is remarkably evident within GVC. This puts the labour creation opportunity under threat. Finally, India is going to participate in a supplier base where the competition is intense. This creates a concern for the creation of a job only of low quality with low domestic value-addition. Under this circumstance, India should put effort to create regional and domestic value chains and thus limit the dependency on “north”. To do this, she has to empower her local economy first by investing in capital creation, R&D and strengthening the local consumption power. After all, GVC does not make a country strong, it exploits the strength of a country for its growth. As far as creating employment is concerned, it should be prioritised over GVC integration because irrespective of export or GVC performance, employment has to improve. In that respect, a comprehensive national employment policy should be developed. GVC maybe is one of the options but not the only one.

References

- Abraham, V. 2017. ‘Stagnant Employment Growth: Last Three Years May Have Been the Worst.’ *Economic and Political Weekly*, 52 (38), 13-17.
- Gereffi, G. 1999. ‘A Commodity Chains Framework for Analyzing Global Industries’. *Institute of Development Studies*, 8 (12), 1-9.
- Kannan, K. P., & Raveendran, G. 2009. ‘Growth Sans Employment: A Quarter Century of Jobless Growth In India’s Organised Manufacturing’. *Economic and Political Weekly*, 80-91.
- Kannan, K. P., & Raveendran, G. 2019. ‘From Jobless to Job-loss Growth’. *Economic & Political Weekly*, 54 (44), 39.
- Mehrotra, S., Parida, J., Sinha, S., & Gandhi, A. 2014. ‘Explaining Employment Trends In The Indian Economy: 1993-94 to 2011-12’. *Economic and Political Weekly*, 49-57.

THE ECONOMICS OF A PLATE OF FOOD IN INDIA

Tirtha Chatterjee

Thalinomics, according to the Economic Survey 2020, is a means to quantify what common man pays for food and therefore relate economics to his everyday life. The objective of this note is to summarize and review the findings of the chapter in the Economic Survey. Section 1 summarizes the chapter and Section 2 reviews the same.

Section 1: Summary of the Chapter

They study prices of two types of thalis- vegetarian and non-vegetarian between 2006-07 and October 2019-20 and find that after 2015-16, the average household gained Rs. 10887 and Rs. 11787 per year on average from the moderation in vegetarian and non-vegetarian Thali prices respectively. In terms of increase in the price of thali components, they argue that although price rise for almost all commodities was lower in the period of the study, dal and vegetable prices, in particular, have been lower in the given period. Thali inflation has declined and variability in prices does not follow any trend.

The Chapter also measures affordability of a thali using share of daily wages of a worker required to acquire two thalis a day for his/her household members and find that earlier 70% of his/her wage had to be spent on vegetarian thali and now they have to spend 50% of their daily wage. For non-vegetarian thali, share of wages fell from 93% to 79%. There are regional variations in terms of affordability of a thali and both vegetarian and non-vegetarian thalis are cheapest in Jharkhand.

The Chapter claims that the increase in affordability is because of schemes like Pradhan Mantri Annadata Aay Sanraks Han Abhiyan (PM-AASHA), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) - Per Drop More Crop, Pradhan Mantri Fasal Bima Yojana (PMFBY), Soil Health Card, e-National Agricultural Market (e-NAM), National Food Security Mission (NFSM) and National Food Security Act (NFSA).

Section 2: Some Comments

The first point to note is that while measuring affordability of thali, they consider only a subset of the workforce who earn their livelihood from organized manufacturing sector. The sample they

consider for their result forms just about 3.3% of the total workforce of the country¹. Hence all results from this chapter must be taken keeping the small sample in mind. The second point to note is that falling prices imply falling income for agricultural households who form almost half of the total workforce. Rising farm distress is a signal of that. Ideally, policy objective must be both towards rising farm income and stabilizing prices rather than only controlling the latter.

The third point is regarding factors driving falling food prices. Claiming it to be only because of success of these above-mentioned schemes is too premature. Given that some of these schemes like PM-AASHA are yet to be implemented², any claim of their success must be taken with a pinch of salt. With regards to PMFBY, during 2018-19, about 5.64 crore farmers are enrolled with PMFBY for an insured sum of Rs 2,35,277 crore, and 30% of the gross cropped is insured. The fact that the scheme underwent a massive revamp days after publication of the Economic Survey raises questions about its efficiency in the first place. e-NAM was launched in 2016 with an objective of spatial integration of all markets across the country. However, there is hardly any evidence of intra mandi or inter-state trade. Rather the factor which actually helped in controlling prices was the inflation targeting scheme since 2016 through which the Parliament mandated the RBI to target a 4% inflation rate with a deviation of +/- 2 percent. Lower inflation is because of this regime and the document does not talk about it or give any credit to it.

One thing that the chapter must be given due credit is indirectly acknowledging farm distress. With food prices not going up, farmer income is unlikely to go up. OECD (2018) finds that despite all the schemes and subsidies given to the farming sector, we tax agriculture. The report finds that between 2000-01 and 2016-17, farmers lost 45 lakh crore (at 2017-18 prices), or around Rs 2.6 lakh crore per year. By claiming that plummeting dal and vegetable prices are one of the reasons for cheap thalis, the Economic Survey admits inefficiencies in value chains for both these commodities. Low prices are because of inefficient marketing system, abrupt and consumer biased trade policies, poor marketing infrastructure among many others.

In another context, a leaked National Statistical Office consumption survey report, which the government junked in November 2019, showed that rural consumption, including expenditure on staples, fell by 9% between 2011-12 and 2017-18. The poor are evidently consuming less than they did a decade back³. This raises many questions- Why is consumption falling if food is cheaper? And makes us think whether cheaper food is always a thing to wish for.

1. This is because share of workers in organized manufacturing is 30% of overall workforce in overall manufacturing sector. And with 11% of workforce in manufacturing sector (NSS), the study addresses the concerns of 3.3% of the total workforce of the country.

2. Price Deficiency Payments and pilot of Private Procurement and stockist scheme

3. <https://www.livemint.com/news/india/why-food-inflation-may-turn-sticky-11579537949867.html>

To conclude, the chapter must be given credit for bringing out the bias that the agriculture sector as a whole has been facing in India in the public domain. There is an inherent consumer bias in policy making in the country. Fall in prices is not considered as a fall in farm income and considered credit worthy while rise in agricultural commodity prices is turned into a crisis.

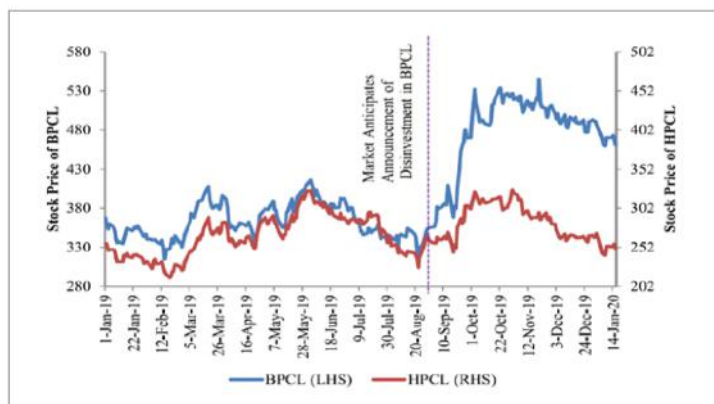
References

- OECD/ICRIER. 2018. Agricultural Policies in India, OECD Food and Agricultural Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/9789264302334-en>.
- Kapoor, R., & Krishnapriya, P. P. 2019. 'Explaining the contractualisation of India's workforce.' ICRIER Working Paper-369.
- Khandekar, N. 2019. 'More Crop Per Drop': How PM KrishiYojana is Making Agricultural Land More Productive, <https://www.news18.com/news/buzz/more-crop-per-drop-how-pm-krishi-yojana-is-making-agricultural-land-more-productive-2105879.html>
- Sharma, H. 2020. Explained: How Crop Insurance Changes, <https://indianexpress.com/article/explained/explained-how-crop-insurance-changes-6278800/>

PRIVATIZATION AND WEALTH

Ritika Jain

Chapter 9 of the Economic Survey (ES) focuses on privatization and the efficiency gains that follow. It analyses the before-after performance of central public sector enterprises (CPSEs) that had undergone strategic disinvestment. The analysis shows that privatized CPSEs perform better than their peers in terms of several financial performance indicators. Thus, the chapter recommends this form of privatization to be replicated across all non-strategic manufacturing CPSEs. This short commentary summarizes and critically discusses specific issues related to Chapter 9 of the ES 2020. Chapter 9 starts with a discussion on the rise in the value of shareholders' equity for Bharat Petroleum Corporation Limited (BPCL) after its strategic disinvestment announcement in September 2019. The comparison of BPCL share prices with that of HPCL suggests that while the price trend for both these companies was in sync before the announcement, there is a spike in the share price of BPCL post the announcement. This has been shown in Figure 1:



Source: Bombay Stock Exchange (BSE)

Figure 1: Trend of Share Price of BPCL Before and after Privatization Announcement

Source: ES 2020.

The soaring trend of BPCL share price reflects anticipated gains from efficiency improvement. The chapter then examines the efficiency gains from privatization by analysing the before-after performance of 11 CPSEs that had undergone strategic disinvestment from 1999-00 to 2003-04. Performance indicators used are net worth (equity capital and profits), net profit (profit after tax), gross revenue, return on assets (profit after tax to assets), return on equity (profit after tax to net worth), net profit margin (profit after tax to operating income), sales growth, gross profit per employee

(profit to number of employees). Performance of these 11 CPSEs is then compared for ten years before and after privatization. To examine the between firm differences explicitly, the Survey examines the trends for each of the performance indicators of privatized firms ten years before and after privatization. This has been presented in Appendix I. As a next step, difference-in-difference estimation technique is used to measure the effect of privatization on performance indicator. The main results indicate a positive effect of privatization (Table 1).

Table 1: DiD Measure for Select Performance Indicators

Indicator	DiD value
Return on Assets	5.04%
Return on equity	0.89%
Net profit margin	15.26%
Sales growth rate	4.89%
Gross profit/employees	21.34 (in Lakhs)

Based on this analysis the Chapter pushes for aggressive privatization and disengagement of the government from non-strategic competitive sectors.

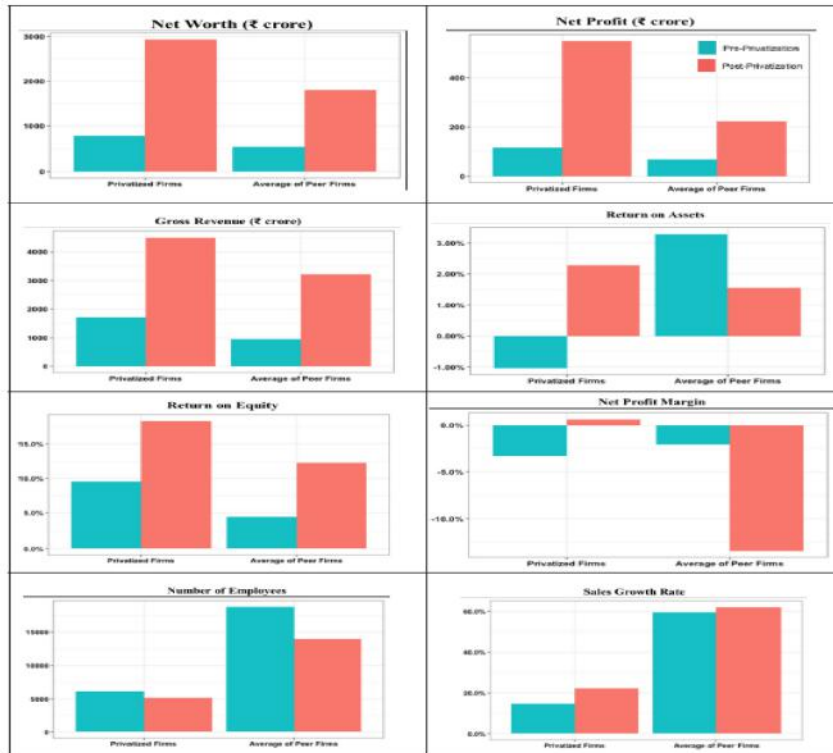


Figure 2: Comparison of Privatized and Non-Privatized Firms

Critical Review

Within the framework of the current Chapter 9 of ES 2020, there are some limitations. The Chapter motivates the privatization drive with the anticipated gains that follow the news of privatization announcement for BPCL in September 2019. However, higher prices of BPCL may be attributed to the fact that it is one of the Top Maharatna CPSEs and hence is highly valued on the stock market. By selecting profitable CPSEs, the government caters to reducing the fiscal burden. Secondly, while analysing the pre and post differences in outcome variables- ES uses variables at levels such as net worth, net profits and gross revenue. These may be different for the “privatized and peer” groups since the firm sizes may be different. Further, DiD estimation suggests that there is some improvements in these indicators. However one of the most essential requirements of a DiD methodology is the satisfaction of parallel path assumption. Figure 3 reflects ambiguity more than certainty of this assumption.

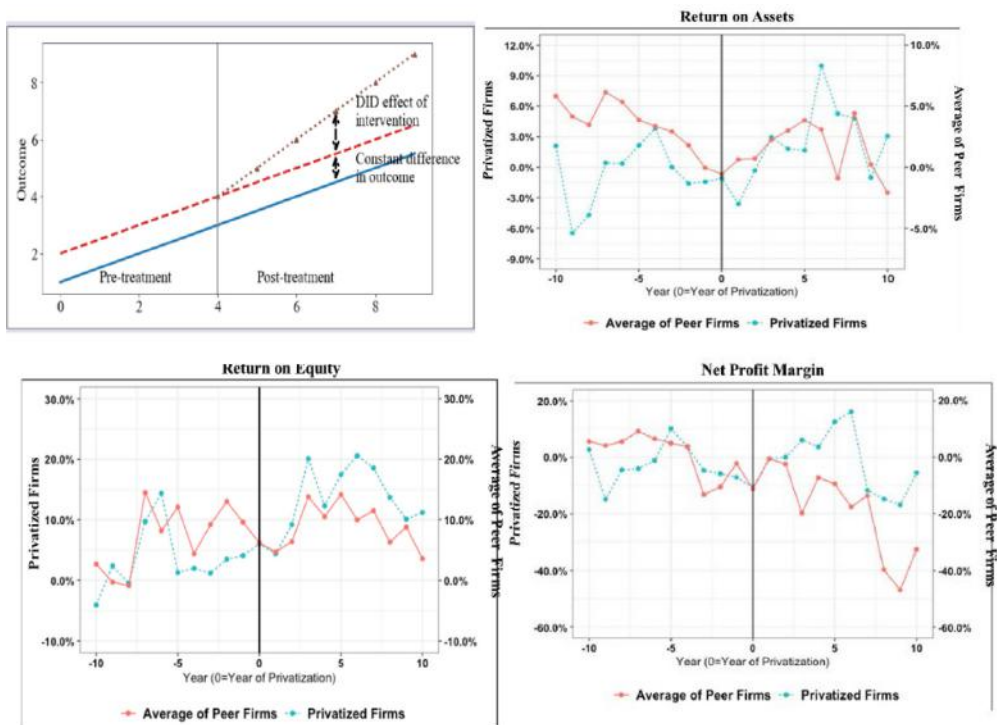


Figure 3: Parallel Paths in Theory- Comparison with ROA, ROE and Net Profit Margin

The next set of comments are broader and more relevant in scope. The assumption of a movement towards profit-oriented objective as a solution seems to be flawed. State-owned enterprises exist for providing employment to the masses, keeping prices low in certain sectors, reducing regional imbalances and operating in areas and sectors where the private sector is not well suited. Hence, this social objective may be completely diluted when focusing on privatization. Additionally, the Chapter discards

the role and prevalence of slow paced disinvestment typical to the Indian experience despite the positive effect of disinvestment in India (Majumdar, 1998; Ghosh, 2008; Gupta, 2005; Jain, 2017; Chhibber and Gupta, 2018). Hence, a mere reduction of state-owned enterprises to privatization indicates the narrow lens through which these enterprises have been evaluated in Chapter 9 of ES 2020.

References

- Chhibber, A., & Gupta, S. 2018. 'Public Sector Undertakings: Bharat's other Ratnas'. *International Journal of Public Sector Management*.
- Ghosh, S. 2008. 'Does Divestment Matter for Firm Performance? Evidence from the Indian experience.' *Economic Systems*, 32(4), 372–388.
- Gupta, N. 2005. 'Partial Privatization and Firm Performance.' *The Journal of Finance*, 60(2), 987–1015.
- Jain, R. (2017). 'Public Sector Enterprise Disinvestment in India: Efficiency Gains in a Political Context.' *Journal of Asian Economics*, 53, 18-36.
- Majumdar, S. K. (1998)]. 'Assessing Comparative Efficiency of The State-Owned Mixed and Private Sectors In Indian Industry.' *Public Choice*, 96(1–2), 1–24.

Appendix A:

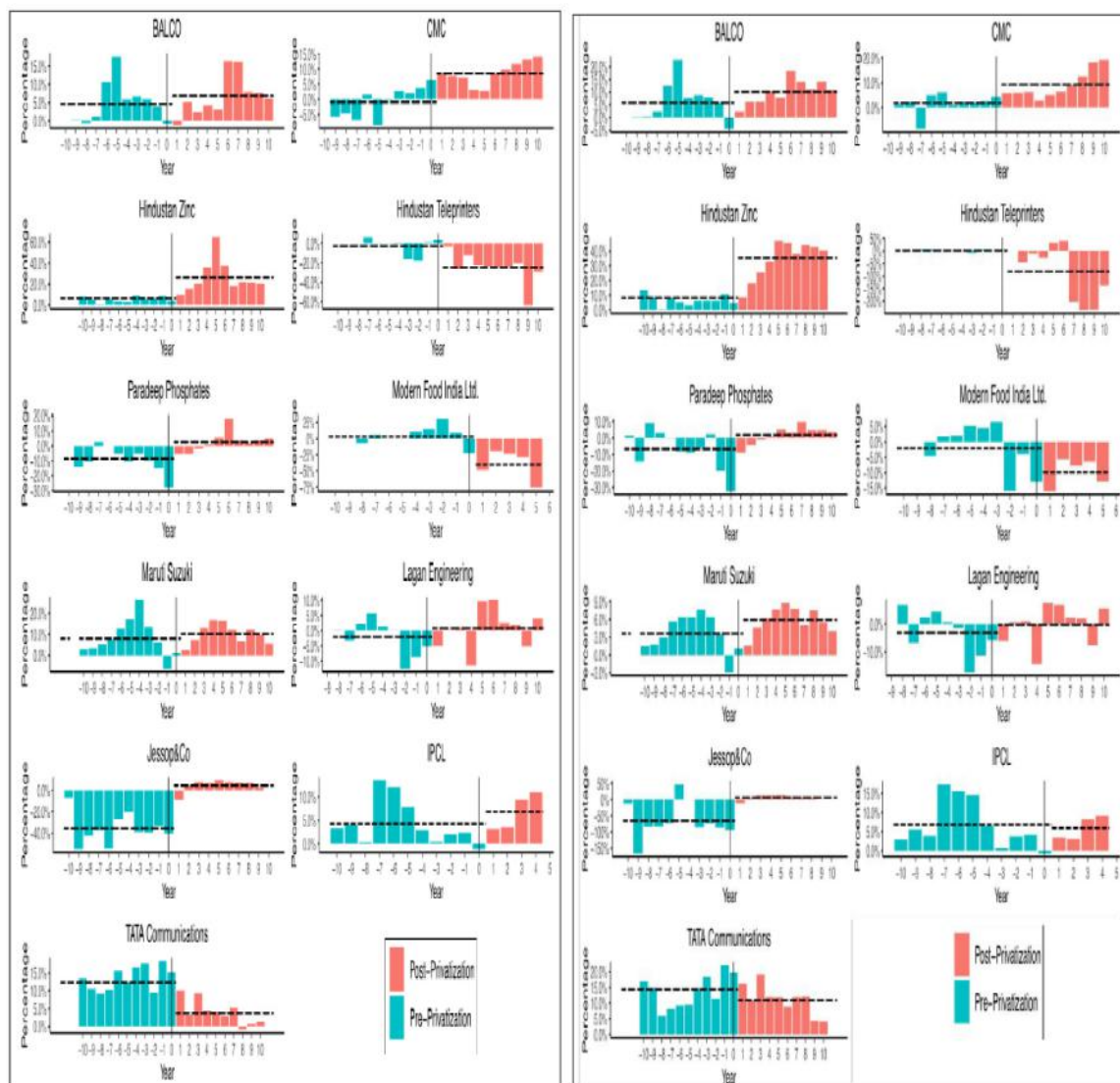


Figure 4: ROA and ROE Trends for Privatized Firms

*The contributors of the paper are faculty members/doctoral scholars at
the Centre for Development Studies, Thiruvananthapuram*

PREVIOUS PAPERS IN THE SERIES

1. **Dimensions of India's Economy: As seen through the Economic Survey 2017-18 and the Union Budget 2018-19.**
Manmohan Agarwal, Sunandan Ghosh, M Parameswaran, Ritika Jain, P Seenath, Hrushikesh Mallick, Vinoj Abraham, Udaya S Mishra, Sunil Mani, P L Beena. March 2018.
2. **Dimensions of India's Intellectual Property Right System. How Many Patents are Commercially Exploited in India?**
Sunil Mani. May 2018.
3. **An Uncertain Shift from 'Protectionism' to 'Empowerment'? Probing the Decision by NORKA to Recruit Women Domestic Workers for Kuwait**
Praveena Kodoth, November 2018.
4. **Protectionism: US Tariff Policy and India's Response**
Part I: Manmohan Agarwal, **Part II:** Sunandan Ghosh, December 2018.
5. **Industrial Investment Intention and Implementation in India: Broad Trends and Patterns at the State-level**
Ritika Jain, March 2019.
6. **Monetary Policy Journey to Inflation Targeting**
Manmohan Agarwal & Irfan Ahmed Shah, April 2019.
7. **Gender-Based Cyber Violence against Women in Kerala: Insights from Recent Research**
J. Devika, May 2019.
8. **SWACHH BHARAT - 2019: Will Rural India be ODF/SWACHH?**
G. Murugan, May 2019.
9. **Dimensions of Indian Economy As seen through the Economic Survey 2018-19 and the Union Budget 2019-20**
K. P. Kannan, P.L. Beena, M. Parameswaran, Vinoj Abraham, G. Murugan, Udaya Shankar Mishra, Hrushikesh Mallick, Sunil Mani, August 2019.
10. **Are Medicine Prices High and Unaffordable after TRIPS? Evidence from Pharmaceutical Industry in India**
Sudip Chaudhuri, December 2019.
11. **World Development Report 2020: Trading for Development in the Age of Global Value Chains.**
Rajkumar Byahut, Sourish Dutta, Chidambaran G. Iyer, Manikantha Nataraj, March 2020.



Centre for Development Studies

(Under the aegis of Govt. of Kerala & Indian Council of Social Science Research)

Prasanth Nagar, Ulloor

Thiruvananthapuram 695 011

Kerala, India

Phone : 0471 - 2774200, 2448881, 2442481, 2448412

Fax: 0471 - 2447137

Website: www.cds.edu