COMMENTARY ON INDIA'S ECONOMY AND SOCIETY SERIES

9

DIMENSIONS OF INDIAN ECONOMY
As seen through the Economic Survey 2018-19 and the Union Budget 2019-20

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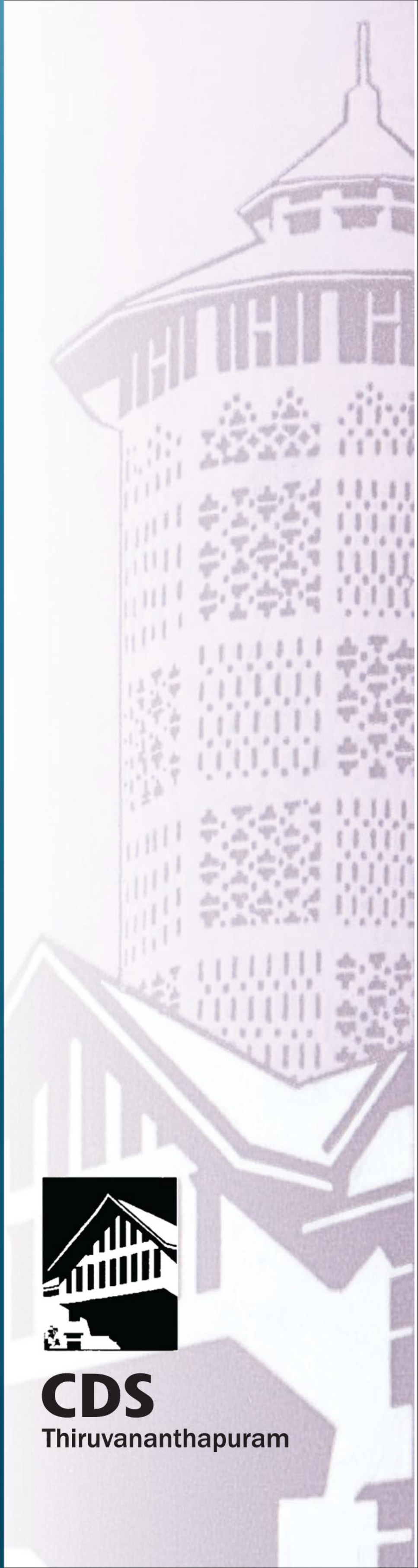

CDS
Thiruvananthapuram

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.

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RHETORIC AND REALITY OF GROWTH AND EMPLOYMENT

K.P. Kannan

The annual budget presentation in the parliament is a big occasion in India to discuss not only the state of the economy but also to gauge the government's, and thereby the ruling party's, intention in what direction it is trying to steer the economy. The budget presentation is preceded by laying on the table of the parliament the Economic Survey for the preceding year that also gives a long term view of the important trends in the macroeconomy. This year both the Economic Survey, as well as the Union Budget, was disappointing, to put it modestly. Two important developments have gone unanswered given the stakes involved in terms of credibility of statistics both domestically and internationally. One is the controversy over the estimation of GDP[1], a number that the government is so much dependent on to project its economic achievements and power, especially to convince the international players. The recent paper by a former Chief Economic Advisor, Arvind Subramaniam (2019), has cast a shadow over the government's claim of India being the fastest growing economy despite a somewhat timid performance than during the UPA regime. The basic question that informed analysts are asking relates to the high rate of growth of GDP at around 7 per cent per annum despite a declining trend in a number of crucial macroeconomic variables such as savings, investment, exports and imports and so on. The second question is the lack of any studied response to the findings of the employment and unemployment survey (now called Periodic Labour Force Survey 2017-18). Initially, the report and statistics were withheld for about six months but subsequently released after the re-election of the NDA regime. To be fair, the Economic Survey does not reject the findings but only pleads for comparing the results with the earlier survey in context and then goes on to give the comparative figures, albeit as an aside in the last chapter of volume 2 of the Economic Survey[2]. Despite the rhetoric of inclusion and creation of jobs arising out of the high growth in the Budget speech of the Finance Minister, the findings of the employment survey gives further credence to the scepticism on the official growth figures for the economy that the government continues to hold on without a convincing explanation to justify the changes in the methodology of the GDP estimation.

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1 See, e.g., Dholakia, et.al. (2018), Nagaraj (2019) and Bhattacharya and Kwatra 2019).

2 "For comparability, the result of the PLFS with earlier rounds of NSSO surveys need to be understood in the context with which the survey methodology and sample solution has been designed" (Economic Survey 2018-19, Ch.10, p.265).

There is no attempt to discuss the dismal findings of the employment survey in the light of the continuing success story in growth as claimed by the government.

However, following the announcement by the Prime Minister on 15 June 2019 setting a target of 5 trillion US dollar GDP for the economy by the end of his second term i.e. 2014, the Finance Minister has re-stated that goal although without giving a time-frame but presumably implying that the goal will be reached by the end of the current term of the government. The Chief Economic Advisor takes some freedom in extending the time-frame from five to six years, i.e. by 2025, one year more than the current term of the government. Assuming a 7 per cent depreciation of the rupee during this six-year period (i.e. 1.3 percent per annum as against the 2.6 percent per annum during the last five year period) and assuming no change in domestic inflation he calculates the warranted real growth rate at 8 per cent per annum. If the government sticks to the five year time, then it will no doubt warrant a much higher growth rate even assuming the continuance of the current rate of inflation.

The Finance Minister eloquently announced as a matter of pride that the NDAII regime added another one trillion dollar worth of GDP to the Indian economy during its 5 year term. Going by the figures given in the Economic Survey the addition is around 880 billion in US dollars. But the issue is not about the absolute amount as a yardstick of performance because as the level increases even smaller growth rates will give a larger increase in absolute terms. It is only fair then to compare the growth performance of the NDA-I and II regimes with the performance of the earlier UPA I and II regimes. During UPA I the GDP got almost doubled (98 percent to be exact) in dollar terms that was an impressive feat going by the yardstick of aggregate growth performance. This feat could not be repeated during UPA II; it is possible that the global financial crisis of 2008 might have come in the way. This resulted in an increase in India's GDP by 52 percent by the end of UPA II. During the NDA II regime, the increase was lower at 47 per cent that got translated into an absolute increase of 880 billion dollar equivalent. This is another way of saying that the growth momentum has got slowed down. Of course, then there is the still unresolved questions about the change in the methodology of estimating the GDP which, according to Arvind Subramaniam (2019), is higher by around 2.5 per cent.

It is in this background that one needs to examine the target of a 5 trillion dollar economy in five years from the current year. To put things in perspective we have worked out the past performance as a background to attaining this goal. If the rupee to dollar exchange rate as well as the inflation rate remains the same, then the economy will have to grow 12.8 percent in nominal terms or 8.8 percent in real terms. That would be repeating the performance during the UPA I regime when the external and internal factors were so favourable that there was no depreciation of the rupee-dollar exchange rate. However, if the experience of the last five years is any guide, then the annual warranted growth rate in GDP to attain a 5 trillion dollar economy would be close to 16 percent in nominal terms. This calls for a real rate of growth of close to 12 percent per annum.

Table 1: India's GDP in US Dollars

Year	India's GDP in US Dollars			
	Regime	Rs In Billion	Rs to 1 US$	GDP Bn $
2003-04	End of NDA-I	26415.03	45.95	618.4
2008-09	End of UPA-I	56301.00	45.99	1224.2
% change			0	98
2013-14	End of UPA-II	112330.35	60.50	1856.7
% change			32	52
2018-19	End of NDA-II	190097.28	69.48	2736,0
% change			14.84	47
2023-24 (A) No change in Rs/$ rate	End of NDA-III	347400.00	69.48	5000.0*
2023-24 (A) Same rate of depreciation of Rs/$ as in previous 5 years		398950.00	79.79	5000.0*
% change (required)A		83		83
% change (required)B		110		83
Warranted annual growth rate in nominal terms under A				12.82
Warranted annual growth rate in nominal terms under B				15.98

Note: * denotes targeted GDP. Source of data for GDP and exchange rate: Government of India (2019).

When a GDP target is set, either in absolute terms or in growth rates, it becomes incumbent to plan for it especially in a poor developing economy like India. This is one of the main tasks of planning for overall economic growth not to speak of development. It then will have to specify the investment rate required and the corresponding savings rate within the economy as well as the strategy for export and import growth. Technological choice is an important consideration. All these will then spill over to the requirement of investment from abroad either through a loan or direct investment. There is no evidence of any such exercise except an acknowledgement that the country will have to go for more external borrowing. The recent trends in some of the variables such as savings and investment or exports and imports for that matter, do not give much of a basis for the realisation of the goal of a 5 trillion dollar economy in the next five years. Here again, we take a summary view of the performance for the five year periods of the last four regimes (see Table 2) that is quite revealing. As a share of GDP, investment, savings, export and imports – all have declined. To this one should add the concerns expressed by industrialists of a decline in demand for a number of important products such as automobiles, construction equipment, fast-moving consumer goods, and so on. Despite the rhetoric and the pompous-sounding target of 5trillion GDP, it is interesting to note that during the regimes of both NDA I and II, all these four important macro-economic variables were lower than those attained during UPA I and II.

Table 2: Gross Domestic Savings, Gross Investment, Exports and Imports as percentage of GDP (Five Year averages by Political Regimes)

5 year ending	Regime	Savings	Investment	Exports	Imports
2003-04	NDA I	25.96	25.38	9.37	11.27
2008-09	UPA I	33.92	35.28	13.27	20.09
2013-14	UPA II	33.52	36.78	15.83	24.40
2018-19	NDA II	30.95*	32.15*	12.52	18.53

Note: * denotes four-year average ending 2017-18 since 2018-19 data are not yet available.
Source: Computed from data available in Government of India (2019), Statistical Appendix.

Doubling of the GDP in dollar terms is not an impossible feat, going by the experience of UPA I regime, but it would take somewhat more time than what is being currently projected provided the regime addresses the central question of aggregate demand. However, there is a danger that every policy will now get tuned to this projected big goal post as an end in itself. But at what cost? Without any corrective policies and instruments, it will surely aggravate the sectoral inequality as between the rural and urban economies. But more importantly and from a political point of view, it will further exacerbate the huge inter-state inequality with states in central and east India including the demographically huge states of Uttar Pradesh and Bihar as clear losers.

But the biggest spoiler in this growth-fetish bright prospect being held out is employment and of course, it's quality. Here again, the prominent losers are the rural economy in general and women there in particular, going by the experience of the last six years. As a matter of fact the findings of the latest employment survey should have come as a shocker to the government that swears by generating jobs through their strategy of growth based on neoliberal principles, now being abandoned by its creators (USA and UK), but firmly held on by the IMF and World Bank as far as developing countries are concerned. Showering praise on the role of the private sector, the Finance Minister extols "*India Inc. are India's job-creators. They are the nation's wealth creators. Together, with mutual trust, we can gain, catalyze fast and attain sustained national growth"* (Budget Speech 2019:4).

Dismal Performance in Employment Front

How credible is this unadulterated praise? For the first time since national survey-based employment data became available in the early seventies, there has been an absolute decline in the number of workers in the economy. From a total workforce of 467.7 million in 2011-12 it has declined to 461.5 million in 2017-18 despite an officially claimed, but contested, average annual growth rate of over 7 per cent. Whether one accepts the official growth figure or a lower band, the fact of the matter is that growth during this six-year period has not only not created additional jobs but led to a loss of jobs in net terms of the order of 6.2 million. This is what is called negative employment elasticity of growth. Of course, new employment was created to the tune of 25.7 million during this period of six years (all in the service sector plus around 4 million in construction) but the economy also witnessed a loss of 31.9 million jobs. Detailed examination shows that the biggest loss was in agriculture to the tune of 29.3 million accounting for 92 percent of this loss. But manufacturing also registered a decline to the tune of 0.57 million. That is to say, there has been a net loss of jobs in the productive sectors of the economy along with an increase in employment in the service sector that has not been adequate even to compensate for the loss in the former. Notable among the losers is the loss of 0.37 million jobs in public administration and defence. The net losers are all women.

Given the dependence of an overwhelming proportion of households on employment for their sustenance, these results are not exactly in keeping with the widely touted slogan of "*sabka saath, sabka vikas* conjoined later by *sabka vishwas"*[3].

However, what ought to be particularly worrying for the Finance Minister is the impact of this fall in employment of women, especially those in rural areas. The Finance Minister said, rather eloquently, that *"In India's growth story, particularly in the rural economy, "grameen arth vyavastha", the role of women is a very sweet story. This government wishes to encourage and facilitate this role of women"*(Budget Speech 2019:18). The irony of this statement couldn't be starker when we find that women workers in rural areas fell by 24.7 million whereas that number increased by 2.9 million in urban areas resulting in a net loss of 21.8 million. Male workers in rural areas experienced an increase of 3.7 million but those in urban areas gained more, by around 12 million. Clearly the entire loss in employment has been borne by rural women with 84 percent decline accounted for by agriculture. These findings also show unequivocally the urban bias of the economic growth story in the country.

What about those outside the workforce? In such a grim employment situation, it is no wonder that the army of unemployed has registered a threefold increase between 2012 and 2018; from 10.5 million to 30 million. Workers plus unemployed together constitute the labour force. While the absolute size has not declined due to the inclusion of the unemployed, the labour force participation rate (LFPR) defined as the proportion of workers and unemployed in the adult population (15 years and

3 "Inclusiveness has been the cornerstone of India's development agenda. Over the last few years, efforts in this direction have been accelerated by the Government through the mantra of inclusiveness 'Sabka Sath, Sabka Vikas, further elaborated by ensuring 'Sabka Vishwas'. As India is a developing economy with resource constraints, we have prioritize and optimize the expenditure on social infrastructure to promote sustainable and inclusive growth. It is critical at this juncture to focus on public investments in human capital and strengthen the delivery mechanisms of government interventions to ensure transparency and accountability. With India having the demographic advantage, improving educational standards, skilling the youth, *enhancing job opportunities* [emphasis added], reducing disease burden and empowering women will help in realizing the potential of a buoyant economy in the future" (Government of India (2019 Vol.2)).

above) has declined from 55.5 per cent in 2012 to 49.7 percent in 2018. Here again, the main brunt is borne by women whose LFPR has declined from 30.7 in 2012 to 22.9 in 2018. Of course, this is not a one-shot affair; in fact, the declining trend started from early 2000. The argument that this is due to higher enrolment in education of those in the younger age groups (15-24) is only partially correct. In 2012 adult women in labour force and in educational enrolment accounted for 40.4 percent and the remaining close to 60 percent were outside the labour force and education. In 2018 this has been found to be 34 percent in the labour force and education and the remaining 66 percent outside. For men, the story is a different one with 93 percent and 90 percent in the labour force and education in 2012 and 2018 respectively.

This exclusion of women has now put India as one of the countries with very low women's LFPR and in the company of Pakistan (24%). It is well below our immediate neighbours of Bangla Desh (36%) and Sri Lanka (35%) and far below other neighbours such as Afghanistan (49%), Malaysia (51%), United Arab Emirates (51%), Indonesia (52%), Thailand (59%) and a far cry from China (61%). The regime that wants to learn from East Asia for accelerating the growth process would do well to help the women if a few lessons on employment are also included in the learning game.

No Big Statements on how to Create Jobs

Quoting Mahatma Gandhi, the Finance Minister, said: *"The soul of India lives in its villages"* (Budget Speech 2019:10). Despite the spirit of this invocation of Mahatma Gandhi, one wonders whether the government bothered to give a serious look at the findings of the latest employment survey and the crisis situation facing the rural economy in general and women in particular. One of the powerful avenues available to the government is the public employment scheme in the name of Mahatma Gandhi - i.e. the National Rural Employment Scheme - that is an entitlement on demand for any rural resident albeit restricted to one member per household. Despite widespread scepticism of high self-selection at the time of its enactment, the total number of job cards issued on demand has not exceeded 43 percent of total workers in rural areas. Within that only 57 percent of the job cards are considered 'active,' i.e. those actually availed of (or given) the employment under the scheme. Although it is an entitlement on demand, it is well known that there is an issue of aggregation of demand at the local level as well as the supply of works in terms of well thought out projects that could strengthen the natural capital of the rural economy in terms of developing/managing land-water-forest-livestock resources. The allocation this year (2019-20) at Rs. 60 thousand crores is less than the actual expenditure of Rs.61.1 crore during the last year. There is an impression that the current regime is not interested in continuing this public employment scheme that has a certain dignity (self-selection and a legal entitlement) and local relevance (employment within 5km radius). Not that the UPA which authored this historic act and the scheme was that enthusiastic going by the average days of employment of 46-50 days per beneficiary. Last year the beneficiaries were 52.8 million persons (with 51 days average days of employment), that is to say, just 17 per cent of the estimated total workers in rural areas at

311.3 million in 2017-18. Women now constitute 55 percent of the persons who availed of this employment, pointing to the increasing importance of this source of employment for poor labouring women in rural areas. Had this average employment been 100 days, it could have provided some succour to those who lost their employment. This doesn't look like "a very sweet story" for the women in the "*grameen arth vyavastha*".

Not that the blame for this lackadaisical performance is entirely to be placed on the current regime. The UPA regime's average performance was exactly the same. An otherwise historic initiative for the labouring rural poor ended up as a half-hearted half-initiative.

The story is the same with regard to other rural development schemes that are either entirely for the rural economy (e.g. PM Gram Sadak Yojana, Rural Drinking Water Mission) or substantially for rural areas (as in the case of housing, health mission, and ICDS) that could help create more jobs. In fact, the allocation for the Ministry of Rural Development at Rs.1.2 lakh crores is higher only by 4.8 percent compared to the previous year. But in real terms, this works out to an increase of a pitiable 0.8 percent after adjusting for inflation.

Labour Reforms: A Case of Misplaced Concreteness

Neither in the Economic Survey nor in the Budget Speech is there a clear direction as to how the claim of growth leading to employment generation be achieved. However, there is a strong fixation (both in this regime as well as in the UPA regime) that labour reforms is the principal answer. And that should be to make the labour market more flexible for capital to invest and realize their profit. The earlier idea, as propounded in the Constitution as well as in the enactment of labour regulation and welfare legislations, is now a thing of the past signalling the victory of neoliberalism in economic as well as welfare policies. The introduction of two Labour Codes on Wages and Occupational Health, Safety and Working Conditions (OSHC) is a case in point. Far from promoting decent jobs along with the much-touted high growth trajectory, the labour codes are now perceived by almost all trade unions, impartial scholars and media as a comprehensive onslaught on the workers especially those who work as insecure or informal workers in both the informal sector (employing less than 10 workers) and in the formal sector. Take the case of minimum wage fixation. In principle, the Wage Code mandates a national minimum wage (that could be taken as a floor wage) below which no state or the central government should fix industry-specific or state-wise minimum wages. However, the issue of fixing the minimum wage has been left to the executive that is contrary to the principle of "need-based" propounded by the Supreme Court and demanded by the Indian Labour Conferences. But this lofty principle has been followed within days by announcing a pitiable Rs.178 as the national minimum wage by the Ministry of Labour that is higher by two rupees from the previous year's recommended national minimum wage. Not only that it represents a decline in real wages – given an inflation rate of 4 per cent –, but it also signals that the government is in no mood to accept the recommendations of its own committee (Satpathy Committee) that recommended a minimum wage of Rs.375 per day as of

2018. Of course, this was considerably lower than the demand of the 15th Indian Labour Conference for a national minimum wage of Rs.692 or Rs.18000 per day. The new code also takes away the workers' right to judicial remedy because of the creation of a quasi-judicial appellate authority. For the overwhelming majority of informal workers who do not have an identifiable employer, the route to remedy for non-implementation is further complicated because a claim can only be filed by an appropriate authority, employee or trade union.

The OSHC Code has also faced severe criticism from the trade unions. The earlier Contract Labour (Abolition) Act of 1979, now merged with this code, has provisions that promotes contract labour by relaxing licensing norms that cannot distinguish between perennial and non-perennial jobs and taking away the responsibility of the principal employer. There are provisions for extending the working hours, with the consent of the worker, that could lead to a return to the pre-independent days of long working hours given the insecure nature of employment of a majority of workers not to give their consent. Safety norms have also been relaxed in the proposed code. Workers in the informal sector or those who work as informal – often as casual – workers in the formal sector (e.g. construction) are at a loss as to what will happen to the welfare boards and funds created on an industry-wide basis.

In sum, the message is loud and clear. The path to high growth needs to be paved with cheap and pliable labour for the private corporate sector, the India Inc., with borrowings from abroad and assisted by a freer and easier entry of foreign capital to the Indian economy.

References:

Bhattacharya, Pramit, and Nikita Kwatra. 2019. 'The Unanswered Questions in India's GDP Calculations' in https://www.livemint.com/politics/policy/the-unanswered-questions-in-india-s-gdp-calculations-1558424296214.html.

Dholakia, Ravindra, R. Nagaraj and Manish Pandya. 2018. 'Some Methodological Issues: Manufacturing Output in New GDP Series' in *Economic and Political Weekly,* Vol.53, No.35, 1 September.

Government of India. 2019. *Economic Survey 2018-19*, Vol.1 and 2 and *Statistical Appendix,* Ministry of Finance, New Delhi.

Government of India. 2019. *Budget 2019-20: Speech of Nirmala Sitharaman, Minister of Finance, July 5, 2019,* Ministry of Finance, New Delhi.

Nagaraj, R. 2019. 'Is India Overestimating its Economic Growth?' in *The Hindu*, 21 June.

Subramaniam, Arvind. 2019. 'India's GDP Mis-estimation: Likelihood, Magnitudes, Mechanisms, and Implications,' CID Faculty Working Paper No. 354, Harvard University.

INDUSTRY AND EXTERNAL SECTOR

P.L. Beena

Government of India has introduced many measures since 2014 such as Make in India (MII), Startup India and Standup India; Foreign Direct Investment (FDI) policy in order to boost the manufacturing/production activities. However, manufacturing growth, which is measured in terms of Index of Industrial Production (IIP) has been consistently declining, accounting for 3.6% growth during this financial year.

Domestic Sector

While growth of capital goods and consumer non-durables has stagnated, infrastructure and construction goods have recorded considerable growth of 7.5%. Consumer durables have the second-highest growth. Though *Economic Survey* claims that there is a marginal growth in the Gross Value Added (GVA) of Indian industry during last one year, the growth that was registered in 2018-19 (6.99%) is much lower than the growth that was experienced in 2016-17 (7.9%). Gems and Jewellery is the largest exporting sector, which accounted for 14% of total Indian exports, but its contribution to the GDP is very low. The contribution to GDP from the most important sectors such as Iron & Steel and Textiles are 2.3% and 2% respectively. The share of Textiles and Garments to the total exports is 12.65% of total Indian exports and contributes 5% of global trade in this industry. This is also the largest employer in India after agriculture, generating 4.5 crore employments directly and 6 crore employment in allied sectors. Thrust is given to boost this sector through various policies such as Make in India, and Skill India. Women empowerment and Rural youth employment is expected to improve through such strategies which could develop backward linkages to the rural economy and give huge opportunities to millions of farmers, artisans, handloom and handicraft manufacturers. However, the important exporting sectors such as Textiles and Garments; Iron and steel apart from motor vehicles and transport equipment have experienced slack in demand. Growth of investment in the individual sector has also been declining consistently which is a matter of concern.

The analysis carried out by Reserve Bank of India (RBI) based on 1700 Non-government Non-financial manufacturing firms observed an improvement in net profit, capacity utilization and sales. However, the growth pattern across industries was found to be the same as in the case of performance measured, based on the data collected from the Central Statistical Organisation (CSO) or IIP. Distribution of these private manufacturing firms in terms of sales or assets is highly skewed as it reveals that relatively less number of firms control a major share of sales, assets and profits while generating less employment (Beena 2018). However, this sector is not proportionately taxed by stating that they are the "employment creators". It is quite saddening to see the announcement of 2019 budget regarding the resource mobilization and their move towards disinvestment of profit-making Central Public Sector Enterprises (CPSE) in order to meet the liquidity crunch faced by commercial banks and Medium and Small Manufacturing Enterprises (MSMEs). MSME sector did face liquidity crunch as Non-Banking Financial Companies (NBFCs) failed to lend money to this sector, though the budget 2017-18 relied upon NBFCs as commercial banks were already going through a liquidity crunch.

Though Government of India (GoI) announced new FDI policy and Make in India initiatives to transform India as a manufacturing hub, it is evident that 74% of such FDI came to the service sectors (Rao and Dhar 2018). Trade, especially Retail trade, including E-commerce, accounted for the major share. Transport, storage, and communication received 11.9% FDI. The share of FDI received by Construction and Business services are 11.5% and 8.8%. Further, it is evident that companies are bringing more of non-RFDI during post-MII period as compared to the pre-MII period. More than 50% of the portfolio investment went into the retail trading, web portal, cab aggregators and construction. Further, it is observed that out of FDI received by retail trade, including e-commerce, only 29.3% were RFDI. The rest is in the form of Foreign Portfolio Investment (FPI). RFDI share in SEZs, technology parks, etc was very minimal, accounting for only 1.2%. RFDI share in microfinance was only 8% while business services received 70% RFDI. RFDI share in restaurants, eating places, etc. was 64%; in solar power, it was 52%; in other renewable energy, it was 60%; in healthcare (67%); Mining and quarrying (89%), education (97%), Agriculture, Hunting and Forestry (66%). These statistics indicate that such FDI are more of a market seeking of services goods rather than the manufacturing goods. The purpose of attracting foreign savings has become a matter of balancing of Current Account Deficit (CAD) rather than building long term investment, technology transfer and employment generation. The new announcements regarding the FDI policy in the Single Brand Retail Sector does not go hand in hand with the 'Make in India' policy as the local sourcing requirement has not been valid anymore. *Economic Survey* and the Budget 2019 announced many policies as part of the second generation of infrastructure reform by hiking social overhead capital. Many of the policy announcements such as transforming India as a global hub for manufacturing electric vehicles; creating 100 new clusters in order to benefit 50,000 Artisans, 80 Livelihood Business Incubators, 20 Technology Business Incubators in order to develop 75,000 Skilled Entrepreneurs in Agro-Rural Industry in this year could be a progressive approach towards industrialisation, but there is no clarity on the implementation or viability of such policy instruments. Government initiatives towards introducing thousands of Farmer Producers' companies (FPCs) in order to encourage entrepreneurship among farmers' and encourage them to engage in value-adding activities has also been done without conducting any study about the success or failure of the existing (FPCs).

Budget 2019 has withdrawn exemptions on custom duty as well as announced hike in customs duty for many items in order to encourage production in the MSME sectors, which is a welcome measure. Similarly, facilitating credit linked capital subsidy scheme for technology upgradation;

scheme of fund for regeneration of traditional industries; credit guarantee trust fund; credit up to 1 crore within 59 minutes are all good policy as long as they deliver the expected results. However, thrust is largely given to financing part of vulnerable entrepreneurs operating under unorganized sector without discussing the viability of these enterprises in terms of their success in product diversification, technological innovation, labour productivity and capital productivity. According to the latest National Sample Survey Organisation (NSSO) round, an average MSME unit can generate a maximum number of 2 employees.

16,578 start-ups exist in India as of today which is distributed largely in Maharashtra (19%), Karnataka (15%), Delhi (13%) and UP. Kerala ranked 9th position while Gujarat held 8th position. The major sectors are IT (15%), Healthcare and Life Sciences (9%), Education (8%), Finance and Technology (3%), Renewable Energy (3%), Hardware of Technology (3%), Internet of things (3%), Agriculture (3.7%) and Food and Beverages (4%). Tax concession, along with many subsidies is given to those entrepreneurs to start new start-ups. However, the mortality rate of such start-up is not discussed in any part of the Survey or Budget documents. Given the growth strategies followed by many successful start-up entrepreneurs, how far India can depend on such companies for boosting production activities and employment generation is not clear. The most recent example is the sale of India's prestigious start-up, Flipkart which was started in 2007, to Walmart without having much discussion, by the regulatory agencies such as Competition Commission of India (Saraswathy, 2018).

External Sector

The debt statistics reveal that external debt of India has been increasing and it stood around US$521 billion as of 2018-19. Net international investment deficit has been deteriorating and reached to the level of US$438 billion. However, the economic survey claimed that debt service ratio is quite sustainable, and India is depending more on stable sources of finance for funding Current Account Deficits. It further stated that the share of Net FDI inflows in the total liabilities of India's international investment position has constantly increased while the same ratio of FPI has declined since 2013. The survey further added that the large presence of FDI and the acceleration in the rate of growth of remittances has compensated for the deterioration of CAD and do not need to worry about the capital flight. Accordingly, the Budget 2019 has announced the new policy in order to attract more FPI. But the latest study by Rao and Dhar (2018) argued that the FDI statistics are highly inflated. According to this study, out of the total FDI flows into India during 2014-17, real FDI accounted for only 58% while 27% of that FDI was in the form of FPI. The rest of FDI is contributed by India-related investors directly or together with foreign private equity investors. Similarly, though India claimed to be one of the leading countries in the world in terms of remittances, it is on the decline since 2013-14. These pieces of evidence raise the validity of the claims that are made by the *Economic Survey*.

CAD to GDP ratio and trade deficit to GDP ratio have been increasing tremendously and reached to the level of 2.4 and 6.7 per cent respectively during 2018-19, which is a matter of concern. Export has declined in absolute terms consistently for the last five years, which has led to the widening of trade deficit. Though petroleum, pearl, precious and semi-precious stone, drug formulation and biologist and gold other precious metal jewellery, and Iron and steel together accounted for major share of India's total exports, as on 2017-18, the other important exporting sectors are RMG cotton including accessories, motor vehicles/cars, marine products and organic chemicals. The similar condition exists during 2018-19 as well except that the Electric machinery and equipment has become the ninth leading exporting product. Similarly, petroleum: crude, precious stone, gold, and petroleum products accounted for major import share, the electronic and telecom components are the other leading imported items. The US, China, and the UAE continue to be the major trading partners.

Conclusion

The protectionist policy imposed by the US, the EU, and Canada and the trade war between the US and China could adversely affect India's trade position. The trade protectionism followed by developed countries along with the new FDI/FPI policy of India can only widen the trade deficit and Balance of Payments. Overall, one tends to believe that Government of India is busy designing new policies and creating infrastructure in order to facilitate MNCs to sell their products through retail or e-business instead of transforming India as a manufacturing hub and thus 'Make in India' concept would remain only a slogan rather than a reality.

References:

Beena, P.L. 2018. *Mergers and Acquisitions: India under Globalisation*, Routledge, UK, India.

Beena, P.L. 2018. 'Outward FDI and Cross-border M&As by Indian Firms: A Host Country-Level Analysis', WP No. 479, CDS, Trivandrum.

Government of India. 2019. *Economic Survey.*

Government of India. 2019. *Union Budget*

Rao Chalapati KS and Biswajit Dhar. 2018. 'India's Recent Inward Foreign Direct Investment: An Assessment,' ISID.

Saraswathy, Beena. 2019. 'The Flipkart-Walmart Deal in India: A Look into Competition and Other Related Issues,' *The Antitrust Bulletin,* Vol. 64, No.1.

ROLE OF PRIVATE INVESTMENT: DISCUSSION OF ECONOMIC SURVEY

M. Parameswaran

This note comments on Chapter 1 of the Economic Survey 2019 Vol. 1. The chapter presents a blueprint of the economy for the next five years in terms of economic growth, job creation and exports. It restates the vision, articulated by the Prime Minister, that India aims to grow into a $ 5 trillion economy by 2024-25, which would make India the third-largest economy in the World. To attain the targeted GDP level, the Survey notes, real GDP has to record an annual growth rate of 8 percent for the next five years. This chapter is important as it presents the overall framework, based on which policy measures are suggested for attaining the target.

On the basis of the recent growth experiences of countries across the world, particularly of China and East Asian countries, the Survey presents a growth model for India. The "growth model views the economy as being in *constant disequilibrium - a virtuous cycle or vicious cycle*. When the economy is in a virtuous cycle, investment, productivity growth, job creation, demand and exports feed into each other and enable the animal spirits in the economy to thrive" (page 5, emphasis is original). By generating a virtuous cycle process, the economy is expected to move to the targeted level of GDP. The Survey postulates investment as the "key driver" capable of generating a self-sustaining virtuous cycle. Though investment can be either public or private, the Survey stresses investment by the private sector and elaborates on its virtues. Apart from private investment, the Survey also prescribe other measures that can generate and sustain a virtuous cycle in the economy. To quote the Survey "By presenting data as a public good, emphasising legal reform, ensuring policy consistency, and encouraging behaviour changes using principles of behavioural economics, the Survey aims to enable a self-sustaining virtuous cycle" (page. 1). The Survey claims that this new way of viewing economic progress in terms of virtuous cycle is of very recent origin, emerged from the economic literature following Global financial crisis, and it is a departure from the traditional Anglo-Saxon view of the economy. In more than one place, the Survey highlights the merits of this "new" way of imagining economic progress over the earlier strategy of five year-plans. To quote the Survey "An economy that is in a constant state of disequilibrium needs a new approach to navigate. The earlier attempt to create five-year plans, largely using the equilibrium framework, failed because it was too prescriptive for an inherently unpredictable world" (page.12).

This note examines the two claims made by the Survey regarding the characterisation of the economic progress in terms of virtuous cycle, (1) it is of very recent origin and is a departure from the traditional way of thinking in economics and (2) this way of imagining economic progress was absent when India was formulating its planned economic development in the 1950s. The note also comments on two other related issues.

Modelling economic progress in terms of virtuous cycle is not of recent origin, and it dates back at least to Young (1928). The literature also uses the term cumulative causation in place of virtuous cycle, as the mechanism essentially implies each state of the economy drives itself to the next higher level. Hence, in this note, we use the terms virtuous cycle and cumulative causation interchangeably. Young (1928) imagines a process of cumulative causation in industrialisation due to increasing returns arising from the division of labour. Hirschman's (1958) unbalanced growth strategy is also based on the generation of a virtuous cycle in a poor economy by creating a disequilibrium through investment in some selected sectors. Similarly, Myrdal's (1957) idea of growth as an endogenous cumulative change is also a reflection of the idea that economic growth proceeds on a path of cumulative causation.

The sources of cumulative causation in modern industrial economies include division of labour, knowledge spillovers, and learning by doing. In real life these three sources work together and reinforce each other, creating strong increasing returns at the aggregate level, which would result in increasing growth rate of the economy over time (Romer, 1986; Balakrishnan, Das, and Parameswaran, 2017). In modern industrial economies, division of labour is nothing but adoption of roundabout methods of production in which many different specialised inputs are used to produce final goods (Rodríguez-Clare, 1996). The literature modelling economic progress based on these ideas suggests that there would be multiple equilibria - an equilibrium at lower level of income characterised by shallow division of labour and weak or absence of knowledge spillovers and an equilibrium at a higher level of income featured by deeper division of labour and extensive knowledge spillovers. As increasing returns to scale technologies need a certain scale of operation to break even, in these multiple equilibria models, the process of cumulative causation works only after the economy crosses a threshold size (Balakrishnan, Das, and Parameswaran, 2017). Therefore, for an underdeveloped economy to move out of the lower level equilibrium trap, it needs to be positively shocked by investing in sectors having greatest linkages and spillover effects. Once it is shocked and crosses a threshold size, the economy would be able to move up through a virtuous cycle path. The underlying driver of this process is the ever-increasing productivity owning to realisation of increasing returns. However, this process is not automatic; it needs to be lubricated by providing productivity-enhancing environments like improvement in the quality of institutions and governance, better provisioning of public goods, and so on.

A reading of writings on economic planning in India in the 1950s convince one that Indian planners did aware of the presence of a virtuous cycle mechanism in the economic growth process. For instance in a paper titled "Some Observations on the Process of Growth of National income", Mahalanobis (1953) conclude on the possible path of the ratio of increment in income to investment (β) that "A steady increase of β may be, therefore, a characteristics of harmonious development." (page: 311). Here one point needs to be clarified. Five-plans in India were the instances of state direct action to accelerate economic growth in an underdeveloped economy. On the other hand, virtuous cycle represents the internal dynamic of a growing economy. Of course, to be more effective, state action in the form of economic planning must recognise and utilise this internal dynamic. As evident from the following statement of Mahalanobis (1955), made while elaborating the context and logical and statistical basis of the plan-frame of the second five-year plan, it is clear that planning in India recognised this internal dynamic.

I shall now consider the proportion of investment that should be allocated to industries producing investment goods (λ_k) through planning. We found from available data that β_k is usually much smaller than β_c (that is, the marginal increase of income per unit of investment is much less in basic industries producing capital goods than in industries producing consumer goods). This being so, the larger the value of λ_k, the smaller is the increase in income in the short run; but, after a critical period of several years, income begins to rise steeply. (Mahalanobis, 1955, p.28-29).

In a recent paper, Balakrishnan, Das, and Parameswaran (2017), while explaining the growth acceleration of the Indian economy since the end of the 1970s, provides empirical evidence for the presence of virtuous cycle. The virtuous cycle is emanating from the positive feedback relationship between manufacturing and services sectors, which can increase the growth rate of the economy over time, as shown in the paper. The paper dates the beginning of this mechanism to 1965-66 - fifteen years after the starting of planned economic development in the country. As anticipated by Mahalanobis (1955), public investment during the first 15 years of planning must have provided life to this mechanism.

There are also problems in the empirical evidence provided to support the presence of virtuous cycle in the growth process of China and East Asian countries. By plotting saving and investment rates against per capita GDP and GDP growth of these countries, the Survey concludes that "The evidence in this section suggests that saving and investment and GDP growth grown in the virtuous cycle in high growth economies" (p.8). This conclusion is very tenuous as a positive correlation between two variables does not imply virtuous cycle. Virtuous cycle requires two-way causation, that is each variable is feeding the other that cannot be inferred from simple correlation between them.

After setting the target and strategy, the Survey suggests continuous recalibration of policies based real-world evidence derived from observations (data analysis). Here, a recommendation is made for making data a public good within the legal framework of data privacy. The chapter also argues for adapting economic theories to Indian realities and makes case for theory building on the basis of observations (data analysis) instead of testing theories derived axiomatically using data. Here the issue is that, in abstract subjects like economics and other social sciences, concepts and variables are framework dependent. Therefore, the choice of which variables are to be selected and what kind of relationships among them are to be tested depends on the theoretical framework one holds. Hence, proceeding to the data analysis without a framework is meaningless. As the following quote from Albert Einstein reveals, this is the case even in natural sciences where concepts can be concrete.

"It is the theory which decides what can be observed."

References

Balakrishnan, P., M. Das, and M. Parameswaran. 2017. 'The Internal Dynamic of Indian Economic Growth,' *Journal of Asian Economics*, 50, 46–61.

Hirschman, A. O. 1958. *The Strategy of Economic Development*. Yale University Press, New Haven, CT.

Mahalanobis, P. C. 1953. 'Some Observations on the Process of Growth of National Income,' *Sankhyâ: The Indian Journal of Statistics (1933-1960)*, 12(4), 307–312.

____(1955): 'The Approach of Operational Research to Planning in India,' *Sankhyâ: The Indian Journal of Statistics*, 16(1/2), 3–130.

Myrdal, G. 1957. *Economic Theory and Underdeveloped Regions*. Methuen, London.

Rodríguez-Clare, A. 1996. 'The Division of Labour and Economic Development,' *Journal of Development Economics*, 49(1), 3–32.

Romer, P. M.1986. 'Increasing Returns and Long-Run Growth,' *Journal of Political Economy*, 94(5), 1002–1037.

Young, A. A. 1928. 'Increasing Returns and Economic Progress,' *Economic Journal*, 38(152), 527–542.

NATIONAL FLOOR MINIMUM WAGES IN INDIA

Vinoj Abraham

An overwhelming majority of the workers in India are not covered under any social security, does not belong to any collective bargaining arrangements and remain poor even to meet basic necessities. Further, these workers are not covered under any labour legislations that protect them against the various vulnerabilities of work life. Against this background, the Minimum Wages Act of 1948 assumes tremendous significance to the working poor. This is the only Act that provides legal support to unorganised wage workers in India. But the implementation of the Act is rift with problems.

Minimum wages are scheduled for industries and occupations separately in both central and state spheres. Moreover, each state in India separately implements minimum wage rules for state-specific employments and job categories. As per the economic survey, 2018-19, there are more than 429 scheduled employments and 1915 scheduled job categories for unskilled workers in India. Firstly, this multiplicity of minimum wages across states and centre for different occupations has made monitoring of the working of the Act an enormous task. Inspectorates of Minimum Wages in most states are understaffed to monitor these scheduled employments. Multiplicity of minimum wages also implies that there are large variations in minimum wages across regions and occupations. Compliance to the Act is compromised as multiplicity of categories and Wages makes the Act intractable. Secondly, even though Minimum Wages Act is arguably the last resort for the working poor, the Act does not cover all the wage workers. The Act stipulates that a state needs to declare a minimum wage for an industry only if there are at least 1000 workers in the industry. So a number of workers in small industries get excluded from the purview of the Act. Thirdly, revision of minimum wages as stipulated in the Act, to be done at least once in five years, has often been delayed.

Against this background, the government of India has introduced the labour code bill in the parliament aimed at amalgamating 44 different labour legislations into four different sets of codes namely wage code, code on social security, code on industrial relations and code on industrial safety. These four codes aim to reduce the multiplicity of labour market regulations to enhance implementation and compliance. The Minimum Wage Act of 1948 is part of the proposed wage code.

The economic survey proposes that the central government should notify a ‘national floor minimum wage’ that can vary across five geographical regions. Thereafter, states can fix state-specific minimum wages, which are not to be less than the floor wage. In light of the issues cited above the proposal to rationalize the minimum wages across the country seem to be a welcome move. Apparently, compliance and monitoring of minimum wages could improve with a simpler minimum wage system applicable across the country.

But let us look at some of the arguments that stand against a unified national floor minimum wage. What does a minimum wage mean? The Act is ambiguous on the determination of the minimum and leaves it as the discretion of the appropriate government. The Fair Wages Committee of 1949 and the 15th session of the Indian Labour Conference in 1957 established the ground rules for estimation of the minimum wages in India. The Indian Labour Conference set basic standards of worker consumption units in terms of food, clothing and housing. Following the Supreme Court judgment on Workmen v. Reptakos Breet& Co. Ltd in 1992, the interpretation of minimum wages expanded to include not only physical subsistence, but also children's education, medical requirement, minimum recreation including festivals and ceremonies, and provision for old age, marriages etc. which should account for 25% of the total minimum wage.

It should be kept in mind that minimum wage is not conceived as returns to work; rather, it guarantees a basic minimum standard of living for the workers and their household members. Now the question arises as to what is subsistence for households across the country? Firstly, while the basic physical requirements of the average individual may not vary from across regions, the household size would vary across regions depending on their place in the demographic transition. For instance, states such as Kerala and Tamil Nadu may have smaller household size due to their transition into the final stage of the demographic transition while state such as Bihar and Uttar Pradesh may have much larger households as they belong to an earlier phase of the demographic transition. Secondly, the number of workers in households may vary according to the level of development of a region. For instance, states with an ageing population may have lesser number of workers than a state with a younger population. Finally, can we think that the consumption basket of the households across regions would be homogenous? Even if the requirement is of physical subsistence, the availability of such goods and therefore their price may also vary substantially. Given these facts, a basic minimum national wages may be difficult to be justified.

The compliance of the minimum wages need not necessarily improve by simplification of the minimum wages rules. Simplification and standardization would help the administrators to trace who is complying and who is not. However, the issue of compliance is not just a lack of official capacities. Even if monitored well unless all the stakeholders are on an equal footing to bargain, the Act may not be implemented in its spirit. If industrial and agricultural lobbies are successful in negotiating with the government in power, then bureaucratic or even technological interventions may not lead to better implementation of the act. In the current context of weakening bargaining power of the workers and the impending labour code that would make the labour market more flexible, standardization of the minimum wages on its own may not lead to the desired outcomes. The introduction of new technologies in minimum wage monitoring such as the e-payment system and bank-based payment system may, to some extent, enhance the compliance of employers to the Act. Yet there are multiple ways of evading the Act even after payment of the wages such as advance cheque collection from the employees.

Finally, though small, there are a number of sectors such as information technology, bio-technology and automobile which earn large surplus and are capable of paying wages much higher than a stipulated national minimum wage. In these sectors, at least the government can move towards a fair wages regime. Not doing so may act against the interest of the workers wherein employers may use the national floor minimum wage as the benchmark for wage setting.

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BEHAVIOURAL ECONOMICS APPLICATIONS FOR POLICY IMPLEMENTATION

Vinoj Abraham

The economic survey of 2018-19 has, for the first time, introduced a chapter on the applications of behavioural economics for implementation of various policies. In summary, the chapter provides a justification for the use of behavioural economics, followed by illustrations from successful cases of policy implementation in other countries. Thereafter the chapter gives a broad theoretical overview of the specific tool, nudge and then proposes certain applications in various sectors such as health and sanitation, environment and education of girl children.

Human beings are conditioned by their cognitive boundaries, and their decisions are structured and biased to act within these boundaries. The choices that are visible to a decision making individual is blurred by these boundaries. Nudge is a way to restructure the choice architecture for the individual such that more desirable behavioural outcomes are chosen by the person.

Social norms followed within the society draws cognitive boundaries for people in a society. Many a time, these social norms are not ideal or socially desirable. Nudge can be a way to gently push people to move from what is practised of social norms to what is socially ideal. In doing so, nudge uses the mental maps of people within which the society is situated. For instance, the economic survey argues that in a patriarchic society where education of girl children has not been valued the campaign of "selfie with my daughter" by their father would invoke pride in girl children. The larger society would learn from such role models and gradually help in nudging to change the mental map such that their attitude towards girl children would change.

While nudge seems to be an effective policy tool in various contexts, the specific manner in which the economic survey views nudge is problematic. Firstly, the economic survey claims that the Indian culture is religion-based, and the cultural values embedded in such a religious society could be leveraged towards achieving policy goals. The chapter cites extensively from Hindu, Islamic and Christian scriptures to establish certain prototypes of universal values. Further, it is claimed that appealing towards socially desirable goals through these cultural values would be an effective way of nudging.

This view of the economic survey is parochial and problematic. Why does the economic survey use religion as the mental map of culture for nudge. India is a cultural mosaic, drawing from multiple cultures even within the same religion. And, India is a divided society, especially on the basis of religion. Using religion to achieve policy goals may produce the immediate social goals but in the long run, maybe feeding into religion-based identity building and creating fissures within the society. Using religious values may enhance the policy goals but at the cost of enriching hosts of conventions and traditions associated with religious practices that may work against what is social ideal for an aspiring secular modern republic.

At least in some cases, the Economic survey seems to be over-optimistic with regard to the policy relevance for nudge. A case, in particular, is the instance where The Economic Survey points out that much can be achieved by behavioural changes in reducing open defecation. Changes in attitude towards open defecation certainly can have an effect on reducing this. There has been a dramatic reduction in open defecation, as shown in the Survey. However, this is largely due to the access to toilets rather than behavioural changes as shown in the study by Gupta et al. (2018)[4].

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4 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjkxbT31-vjAhWMMY8KHb6DC1gQFjAAegQIARAC&url=https%3A%2F%2Friceinstitute.org%2Fwp-content%2Fuploads%2F2019%2F01%2FChanges-in-open-defecation-in-rural-north-India-2014-%25E2%2580%2593-2018.pdf&usg=AOvVaw1UIgA-wPs6NlEqixBc7XgJ

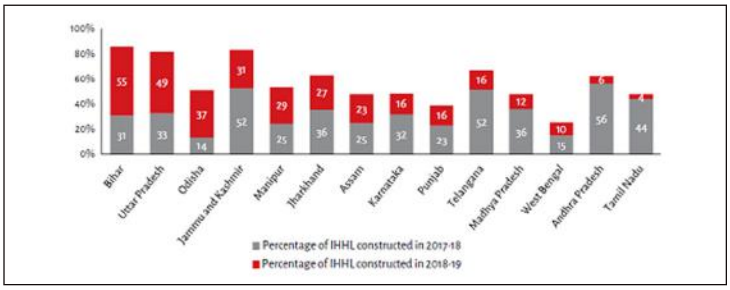
SWACHH BHARAT SUNDAR BHARAT

G. Murugan

Swachh Bharat - a flagship programme of transforming the country completely open defecation free, launched in October 2014 aims to attain sanitation facilities to all by 2nd Oct. 2019. Compared to that of the previous year, 2019-20 has a total outlay 31% less; 9994 crore. The physical achievements denoted in the Economic Survey shows that 98% of households and 30 states have already reached their destinations, with Bihar Orissa, West Bengal, Telangana and Goa as laggards. In order to completely avoid the exclusion errors, the Government of India has introduced a new addendum to the programmes left out in a new category of beneficiaries known as “left out of baseline” and is programmed to cover around 37.77 Lakh households additionally.

The guidelines for Swachh-Bharat demarcates 8% of their budget for utilization under Information, Education and Communication activities, which the government rarely meet the targets in any year. The aim of this allocation in the budget is to facilitate and prepare the community to take up and lead the sanitation through effective communication and polarisation of the programme. This under achievement of target show the lack of initiative on the part of those administering the programme, that negatively tells upon the underutilisation of the goods delivered, particularly the IEC and dissemination of information. It is also surprising that in some states more than 25% of the constructions have taken place in 2018-19, and even more than 50% in Bihar and Uttar Pradesh, as evident from the Figure 1 below. It needs to be specifically mentioned that as on 30-6-2018 around 23.9% of the districts in the country out of 699 districts, more than 70% of households are left uncovered, with another 5.2% of districts more than 60% of households are without any latrine. (see Murugan, 2019) Both together constitute almost 1/3rd of the districts in the country. Hence if at all the present claim of GOI is true, it is possible only through massive construction on contracting that does not serve the purposes envisaged in the Swachh Bharat guidelines, as it is known to any knowledgeable person that community construction takes time for completion. The rates of construction during ‘17-’18 and 2018-19 are depicted in Figure 1. It may be noted that in laggard States more than and some cases almost 50% of the constructions have taken place during 18-19, which is very much doubtful considering the previous experience in performance.

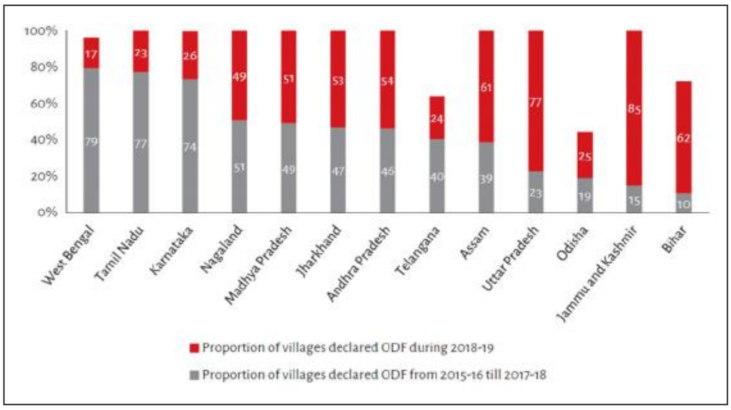
Figure 1: IHHL Construction in 2017-18, and 2018-19



Source: SRM dashboard, www.sbm.gov.in

Further, the declaration of ODF in the villages has also taken place during the fag end of the targeted period. Even if one admits that there can have some lag in the construction and declaration of ODF. Figure 2 shows a disproportionate ratio of declaration at the terminal year, generating doubts on the authenticity of the figures and veracity of achievements reported.

Figure 2: Proportion of Villages Declared ODF, 2015-19



Source: SRM dashboard, www.sbm.gov.in

Environment-friendly treatment and disposal of Solid-Liquid Waste in the villages is another aim targeted in Swachh Bharat. Only around 4% of the state's expenditure and 4% of the central expenditures during 2018-19 were on SLWM. These too, have taken place only in states that have already declared a majority of their villages ODF years back, like that of Himachal Pradesh, Arunachal Pradesh, Kerala and Mizoram. Barring these states, the expenditures in others is only to the tune of around 1%.

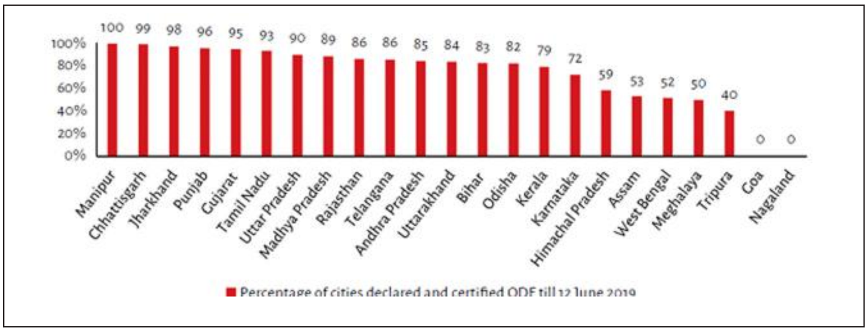
Swachh Bharat - Urban

Outlay for the current year SBM-U has hiked its outlay by 6% than that of the revised estimate of the previous year making it to 2650 crore. Since the onset of the programme 57.63 lakh new Individual Household Latrines have been constructed, accounting for 87% of the revised target. About 97% of the community latrines and public toilets have also been completed, although its utilization is not known nor made any attempt to explore the use. Unlike rural, urban sanitation is more complex and large sewerage systems still need proper disposal and construction, and are in various stages. Twenty-three states and UTs have been declared to be ODF still leaving many states. Release of funds to the states by the government of India (GOI) too are much slower, that only 57% of GOIs total mission allocation of 14623 crores have been released. As the release is based on previous expenditures certified by the concerned states, it is possible that expenditure might be low, telling again on the nature of the progress.

SBM-U aims to cover 4041 statutory towns as identified during Census 2011. Allocation of funds to the states too were disproportionate. While states like Chattisgarh, Andhra Pradesh, Rajasthan and Gujarat have received 97%, 88%, 87%, and 86% respectively of their release of funds, in many other states, their release of funds stands to be less than 50%. Expenditure was also abysmally poor in many states. Out of the 529 crores released to states only 45 crore (9%) are spent during 2018-19 leaving huge - 91% - balance of unspent.

A key component of SBM-U is the IEC and allocation to it. The total allocation for IEC during the mission period earmarked to be 1828 crore, between 2014 and Jan 2019 only 653 crores have been released, which is only 45% of the GOI allocation to states. Thus in all tunes both in allocation and release; and in expenditures, the performance is poor, very much tell upon the progress of sanitation in the towns and cities. Twenty-three states have declared ODF in their cities and even among them, many could not reach full coverage. Figure 3 below gives us an idea of the scenario of these states, signifying that other states have to make serious effort to reach the target. Further, the figure reveals that only 6 states have crossed 90% and only Manipur could reach 100, thanks to the institutional structures and specificities prevalent in the state.

Figure 3: Percentage of Cities Declared and Certified ODF till 12 June 2019



Source: ODF Certification Portal, www.sbmodf.in

Solid Waste Management (SWM): Management of Solid Waste in cities and towns is a serious issue in many states. As of June 2019 full door to door collection of waste, is practised in 90% wards, yet only 42 percent of the wards do have segregation of waste at source. Similarly, the capacity of waste processing is also very low in towns. Although 1.45 lakh metric tonnes of waste are generated per day only 54% of it is being processed, leaving a huge dump of waste and its resultant aftermath, generating '*negative public goods'* quite often. SWM guideline refers to a systematic process of ensuring that solid waste is disposed off in a sustainable manner without polluting the environment. Under SBM – U a total of 7366 crore has been earmarked for improving SWM, however with a few months left for the completion of the mission only 56% (4057 crore) had been made available to the states till January 2019. This again signify the inactivity on the part of urban local bodies and the State Governments.

Economic Survey: Chapters 2 and 8 of Economic Survey makes tall claims about the performance of Swachh Bharat, sometimes knowingly or unknowingly hiding the actual field truth. Indeed it is commendable that the political will of the government could achieve some remarkable progress in the constructed latrines, but the real achievement of 'NUDGE' is a matter of debate and dispute, despite some efforts. The claim of Economic Survey that already 30 states and UTs have 100 % coverage with IHHL is of serious doubt considering the facts put forth. Even if we assume that there is full achievement in these states, which is quite unlikely as revealed from the data of MDWS – IMIS (see Murugan, 2019), experience suggests that it depend on; usage practices of people; quality of construction owing to contractual interventions and community avoidance; inappropriate technology use and negligible diffusion of technologies among the common people; faulty technology options in the absence of dissemination; corruption; and dysfunctional toilets; behaviour of the people adapting to seasonal changes etc. Results of the survey carried out by CPR, 2017 reveals that in 45% of the households surveyed the reason for building latrines were because of the pressure from officials. This gives us the clue that most of these latrines would be sparingly used or if at all used only by the female or elderly persons, a failure of the animosity of 'nudge.'

Since the states were given the option to use their choice of technology, many states have opted for the single pit; rather than the twin pit, which is summarised in Table 1 (see Murugan, 2019).

Table 1: Single Pit and Container Chamber, Focus States, Bihar, UP,MP, and Rajasthan

	Percent
Focus State	71
Bihar	79
Uttar Pradesh	76
Madhya Pradesh	86
Rajasthan	60

This gives rise to another set of problems of faecal sludge management and its treatment in the years to come. Further because of the fear of pit emptying and related surmounting cost involved, members of rural households would abstain from using it. There exist many dysfunctional toilets because of the inappropriate use of technology and the contractual system followed for construction of latrines in order to achieve physical targets in many states. This, itself is a failure of the triggering as envisaged in the Community-Led Total Sanitation (CLTS) model, wherein the process of triggering and community achievement and participation; a way to 'Nudge'; is an essential component. In this process what happened is not 'nudging' but targeting to some physical achievements, and that too is found to be erroneous in line with the opinions of Cornea and Stewart (1993), Sen (1995) and Atkinson (1995).

The study carried out by the Public Affairs Foundation of India in 2017, three years after the onset of swachh bharat, provides us with a picture that full usage does not take place in many districts, as revealed from Table 2 below.

Table 2: Use of SBM-G toilets, and Open defecation, 2017

% partial usage of households with SBM-G toilets (see below for categories. HH with complete usage are not included) > - 2017

Public Affairs Foundation 2017

	Some members use all the time	Some members use during certain seasons	Nobody uses the toilet
Dhenkanal > - Odisha	12%	5%	16%
Sambalpur > - Odish	4%	6%	17%
Baleshwar > - Odisha	14%	3%	3%
Angul > - Odisha	12%	4%	7%
Ganjam > - Odisha	14%	2%	3%
Cuttack > - Odisha	7%	2%	2%
Dharmapuri > - Tamil Nadu	4%	1%	7%
Krishnagiri > - Tamil Nadu	4%	1%	3%
Perambalur > - Tamil Nadu	4%	1%	2%
Tiruchirapalli > - Tamil Nadu	2%	2%	2%
Tirunelveli > - Tamil Nadu	1%	0%	0%
Kanyakumari > - Tamil Nadu	0%	0%	0%

% of rural households with toilets has at least one member practicing open defecation - 2017#

Water aid 2017

Korba # - Chattisgarh	56%
Durg #- Chhattisgarh	15%
Kanker# - Chhattisgarh	1%

Further, the Volunteer verification carried out in 2017 also supports the same, which is shown in the following Table 3.

Table 3: Open Defecation Villages, 2017

% of open defecation villages despite ODF decalred status (rounded off) volunteer verification- 2017

Sambhal ~ - Uttar Pradesh	60%
Amroha ~ - Uttar Pradesh	60 %
Moradabad ~- Uttar Pradesh	50 %
Bijnor~- Uttar Pradesh	30 %

Sources: Volunteer verifications as informed in IDS interviews and field investigations; # Wateraid Verification Survey 2017; $Aiyar et al 2016 / Accountability Initiative; > Public Affairs Foundation, 2017; ^ Hajra and Dutta, 2016; * Coffey et al, 2014; \ Clasen et al 2014; / Jenkins et al 2014; & Patil et al 2014;) Barnard et al 2013. Not included in the table are anecdotal figures received between 20-25% partial usage in North Karnataka districts / 97% in Tamil Nadu and findings from the QCI Swachh Survekshan Gramin Report 2017,

A recent study carried out during 2018 and published in 2019, further emphasizes the fact that the process of 'nudge' as envisaged in the CLTS model does not take place at all. Table 4 reveals the picture of open defecation under weighted and unweighted measures and from different sources. Specifically, open defectation is quite high in staes of Bihar, Rajastan and Uttar Pradesh. This also reveal the fact that, it is the contractor led construction that have taken place in these States and one can read this with the low expenditures on IEC. Thus in all measures 'nudging' and CLTS have not taken place by and large in many states.

Table 4: Open Defecation in Rural North India 2019

Sample	Latrine owners	Weight	Focus States	Bihar	Madhya Pradesh	Rajasthan	Uttar Pradesh
All	Owners & not	no weight	42%	59%	24%	52%	38%
All	Owners & not	Census	44%	60%	25%	53%	39%
All	Owners & not	DHS weights	57%	77%	29%	62%	53%
Adults	Owners & not	no weight	41%	57%	23%	52%	38%
Aduls	Owners & not	Census	43%	57%	23%	54%	38%
Aduls	Owners & not	DHS weights	54%	73%	27%	61%	50%
All	Latrine owners	Census	23%	21%	16%	40%	21%
Adults	Latrine owners	C1ensus	23%	19%	15%	41%	21%
Adults F	Owners & not	Census	41%	57%	21%	53%	34%
Adults F	Latrine owners	Census	20%	18%	13%	39%	17%
Adults M	Owners & not	Census	44%	56%	25%	56%	41%
Adults M	Latrine owners	Census	25%	21%	17%	43%	24%

This is tested by the authors, Gupta et. al. (2019) using the Kitawaga decomposition, (Table 5) which reveals that only in 1% households the triggering effect of CLTS has taken place. With this, one could clearly point to the fact that the success of 'nudge' in the case of sanitation in India is a failure and only constructions have taken place. If at all people are using it; it is out of sheer necessity and hence the reason for high percentages of partial usage.

Table 5: Changes in Open Defecation, 2014-2018

	Focus States	Bihar	Uttar Pradesh	Madhya Pradesh	Rajasthan
Census weighted means					
Open defecation, 2018	44%	60%	39%	25%	53%
Open defecation, 2014	70%	75%	65%	68%	76%
Open defecation Change	26pp	15pp	28pp	43pp	26pp
Latrine Ownership, 2018	71%	50%	73%	90%	78%
Latrine Ownership, 2014	37%	29%	42%	43%	31%
Latine Ownership Change	33pp	21pp	31pp	47pp	47pp
Kitawaga Decomposition					
OD Due to Behaviour	1pp	1pp	3pp	7pp	-7pp
OD Due to ownership	25pp	15pp	23pp	37pp	30pp
% change due to Ownership	96%	97%	89%	84%	130%

Economic Survey claims that SBM adopts a multifaceted approach as spelt out below.

– Community participation - The participation of the community is very much limited; hence the claim is not true at least in some states as evidence shows.

– Flexibility in choice - Choice is very much dependant on levels of information and the agency role of institutions that are expected to facilitate and improve delivery to the common man. The state, being the implementing agency, limits the choice for ease of doing things to the actual user, thereby depriving the flexibility and it exists only in papers.

– Technology options – Actual diffusion of technology is very much dependant on the actual dissemination of knowledge among the end-users and also availability of materials and implementing tools and institutions. In order to achieve the target of ODF, many states have conveniently avoided the technology bundles and provided only the single pit.

– Capacity building – Though the guideline specify swachhgrahis and 'nigrani samithis', in effect they rarely practised nor focused on capacity building, as the focus was more on construction. They simply served as mediating organizations between the common end-users and the funding routes.

– Instill behaviour change – Behaviour change as formulated and practised in the CLTS requires triggering and knowledge sharing among the beneficiaries and the 'swachhgrahis' and 'nigrani samithis' are the supposed facilitators. It involves time to reach the last mile, and the actual construction takes place as expected in a co-operative manner. But this has not been practically implemented in the field for several reasons, as described in Murugan (2019).

– Broad-based engagement - Though resources from many other sources are made available by the GOI, like swachh bharat ghosh funds, only very few takers have utilized it, leaving it largely underspend.

– Use of technology - Geo tagging made as a prerequisite for making payments along with the photograph of the family can ensure only the presence of a latrine construction but not the use nor the quality of construction. Poor quality quite often makes the stakeholders not to use it.

– Diarrhoea cases reduced – Economic survey claims that diarrhoea cases have reduced. It is expected too, but the figure provided in the survey shows that it is not true. In some states, it has even increased.

– Low birth weight has declined – It is true that there is a relationship between low birth weight and sanitation and also stunting and sanitation in the rural areas. However, sanitation may not be the only contributor to it; rather it acts as a facilitator with other variables. (See Murugan, 2019).

Sewerage: Yet another important fact that needs to be focused on making sunder bharat is the treatment and disposal of sewerage in the cities and towns. Liquid waste management in many of the towns in the country is quite precarious as evident from the statistics available. Approximately 62,000 Million Litres of Sewerage is generated each day. Of this only 35 % is treated and safely disposed off, leaving a giant share of 65% untreated. These sewers are usually opened to neighbouring rivers and streams, making the entire water body unusable to anyone and also polluting the entire environment, leave alone the fact that many of these sewers carry hazardous waste too, that enters the water body.

Swasth Swachh Sunder: In the way forward, the Economic Survey envisages cleaning of water bodies, scientific waste management, dealing with plastic menace and controlling air pollution. If the government of India is really interested in achieving this, it requires huge capital investment and a devoted team to lead and supervise. There should also be a very stringent regulatory mechanism and a functioning resource recovery, operational system. As regards eco-friendly sanitation technologies, it is not lack of technologies that have driven to the present situation, it already exists, yet what is needed is more and more dissemination of it and careful and devoted management and diffusion among the common end-users. With all these under the existing scenario and pattern of operational mechanism, one can imagine how long it takes to be sunder unless the political will makes way for reaching the target.

References

Anthony B. Atkinson. 1995. 'On Targeting Social Security: Theory and Western Experience with Family Benefits,' in Dominique Van de Walle and Kimberly Nead (ed) *Public Spending and the Poor: Theory and Evidence*, The Johns Hopkins University Press, Baltimore.

Giovanni Andrea Cornia and Frances Stewart. 1993. 'Two Errors of Targeting,' *Journal of International Development,* September/October, John Wiley & Sons.

Government of India (2019) *The Economic Survey.*

Sen, Amartya. 1995. 'The Political Economy of Targeting,' in Dominique Van de Walle and Kimberly Nead (ed) *Public Spending and the Poor: Theory and Evidence,* The Johns Hopkins University Press Baltimore.

Murugan, G. 2019. 'Swachh-Bharat 2019: Will Rural India be ODF/Swachh?,' *Commentary on India's Economy and Society Series- 8,* Centre for Development Studies, Trivandrum.

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DEMOGRAPHIC AWAKENING: RECOGNITION AND REFLECTIONS

Udaya Shankar Mishra

The economic survey makes an explicit acknowledgement of the reduction in population growth rate in recent times and its implication towards social infrastructure, employment and trends in attainment in human development. While such an acknowledgement is very much welcomed and offers a realistic understanding of the evolving circumstance, there still remain spaces of greater clarity to remove a whole lot of misunderstanding. This particular engagement is primarily motivated by the distinct state of demographic dividend on one hand and commitment towards compliance with the SDGs and its corresponding indicators on the other. India's demography as it is talked about in popular parlance has reference to a young population, and therefore this human resource holds a lot of promise for the Indian economy of the future when contrasted against the global conditions. Considering this stance, India's population growth trajectory with its regional variation demonstrates an optimistic trend towards the attainment of replacement level of fertility in two years from now which ensures a path towards population stabilization in the near future.

The first and foremost indicator for population stabilization has been in terms of the reduction in Total Fertility Rates (TFR) and its due convergence across regions. This expected reduction in TFR values towards a perfect replacement level promises two things; one a reduced count of child population alongside a greater share of the working-age population having its own implication for reduced dependency. Rising count and share of working-age population has been claimed consistently for a while now as the 'demographic dividend' advantage for India. And the duration of this dividend is also claimed to stay for two more decades for the nation as a whole but with differential stake across regions with a few having passed this stage and others yet to begin the same. This specific consequence of fertility transition is largely governed by its pace, and therefore, the duration of demographic dividend or its bearing on per-capita GDP remains different across nations as illustrated in the report. The most crucial aspect missing in the analysis of population trends and its composition is the tempo effect, i.e. the population transition has a lot to derive from past levels of fertility and mortality which skews the composition of the working-age population to be younger or older.

Examining the changing age composition of the population in broad age brackets informs more of complementarity in the sense that if the child population share reduces, it will reflect in working ages or share of old age. Such share complementarity informs less than desirable. The optimism of demographic dividend is loaded with more '**ifs**' in the sense that they can be reaped to the optimum with human capital formation. This does not appear in the horizon when one sees them in efforts and commitments made on health and education sector. On the contrary, satisfaction is revealed as regard improvement in quality as quantity is lowered.

The declining share of young population is highlighted owing to the realization of lower fertility. However, population transition read in such divides makes little sense because it has differential underpinnings like improvement in the quality of children or the future workforce. Such improved quality will result in postponement in entry into the workforce. The claim of a rising share of the working-age population is not sufficient to support the realization of demographic dividend. It is not merely the share but its composition and characteristics that can materialize the dividend in real sense. In fact, the entry and exit from the working-age bracket is all the more important as there may be greater exit due to the stringency of retirement age and late age at entry owing to a quality build-up of the future workforce. Essentially reading this requires a cumulative approach for comparison over time and across regions.

Viewing this working-age population and its regional distribution offers an immediate solution to the labour deficient regions and their replacement. However, when the same is evaluated in a global context, it requires a different evaluation in comparable terms of quality against other nations.

As regards the implication of this emerging population dynamic, the two distinct aspects of bearing discussed relate to education and health. With declining school-going age population, the quality of schooling is said to improve. But on the health front, the experience is the opposite with the rising need not matched with the provisioning of infrastructure. However, such observation has its own limitation in the sense that the private sector details are not duly incorporated into the computation. Another implication notified relates to the revision in retirement age owing to the improvement in healthy life expectancy beyond the age of sixty years. In fact, these warrants a discussion on defining old age itself with its multiple facets like expected years of life along with characteristic features of the capability of future elderly. Redefining old age in consideration of multiple dimensions of well being in old age not only makes an eligible comparison of ageing across circumstance but also helps in fixing the age at retirement. A position taken in favour of increasing age at retirement is perhaps to guarantee minimum working years across different cohorts.

Recognition of changing population dynamics and its implied dividend seems to have been defended with a noticeable increase in health sector allocation that has risen from 1.2 per cent of GDP to 1.5 per cent and similarly the education sector allocation has gained from that of 2.8 per cent of GDP to 3 per cent. As regard improvement in skill development, the survey suggests the following

1. Introduction of the skill vouchers as a financing instrument to enable youth to obtain training from accredited training institutes.

2. Involving industry in setting up of training institutes in PPP mode; in curriculum development; provision of equipment; training of trainers etc.

3. Personnel of Railways and para-military could be roped in for imparting training in difficult terrains.

4. Create a database of Instructors, skill mapping of rural youth by involving local bodies to assess the demand-supply gaps are some of the other initiatives proposed.

Further commitment towards health promotion rests with the national health mission and the Ayushman Bharat scheme of govt of India. Alongside, there is a promotion of national Ayush mission towards provisioning of cost-effective and equitable AYUSH health care throughout the country to address the issue of affordability and barriers to accessing health services.

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SOME REFLECTIONS ON THE IMPLICATIONS OF THE UNION BUDGET 2019-20 ON ECONOMY

Hrushikesh Mallick

The government budget contains significant policy statements besides projecting receipts and expenditures of the government, providing appropriate directions to the economy. Budget shapes the economy, and in turn, itself is shaped by the economy. The budget 2019-2020 seems to be more of a rhetoric as regards to the introduction of various reform measures and pronouncing to achieve a significant transformation of the whole economy towards imagining a New India. It claims transforming the lives of common people in both the rural and urban areas in a variety of ways, but without undertaking any intensive and effective policy measures on any of those aspects and thereby losing its major focus and direction. It does not adequately illuminate about the allocation made for various programmes under each of those individual heads, how those allocations are going to intervene the economic and social outcomes or achieve the desired goals set in the budget.

For instance, it claims to transform the lives of every rural family by evoking that the soul of India lives in its villages, but without any lead, how it can influence raising the productivity in agriculture. All the households are assured that they will have electricity and gas connections by 2022. There is complete silence as regards to the sustainability in the use of those connections and raising greater productivity on account of these provisioning. Such ad hoc populist provisioning overlooks sustainable means of raising the livelihood of rural poor households and thereby helping them to improve their standard of living.

An important positive consideration has gone into this budget, as the FM has identified some critical traditional sectors (viz. bamboo, khadi and honey) for which it has aimed to set up 100 clusters and common facility centres to make these sectors productive, profitable and capable of generating employment. This is a much-desired step to revive these agro-based sectors having the long-run potential for generating rural employment. However, this is going to merely absorb 50,000 artisans to join the value chain and few innovative entrepreneurs with some subsidiary employment opportunities in these agro rural industry sectors. The issue remains as to whether creating some small scale employment in the traditional agro-based industries, will be sufficient to realise the dream of a transforming rural economy of India?

As far as expenditure allocations are concerned, crop husbandry is the single largest head under economic services of revenue account, where major incremental resource allocation is made. The allocation on this is raised to as much as by 88%. However, the budget did not devote a line on the significance of this huge allocation and its consequences. Rural India needs massive amounts of funding for the provision of public goods in areas of health, mass transportation system (not just road), quality education etc. which have their own major bearing on quality of rural livelihood. These aspects are absent.

The improvement in urban living also greatly depends on the improvement in rural living standards and vice-versa. Unless India improves her rural infrastructures, it is not going to transform the quality of living in cities. There will be an influx of people in huge numbers in search of employment opportunities in cities for earning their daily livelihood without water, food and shelter, as major cities are experiencing at the moment including congestion, scarcity of clean water and air pollution. Since major cities in India have witnessed increased investment in infrastructure development projects under the smart city programme and received various other development funds through centrally sponsored schemes, the FM should have been more specific on account of such improvements in urban infrastructures. Such specificities could have been in terms of the kinds of cities that the government is targeting to improve now, and the infrastructures that are planned in keeping with their varying circumstances and developmental challenges. Given the emerging complexity of urban living, there needs to clarity on priorities as regards to the provision of water and air quality vis-a-vis setting up few new rail line connections and establishing some dedicated freight rail corridors which are expected to mitigate the congestion of railway networks benefiting the common people at large as is hugely pronounced or highlighted in the budget.

The government is also inconsistent in its fiscal policy stance. While there is a proposal for massive investment in infrastructure for faster growth, squeezing up allocations to capital expenditure sounds unreasonable. This budget projects the share of revenue expenditure in total expenditure to almost 88% and the rest to be allocated for the capital expenditure. The government tries to pass the benefit of low tax burden to the lower and middle income classes of population, against the rich, which may be a fair to achieve an egalitarian society but alternatively intends to tax all of them on a daily basis on their transportations as it wishes to grab revenues on a favourable condition of declining international price of oil without committing its withdrawal in a reverse instance.

The budget proposes to hike the surcharges for the super-rich population on top of the applicable income tax rates. It offers the argument that the rich have a duty towards the development of the nation. However, this would definitely discourage new investors and exacerbate migration of high net worth and highly skilled individuals to other low tax destinations in a liberalised era when both financial and human capital is highly mobile — imposing surcharges also counter to the idea of promoting domestic investments and promoting skilful entrepreneurship. The costs of such a policy decision may surpass the tax benefits to the exchequer. The new tax, including enhancement of short term capital and long term capital gain tax, would hit the investment trusts through which many foreign investors route their investible funds to India’s stocks. Frequent changes in export and import duties along with an unstable GST regime also create a climate of uncertainties in business and investment, thereby affecting output and employment generations in the economy.

Budget projects GDP growth rate at 12%. In case growth rate falters on account of pressures on foreign investment or rich taxpayers or any other exogenous and endogenous distortions, fiscal deficit to GDP is very much likely to exceed 3.3% as projected. The stock of external debt of the central government is piling up over time; however, overpast couple of years government instead of adding external borrowings, is repaying the external loans created in past as reflected in reduced external borrowings. Notwithstanding this, the FM suggests for issuance of sovereign bonds denominated in foreign currencies. Whether the objective is to take advantage of the low-interest regime in foreign countries or facilitating easy access of domestic investors, to India's domestic credit market by complementing with low domestic savings is not clear. This policy step constitutes a reversal of India's earlier policy of reducing foreign currency risk exposures to our sovereign bonds (fiscal policy). If the intention is to increase the availability of domestic funds for domestic investment, the government could have encouraged foreign investor's participation in India'sdomestic rupee bond markets by raising the existing ceilings on foreign portfolio investment in government rupee bonds. Thereby, rupee perhaps would have gained some strength in the global currency market, the way China does for gaining internationalisation of its local currency. This would have helped India to index its own local currency bonds in the global index of bonds in international currencies. The effect is same – greater foreign inflows – but the government security would be issued in domestic currencies. By not adhering to the fiscal glide path of the 2017-18 union budget, the government of the day is visibly noncommittal to its commitments made in the past, implying loss of credibility and vulnerability of international ratings. The budget ultimately seems to be a document of noble intentions with self-defeating policy prescriptions.

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TECHNOLOGY AND INNOVATION ISSUES

Sunil Mani

It was in the Economic Survey of 2017-18 that technology and issues got mainstreamed for the first time in so many years. A full chapter (viz., Chapter 7 of Volume 1) of that survey was devoted to S&T issues. However, the Economic Survey of 2018-19 does not have any discussion of S&T issues excepting that Chapter 8 of the survey focused on leveraging S&T for Direct Benefit Transfer (DBT) for various governmental schemes. But the union budget has a number of schemes and tax concessions for diffusing various types of new technologies such as diffusing a cashless economy to Electric Vehicles. In this way, the economic survey and the budget have given fair importance to four aspects of new technologies: first, improving the ecosystem for new startups to emerge, second the faster diffusion of new technologies, third, the domestic manufacturing of a number of high technology products and fourth the use of new technologies for Direct Benefit Transfer.

The previous budgets focused a bit more on incentivizing the generation of innovations, and the main instrument that was employed was an R&D tax incentive. Beginning with the budget of 2016-17, this was made stable in the following manner. In 2016-17, R&D tax incentive was reduced in a stepwise manner as follows: from 2017-18 through 2019-20, it was reduced from 200 per cent to 150 per cent, and from 2020-21 onwards this is going to be further reduced to 100 per cent, and thereafter it will remain stable at that rate. However, the amount of tax that is lost due to R&D tax incentives has been rising from Rs 2839 crores to almost Rs 8000 crores in 2018-19. But this does not seem to have enabled India to increase its GERD to GDP ratio, which even now stands at around 0.7 per cent of GDP although the number of patents granted to Indian inventors at the USPTO has increased to 4200 patents in 2018. But the majority of these patents are filed by affiliates of MNCs operating from the country.

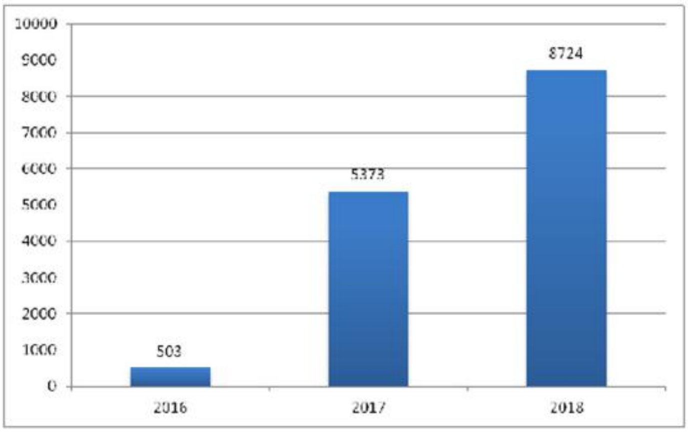
Against this background, we critically examine the identified three issues:

Resolution of the Angel Tax issue for Startups: This should be seen as part of the government's attempt at promoting innovations in the economy. Innovations could be promoted in two ways. First, the government could encourage existing enterprises to commit more resources to R&D and thereby increase innovations through increased investments in R&D. The main instrument that was used for this purpose was the R&D tax incentive. Second, the government has improved the ecosystem for startups to emerge by providing them with a range of incentives, especially since 2016. This incentive system ranged from "Simplification and handholding", "Funding support and incentives" and "Industry-academia partnership and incubation. One of the main barriers to the creation of startups was the availability of risk capita, and one source of it is from angel investors. But there was a long pending income tax issue known as the angel tax. This is a term used to refer to the income tax payable on capital raised by unlisted companies via the issue of shares where the share price is seen in excess of the fair market value of the shares sold. The excess realization is treated as income and taxed accordingly. The tax was introduced in the 2012 Union Budget by the then finances minister Pranab Mukherjee to arrest laundering of funds. It has come to be called angel tax since it largely impacts angel investments in startups. At least 80 startups have received notices to pay angel tax since 2018-19. Many founders have said they have been asked to pay up as much as 30 per cent of their funding as income tax. Angels have also received multiple notices asking them to furnish details on their source of income, their bank account statements and other financial data. Procuring valuations from merchant bankers is also a more expensive proposition for startups than going through chartered accountants.

In order to resolve this issue, the Budget has stipulated that the "start-ups and their investors who file requisite declarations and provide information in their returns will not be subjected to any kind of scrutiny in respect of valuations of share premiums. The issue of establishing identity of the investor and source of his funds will be resolved by putting in place a mechanism of e-verification[5]". Further, the budget has also extended tax breaks to investments in startups.

In short, the proposals in the budget is a logical sequencing of the government's efforts towards improving the ecosystem for startups and the number of startups in the country has been increasing steadily since 2016-17 (see Figure 1)

Figure 1: Growth of Startups in India, 2016-18



Source: Startup India, Department for Promotion of Industry and Internal Trade

5 Budget Speech of Nirmala Seetharaman, Union Budget 2019-20, July 5, 2019, https://www.indiabudget.gov.in/budgetspeech.php

Faster Diffusion of Electric Vehicles and a Cashless Economy

Over the last few years, the government has been striving to diffuse a number of new technologies, which range from AI and Robotics to Electric Vehicles (EVs) and to a cashless economy. Of these, the ones that the government has been doggedly pursuing are the ones on EVs and a more cashless economy. We start with the case of EV.

i. Electric Vehicles

The government have been considering a policy proposal to ban all ICE-driven two-wheelers under 150cc by 2025, and three-wheelers by 2023. Nearly 80 per cent of all vehicles sold in India are two and three-wheelers. However, the EV industry in India is at a very nascent stage. According to the Society of Manufacturers of Electric Vehicles (SMEV), 2.18 EVs were sold, which worked out to just 1 per cent of total vehicle sales. There are, at present, more than 4 lakh electric two-wheelers and a few thousand electric cars that are being used in India. The industry volumes have been fluctuating, mostly depending on the incentives offered by the government. More than 95 percent of EVs on Indian roads are low-speed electric scooters (less than 25km/hr) that do not require registration and licenses. The country has been providing a fair amount of fiscal incentives for faster diffusion of EVs through essentially a scheme called Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME). In March 2019, the government announced phase 2 of the FAME scheme with a total outlay of Rs 10000 crores for three years till 2022. The government will offer incentives for electric buses, three-wheelers and four-wheelers to be used for commercial purposes. Plug-in hybrid vehicles and those with a sizeable lithium-ion battery and electric motor will also be included in the scheme, and fiscal support offered depending on the size of the battery[6]. The target is to incentivize the purchase of 7090 electric buses by State Transport Undertakings, 35000 four-wheelers, 50000 three-wheelers and 20000 hybrids. Further, the government had already moved the GST council to reduce the GST rate on electric vehicles from 12 per cent to 5 per cent. So the government's policy, so far, has been subsidising the purchase of EVs by potential consumers.

The present budget has continued this practice and has further extended this by providing income tax relief to potential purchasers of EVs. This is by way of providing additional income tax deduction of Rs 1.5 lakh on the interest paid on loans taken to purchase electric vehicles, and this works out to a benefit of around 2.5 lakh over the loan period to the taxpayers who take loans to purchase EVs.

However, apart from price subsidies, there are two main technological barriers to a faster adoption of EVs. They are (i) the availability of charging stations at reasonable distances; and (ii) the availability of Lithium-ion batteries. The budget does not have anything for increasing the number of charging stations, but it does address itself to the domestic manufacturing of lithium storage through the provision

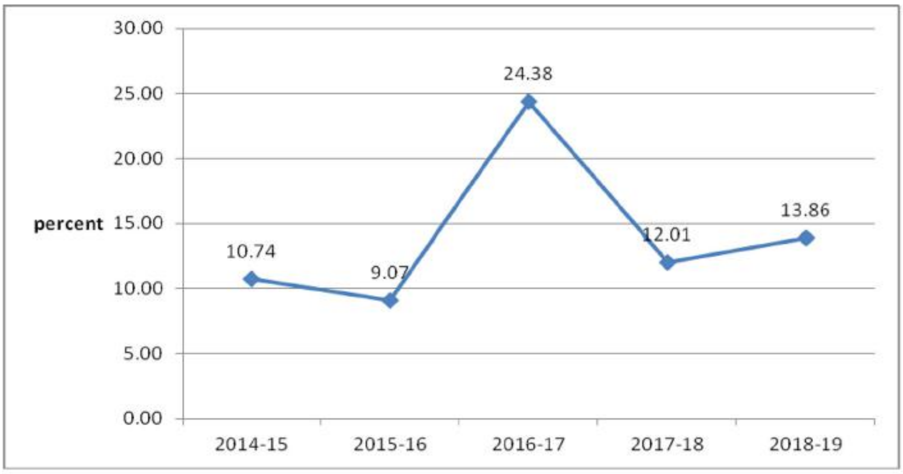
6 The centre plans to roll out an incentive of Rs 10,000 per kilowatt (kW) for two-, three- and four-wheelers, based on the size of their batteries.

of investment-linked income tax exemptions under section 35 AD of the Income Tax Act, and other indirect tax benefits. In the past, such incentive induced investment promotion has not succeeded in effecting the required investments.

ii. Cashless Economy

On November 8, 2016, Government of India demonetized two of its largest circulating bank notes, which accounted for about 86 per cent of the notes in circulation at that time. The sudden and abrupt decision has attracted considerable attention from commentators, much of it, journalistic. However, there has also been a very quick and detailed analysis of this event which is now referred to as the most significant economic event of recent times. The objectives and the design and implementation of the scheme have drawn much flak from all quarters, although there has been very little opposition to this measure from anywhere in the country. On the contrary, a survey done among slum dwellers in Mumbai showed the counter-intuitive result that despite experiencing a fall in their monthly incomes by as much as 10 per cent, majority of those suffering the fall welcomed the demonetization policy. Although it was not the initial objective, over time government has shifted the aim to ushering in a cashless economy, which *inter alia* may promote better tax compliance and hence more tax collection. In order to promote the growth of a cashless economy, a number of incentives have been put in place. Nevertheless, the growth of a cashless economy, in terms of value of such transactions, has been much less than what was observed during the period of demonetization (Figure 2). Currency in circulation as a per cent of GDP has in 2018-19 reached 11 per cent- just a per cent less than before demonetization implying that people have been going back to cash for transactions.

Figure 2: Growth of a Cashless Economy, 2014-15-2018-19



Source: Computed from payment systems indicators, Reserve Bank of India

So in order to encourage cashless transactions, the budget has proposed two policy changes with respect to transactions:

- To discourage the practice of making payments in cash, the government has proposed to levy tax deducted at source (TDS) of 2% on cash withdrawal exceeding Rs 1 crore in a year from a bank or post office account;
- Business establishments with an annual turnover of more than Rs 50 crore will need to offer low-cost digital modes of payment (such as BHIM UPI, UPI, Aadhaar Pay, debit cards, NEFT and RTGS to customers). Customers and merchants will not be charged the Merchant Discount Rate (MDR).

It will be useful to have more positive encouragement to cashless transactions rather than negative ones.

Domestic Manufacturing of High Technology Products

In order to boost economic growth and *Make in India* programme, the government will launch a scheme to invite global companies through transparent, competitive bidding to set up mega manufacturing plants in "sunrise and advanced technology" areas such as:

- Semiconductor Fabrication (FAB),
- Solar Photo Voltaic cells,
- Lithium storage batteries
- Solar electric charging infrastructure,
- Computer Servers,
- Laptops, etc

The mode of support envisaged in the budget is to provide them investment-linked income tax exemptions under section 35 AD of the Income Tax Act, and other indirect tax benefits.

Domestic manufacture of most of these technology products involves lumpy investments, and the country does not seem to be having the requisite technology itself. Past attempts at precipitating domestic investments in Semiconductor Fabrication especially has not fructified into any actual investments. Also, incentive induced stimulation of investments has a large welfare consequence as it involves taxing the citizens of a state or country and passing on the benefits to a private entrepreneur who ultimately may or may not set up a manufacturing facility in the chosen area of technology. At the very same time, lumpiness of investments requires that some sort of subsidy is absolutely required as well. So it all depends upon how the government goes about spelling out the finer details of this policy statement.

Leveraging Technology for Direct Benefit Transfer (DBT)

This is the only technology issue that has been explicitly discussed in the current Economic Survey[7]. DBT has now been applied to, according to the government, about 439 schemes across 55

7 See Chapter 10 of Volume 1 of the Survey, 'Effective Use of Technology for Welfare Schemes – Case of MGNREGS' https://www.indiabudget.gov.in/economicsurvey/doc/vol1chapter/echap10_Vol1.pdf (accessed on August 5, 2019)

Ministries. The estimated savings is a whopping Rs 141,677 crores. For instance, in MGNREGS, the total fund transfer and the total number of bank accounts of beneficiaries seeded with *Aadhar* has shown an increase in 2018-19. After DBT was introduced in 2016-17, the share of payments done within 15 days has increased from 43 per cent in 2016-17 to about 90.4 percent in 2018-19. However, Swamy and Narayanan (2019) have expressed certain doubts about the efficacy of technology in making the MGNREGS more efficient. The authors have shown that while the time taken by blocks to generate electronic Funds Transfer Orders (FTOs) and have it sent digitally to the central government has been reduced, those taken by the central government to process these FTOs and transfer wages to workers have not been reduced. According to them, only about 30 per cent of the payments have been credited on time. So it looks like the positive effects of technology are somewhat exaggerated.

Reference:

Swamy, Rakshita and Rajendran Narayanan. 2019. 'A Misleading Presentation of A Labour Programme', *The Hindu*, July 23.

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COMMENTARY ON INDIA'S ECONOMY AND SOCIETY SERIES

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
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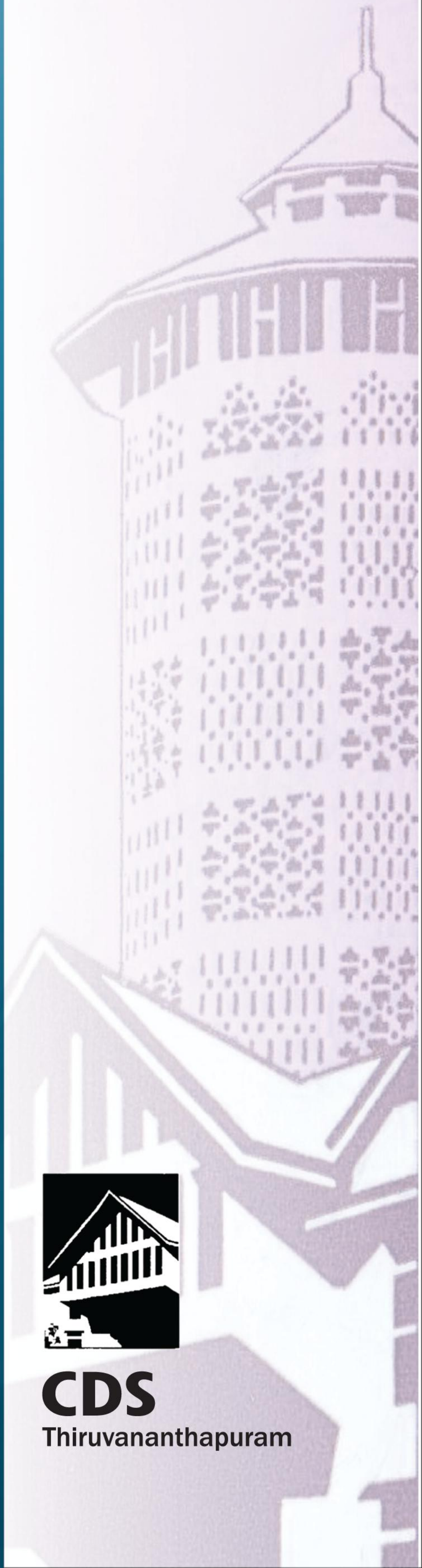

CDS
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India's Economy and indeed its society has been undergoing a major change since the onset of economic reforms in 1991. Overall growth rate of the economy has increased, the economy is getting increasingly integrated with the rest of the world and 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".

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COMMENTARY ON INDIA'S ECONOMY AND SOCIETY SERIES - 9

DIMENSIONS OF INDIAN ECONOMY

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CENTRE FOR DEVELOPMENT STUDIES

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

Thiruvananthapuram, Kerala, India

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Contents

RHETORIC AND REALITY OF GROWTH AND EMPLOYMENT

K.P. Kannan

The annual budget presentation in the parliament is a big occasion in India to discuss not only the state of the economy but also to gauge the government's, and thereby the ruling party's, intention in what direction it is trying to steer the economy. The budget presentation is preceded by laying on the table of the parliament the Economic Survey for the preceding year that also gives a long term view of the important trends in the macroeconomy. This year both the Economic Survey, as well as the Union Budget, was disappointing, to put it modestly. Two important developments have gone unanswered given the stakes involved in terms of credibility of statistics both domestically and internationally. One is the controversy over the estimation of GDP[1], a number that the government is so much dependent on to project its economic achievements and power, especially to convince the international players. The recent paper by a former Chief Economic Advisor, Arvind Subramaniam (2019), has cast a shadow over the government's claim of India being the fastest growing economy despite a somewhat timid performance than during the UPA regime. The basic question that informed analysts are asking relates to the high rate of growth of GDP at around 7 per cent per annum despite a declining trend in a number of crucial macroeconomic variables such as savings, investment, exports and imports and so on. The second question is the lack of any studied response to the findings of the employment and unemployment survey (now called Periodic Labour Force Survey 2017-18). Initially, the report and statistics were withheld for about six months but subsequently released after the re-election of the NDA regime. To be fair, the Economic Survey does not reject the findings but only pleads for comparing the results with the earlier survey in context and then goes on to give the comparative figures, albeit as an aside in the last chapter of volume 2 of the Economic Survey[2]. Despite the rhetoric of inclusion and creation of jobs arising out of the high growth in the Budget speech of the Finance Minister, the findings of the employment survey gives further credence to the scepticism on the official growth figures for the economy that the government continues to hold on without a convincing explanation to justify the changes in the methodology of the GDP estimation.

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1 See, e.g., Dholakia, et.al. (2018), Nagaraj (2019) and Bhattacharya and Kwatra 2019).

2 "For comparability, the result of the PLFS with earlier rounds of NSSO surveys need to be understood in the context with which the survey methodology and sample solution has been designed" (Economic Survey 2018-19, Ch.10, p.265).

There is no attempt to discuss the dismal findings of the employment survey in the light of the continuing success story in growth as claimed by the government.

However, following the announcement by the Prime Minister on 15 June 2019 setting a target of 5 trillion US dollar GDP for the economy by the end of his second term i.e. 2014, the Finance Minister has re-stated that goal although without giving a time-frame but presumably implying that the goal will be reached by the end of the current term of the government. The Chief Economic Advisor takes some freedom in extending the time-frame from five to six years, i.e. by 2025, one year more than the current term of the government. Assuming a 7 per cent depreciation of the rupee during this six-year period (i.e. 1.3 percent per annum as against the 2.6 percent per annum during the last five year period) and assuming no change in domestic inflation he calculates the warranted real growth rate at 8 per cent per annum. If the government sticks to the five year time, then it will no doubt warrant a much higher growth rate even assuming the continuance of the current rate of inflation.

The Finance Minister eloquently announced as a matter of pride that the NDAII regime added another one trillion dollar worth of GDP to the Indian economy during its 5 year term. Going by the figures given in the Economic Survey the addition is around 880 billion in US dollars. But the issue is not about the absolute amount as a yardstick of performance because as the level increases even smaller growth rates will give a larger increase in absolute terms. It is only fair then to compare the growth performance of the NDA-I and II regimes with the performance of the earlier UPA I and II regimes. During UPA I the GDP got almost doubled (98 percent to be exact) in dollar terms that was an impressive feat going by the yardstick of aggregate growth performance. This feat could not be repeated during UPA II; it is possible that the global financial crisis of 2008 might have come in the way. This resulted in an increase in India's GDP by 52 percent by the end of UPA II. During the NDA II regime, the increase was lower at 47 per cent that got translated into an absolute increase of 880 billion dollar equivalent. This is another way of saying that the growth momentum has got slowed down. Of course, then there is the still unresolved questions about the change in the methodology of estimating the GDP which, according to Arvind Subramaniam (2019), is higher by around 2.5 per cent.

It is in this background that one needs to examine the target of a 5 trillion dollar economy in five years from the current year. To put things in perspective we have worked out the past performance as a background to attaining this goal. If the rupee to dollar exchange rate as well as the inflation rate remains the same, then the economy will have to grow 12.8 percent in nominal terms or 8.8 percent in real terms. That would be repeating the performance during the UPA I regime when the external and internal factors were so favourable that there was no depreciation of the rupee-dollar exchange rate. However, if the experience of the last five years is any guide, then the annual warranted growth rate in GDP to attain a 5 trillion dollar economy would be close to 16 percent in nominal terms. This calls for a real rate of growth of close to 12 percent per annum.

Table 1: India's GDP in US Dollars

Year	India's GDP in US Dollars			
	Regime	Rs In Billion	Rs to 1 US$	GDP Bn $
2003-04	End of NDA-I	26415.03	45.95	618.4
2008-09	End of UPA-I	56301.00	45.99	1224.2
% change			0	98
2013-14	End of UPA-II	112330.35	60.50	1856.7
% change			32	52
2018-19	End of NDA-II	190097.28	69.48	2736,0
% change			14.84	47
2023-24 (A) No change in Rs/$ rate	End of NDA-III	347400.00	69.48	5000.0*
2023-24 (A) Same rate of depreciation of Rs/$ as in previous 5 years		398950.00	79.79	5000.0*
% change (required)A		83		83
% change (required)B		110		83
Warranted annual growth rate in nominal terms under A				12.82
Warranted annual growth rate in nominal terms under B				15.98
Note: * denotes targeted GDP. Source of data for GDP and exchange rate: Government of India (2019).				

When a GDP target is set, either in absolute terms or in growth rates, it becomes incumbent to plan for it especially in a poor developing economy like India. This is one of the main tasks of planning for overall economic growth not to speak of development. It then will have to specify the investment rate required and the corresponding savings rate within the economy as well as the strategy for export and import growth. Technological choice is an important consideration. All these will then spill over to the requirement of investment from abroad either through a loan or direct investment. There is no evidence of any such exercise except an acknowledgement that the country will have to go for more external borrowing. The recent trends in some of the variables such as savings and investment or exports and imports for that matter, do not give much of a basis for the realisation of the goal of a 5 trillion dollar economy in the next five years. Here again, we take a summary view of the performance for the five year periods of the last four regimes (see Table 2) that is quite revealing. As a share of GDP, investment, savings, export and imports – all have declined. To this one should add the concerns expressed by industrialists of a decline in demand for a number of important products such as automobiles, construction equipment, fast-moving consumer goods, and so on. Despite the rhetoric and the pompous-sounding target of 5trillion GDP, it is interesting to note that during the regimes of both NDA I and II, all these four important macro-economic variables were lower than those attained during UPA I and II.

Table 2: Gross Domestic Savings, Gross Investment, Exports and Imports as percentage of GDP (Five Year averages by Political Regimes)

5 year ending	Regime	Savings	Investment	Exports	Imports
2003-04	NDA I	25.96	25.38	9.37	11.27
2008-09	UPA I	33.92	35.28	13.27	20.09
2013-14	UPA II	33.52	36.78	15.83	24.40
2018-19	NDA II	30.95*	32.15*	12.52	18.53

Note: * denotes four-year average ending 2017-18 since 2018-19 data are not yet available.
Source: Computed from data available in Government of India (2019), Statistical Appendix.

Doubling of the GDP in dollar terms is not an impossible feat, going by the experience of UPA I regime, but it would take somewhat more time than what is being currently projected provided the regime addresses the central question of aggregate demand. However, there is a danger that every policy will now get tuned to this projected big goal post as an end in itself. But at what cost? Without any corrective policies and instruments, it will surely aggravate the sectoral inequality as between the rural and urban economies. But more importantly and from a political point of view, it will further exacerbate the huge inter-state inequality with states in central and east India including the demographically huge states of Uttar Pradesh and Bihar as clear losers.

But the biggest spoiler in this growth-fetish bright prospect being held out is employment and of course, it's quality. Here again, the prominent losers are the rural economy in general and women there in particular, going by the experience of the last six years. As a matter of fact the findings of the latest employment survey should have come as a shocker to the government that swears by generating jobs through their strategy of growth based on neoliberal principles, now being abandoned by its creators (USA and UK), but firmly held on by the IMF and World Bank as far as developing countries are concerned. Showering praise on the role of the private sector, the Finance Minister extols "*India Inc. are India's job-creators. They are the nation's wealth creators. Together, with mutual trust, we can gain, catalyze fast and attain sustained national growth*" (Budget Speech 2019:4).

Dismal Performance in Employment Front

How credible is this unadulterated praise? For the first time since national survey-based employment data became available in the early seventies, there has been an absolute decline in the number of workers in the economy. From a total workforce of 467.7 million in 2011-12 it has declined to 461.5 million in 2017-18 despite an officially claimed, but contested, average annual growth rate of over 7 per cent. Whether one accepts the official growth figure or a lower band, the fact of the matter is that growth during this six-year period has not only not created additional jobs but led to a loss of jobs in net terms of the order of 6.2 million. This is what is called negative employment elasticity of growth. Of course, new employment was created to the tune of 25.7 million during this period of six years (all in the service sector plus around 4 million in construction) but the economy also witnessed a loss of 31.9 million jobs. Detailed examination shows that the biggest loss was in agriculture to the tune of 29.3 million accounting for 92 percent of this loss. But manufacturing also registered a decline to the tune of 0.57 million. That is to say, there has been a net loss of jobs in the productive sectors of the economy along with an increase in employment in the service sector that has not been adequate even to compensate for the loss in the former. Notable among the losers is the loss of 0.37 million jobs in public administration and defence. The net losers are all women.

Given the dependence of an overwhelming proportion of households on employment for their sustenance, these results are not exactly in keeping with the widely touted slogan of "*sabka saath, sabka vikas* conjoined later by *sabka vishwas"*[3].

However, what ought to be particularly worrying for the Finance Minister is the impact of this fall in employment of women, especially those in rural areas. The Finance Minister said, rather eloquently, that *"In India's growth story, particularly in the rural economy, "grameen arth vyavastha", the role of women is a very sweet story. This government wishes to encourage and facilitate this role of women"*(Budget Speech 2019:18). The irony of this statement couldn't be starker when we find that women workers in rural areas fell by 24.7 million whereas that number increased by 2.9 million in urban areas resulting in a net loss of 21.8 million. Male workers in rural areas experienced an increase of 3.7 million but those in urban areas gained more, by around 12 million. Clearly the entire loss in employment has been borne by rural women with 84 percent decline accounted for by agriculture. These findings also show unequivocally the urban bias of the economic growth story in the country.

What about those outside the workforce? In such a grim employment situation, it is no wonder that the army of unemployed has registered a threefold increase between 2012 and 2018; from 10.5 million to 30 million. Workers plus unemployed together constitute the labour force. While the absolute size has not declined due to the inclusion of the unemployed, the labour force participation rate (LFPR) defined as the proportion of workers and unemployed in the adult population (15 years and

3 "Inclusiveness has been the cornerstone of India's development agenda. Over the last few years, efforts in this direction have been accelerated by the Government through the mantra of inclusiveness 'Sabka Sath, Sabka Vikas, further elaborated by ensuring 'Sabka Vishwas'. As India is a developing economy with resource constraints, we have prioritize and optimize the expenditure on social infrastructure to promote sustainable and inclusive growth. It is critical at this juncture to focus on public investments in human capital and strengthen the delivery mechanisms of government interventions to ensure transparency and accountability. With India having the demographic advantage, improving educational standards, skilling the youth, *enhancing job opportunities* [emphasis added], reducing disease burden and empowering women will help in realizing the potential of a buoyant economy in the future" (Government of India (2019 Vol.2)).

above) has declined from 55.5 per cent in 2012 to 49.7 percent in 2018. Here again, the main brunt is borne by women whose LFPR has declined from 30.7 in 2012 to 22.9 in 2018. Of course, this is not a one-shot affair; in fact, the declining trend started from early 2000. The argument that this is due to higher enrolment in education of those in the younger age groups (15-24) is only partially correct. In 2012 adult women in labour force and in educational enrolment accounted for 40.4 percent and the remaining close to 60 percent were outside the labour force and education. In 2018 this has been found to be 34 percent in the labour force and education and the remaining 66 percent outside. For men, the story is a different one with 93 percent and 90 percent in the labour force and education in 2012 and 2018 respectively.

This exclusion of women has now put India as one of the countries with very low women's LFPR and in the company of Pakistan (24%). It is well below our immediate neighbours of Bangla Desh (36%) and Sri Lanka (35%) and far below other neighbours such as Afghanistan (49%), Malaysia (51%), United Arab Emirates (51%), Indonesia (52%), Thailand (59%) and a far cry from China (61%). The regime that wants to learn from East Asia for accelerating the growth process would do well to help the women if a few lessons on employment are also included in the learning game.

No Big Statements on how to Create Jobs

Quoting Mahatma Gandhi, the Finance Minister, said: *"The soul of India lives in its villages"* (Budget Speech 2019:10). Despite the spirit of this invocation of Mahatma Gandhi, one wonders whether the government bothered to give a serious look at the findings of the latest employment survey and the crisis situation facing the rural economy in general and women in particular. One of the powerful avenues available to the government is the public employment scheme in the name of Mahatma Gandhi - i.e. the National Rural Employment Scheme - that is an entitlement on demand for any rural resident albeit restricted to one member per household. Despite widespread scepticism of high self-selection at the time of its enactment, the total number of job cards issued on demand has not exceeded 43 percent of total workers in rural areas. Within that only 57 percent of the job cards are considered 'active,' i.e. those actually availed of (or given) the employment under the scheme. Although it is an entitlement on demand, it is well known that there is an issue of aggregation of demand at the local level as well as the supply of works in terms of well thought out projects that could strengthen the natural capital of the rural economy in terms of developing/managing land-water-forest-livestock resources. The allocation this year (2019-20) at Rs. 60 thousand crores is less than the actual expenditure of Rs.61.1 crore during the last year. There is an impression that the current regime is not interested in continuing this public employment scheme that has a certain dignity (self-selection and a legal entitlement) and local relevance (employment within 5km radius). Not that the UPA which authored this historic act and the scheme was that enthusiastic going by the average days of employment of 46-50 days per beneficiary. Last year the beneficiaries were 52.8 million persons (with 51 days average days of employment), that is to say, just 17 per cent of the estimated total workers in rural areas at

311.3 million in 2017-18. Women now constitute 55 percent of the persons who availed of this employment, pointing to the increasing importance of this source of employment for poor labouring women in rural areas. Had this average employment been 100 days, it could have provided some succour to those who lost their employment. This doesn't look like "a very sweet story" for the women in the "*grameen arth vyavastha*".

Not that the blame for this lackadaisical performance is entirely to be placed on the current regime. The UPA regime's average performance was exactly the same. An otherwise historic initiative for the labouring rural poor ended up as a half-hearted half-initiative.

The story is the same with regard to other rural development schemes that are either entirely for the rural economy (e.g. PM Gram Sadak Yojana, Rural Drinking Water Mission) or substantially for rural areas (as in the case of housing, health mission, and ICDS) that could help create more jobs. In fact, the allocation for the Ministry of Rural Development at Rs.1.2 lakh crores is higher only by 4.8 percent compared to the previous year. But in real terms, this works out to an increase of a pitiable 0.8 percent after adjusting for inflation.

Labour Reforms: A Case of Misplaced Concreteness

Neither in the Economic Survey nor in the Budget Speech is there a clear direction as to how the claim of growth leading to employment generation be achieved. However, there is a strong fixation (both in this regime as well as in the UPA regime) that labour reforms is the principal answer. And that should be to make the labour market more flexible for capital to invest and realize their profit. The earlier idea, as propounded in the Constitution as well as in the enactment of labour regulation and welfare legislations, is now a thing of the past signalling the victory of neoliberalism in economic as well as welfare policies. The introduction of two Labour Codes on Wages and Occupational Health, Safety and Working Conditions (OSHC) is a case in point. Far from promoting decent jobs along with the much-touted high growth trajectory, the labour codes are now perceived by almost all trade unions, impartial scholars and media as a comprehensive onslaught on the workers especially those who work as insecure or informal workers in both the informal sector (employing less than 10 workers) and in the formal sector. Take the case of minimum wage fixation. In principle, the Wage Code mandates a national minimum wage (that could be taken as a floor wage) below which no state or the central government should fix industry-specific or state-wise minimum wages. However, the issue of fixing the minimum wage has been left to the executive that is contrary to the principle of "need-based" propounded by the Supreme Court and demanded by the Indian Labour Conferences. But this lofty principle has been followed within days by announcing a pitiable Rs.178 as the national minimum wage by the Ministry of Labour that is higher by two rupees from the previous year's recommended national minimum wage. Not only that it represents a decline in real wages – given an inflation rate of 4 per cent –, but it also signals that the government is in no mood to accept the recommendations of its own committee (Satpathy Committee) that recommended a minimum wage of Rs.375 per day as of

2018. Of course, this was considerably lower than the demand of the 15th Indian Labour Conference for a national minimum wage of Rs.692 or Rs.18000 per day. The new code also takes away the workers' right to judicial remedy because of the creation of a quasi-judicial appellate authority. For the overwhelming majority of informal workers who do not have an identifiable employer, the route to remedy for non-implementation is further complicated because a claim can only be filed by an appropriate authority, employee or trade union.

The OSHC Code has also faced severe criticism from the trade unions. The earlier Contract Labour (Abolition) Act of 1979, now merged with this code, has provisions that promotes contract labour by relaxing licensing norms that cannot distinguish between perennial and non-perennial jobs and taking away the responsibility of the principal employer. There are provisions for extending the working hours, with the consent of the worker, that could lead to a return to the pre-independent days of long working hours given the insecure nature of employment of a majority of workers not to give their consent. Safety norms have also been relaxed in the proposed code. Workers in the informal sector or those who work as informal – often as casual – workers in the formal sector (e.g. construction) are at a loss as to what will happen to the welfare boards and funds created on an industry-wide basis.

In sum, the message is loud and clear. The path to high growth needs to be paved with cheap and pliable labour for the private corporate sector, the India Inc., with borrowings from abroad and assisted by a freer and easier entry of foreign capital to the Indian economy.

References:

Bhattacharya, Pramit, and Nikita Kwatra. 2019. 'The Unanswered Questions in India's GDP Calculations' in https://www.livemint.com/politics/policy/the-unanswered-questions-in-india-s-gdp-calculations-1558424296214.html.

Dholakia, Ravindra, R. Nagaraj and Manish Pandya. 2018. 'Some Methodological Issues: Manufacturing Output in New GDP Series' in *Economic and Political Weekly,* Vol.53, No.35, 1 September.

Government of India. 2019. *Economic Survey 2018-19*, Vol.1 and 2 and *Statistical Appendix,* Ministry of Finance, New Delhi.

Government of India. 2019. *Budget 2019-20: Speech of Nirmala Sitharaman, Minister of Finance, July 5, 2019,* Ministry of Finance, New Delhi.

Nagaraj, R. 2019. 'Is India Overestimating its Economic Growth?' in *The Hindu*, 21 June.

Subramaniam, Arvind. 2019. 'India's GDP Mis-estimation: Likelihood, Magnitudes, Mechanisms, and Implications,' CID Faculty Working Paper No. 354, Harvard University.

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INDUSTRY AND EXTERNAL SECTOR

P.L. Beena

Government of India has introduced many measures since 2014 such as Make in India (MII), Startup India and Standup India; Foreign Direct Investment (FDI) policy in order to boost the manufacturing/production activities. However, manufacturing growth, which is measured in terms of Index of Industrial Production (IIP) has been consistently declining, accounting for 3.6% growth during this financial year.

Domestic Sector

While growth of capital goods and consumer non-durables has stagnated, infrastructure and construction goods have recorded considerable growth of 7.5%. Consumer durables have the second-highest growth. Though *Economic Survey* claims that there is a marginal growth in the Gross Value Added (GVA) of Indian industry during last one year, the growth that was registered in 2018-19 (6.99%) is much lower than the growth that was experienced in 2016-17 (7.9%). Gems and Jewellery is the largest exporting sector, which accounted for 14% of total Indian exports, but its contribution to the GDP is very low. The contribution to GDP from the most important sectors such as Iron & Steel and Textiles are 2.3% and 2% respectively. The share of Textiles and Garments to the total exports is 12.65% of total Indian exports and contributes 5% of global trade in this industry. This is also the largest employer in India after agriculture, generating 4.5 crore employments directly and 6 crore employment in allied sectors. Thrust is given to boost this sector through various policies such as Make in India, and Skill India. Women empowerment and Rural youth employment is expected to improve through such strategies which could develop backward linkages to the rural economy and give huge opportunities to millions of farmers, artisans, handloom and handicraft manufacturers. However, the important exporting sectors such as Textiles and Garments; Iron and steel apart from motor vehicles and transport equipment have experienced slack in demand. Growth of investment in the individual sector has also been declining consistently which is a matter of concern.

The analysis carried out by Reserve Bank of India (RBI) based on 1700 Non-government Non-financial manufacturing firms observed an improvement in net profit, capacity utilization and sales. However, the growth pattern across industries was found to be the same as in the case of performance measured, based on the data collected from the Central Statistical Organisation (CSO) or IIP. Distribution of these private manufacturing firms in terms of sales or assets is highly skewed as it reveals that relatively less number of firms control a major share of sales, assets and profits while generating less employment (Beena 2018). However, this sector is not proportionately taxed by stating that they are the "employment creators". It is quite saddening to see the announcement of 2019 budget regarding the resource mobilization and their move towards disinvestment of profit-making Central Public Sector Enterprises (CPSE) in order to meet the liquidity crunch faced by commercial banks and Medium and Small Manufacturing Enterprises (MSMEs). MSME sector did face liquidity crunch as Non-Banking Financial Companies (NBFCs) failed to lend money to this sector, though the budget 2017-18 relied upon NBFCs as commercial banks were already going through a liquidity crunch.

Though Government of India (GoI) announced new FDI policy and Make in India initiatives to transform India as a manufacturing hub, it is evident that 74% of such FDI came to the service sectors (Rao and Dhar 2018). Trade, especially Retail trade, including E-commerce, accounted for the major share. Transport, storage, and communication received 11.9% FDI. The share of FDI received by Construction and Business services are 11.5% and 8.8%. Further, it is evident that companies are bringing more of non-RFDI during post-MII period as compared to the pre-MII period. More than 50% of the portfolio investment went into the retail trading, web portal, cab aggregators and construction. Further, it is observed that out of FDI received by retail trade, including e-commerce, only 29.3% were RFDI. The rest is in the form of Foreign Portfolio Investment (FPI). RFDI share in SEZs, technology parks, etc was very minimal, accounting for only 1.2%. RFDI share in microfinance was only 8% while business services received 70% RFDI. RFDI share in restaurants, eating places, etc. was 64%; in solar power, it was 52%; in other renewable energy, it was 60%; in healthcare (67%); Mining and quarrying (89%), education (97%), Agriculture, Hunting and Forestry (66%). These statistics indicate that such FDI are more of a market seeking of services goods rather than the manufacturing goods. The purpose of attracting foreign savings has become a matter of balancing of Current Account Deficit (CAD) rather than building long term investment, technology transfer and employment generation. The new announcements regarding the FDI policy in the Single Brand Retail Sector does not go hand in hand with the 'Make in India' policy as the local sourcing requirement has not been valid anymore. *Economic Survey* and the Budget 2019 announced many policies as part of the second generation of infrastructure reform by hiking social overhead capital. Many of the policy announcements such as transforming India as a global hub for manufacturing electric vehicles; creating 100 new clusters in order to benefit 50,000 Artisans, 80 Livelihood Business Incubators, 20 Technology Business Incubators in order to develop 75,000 Skilled Entrepreneurs in Agro-Rural Industry in this year could be a progressive approach towards industrialisation, but there is no clarity on the implementation or viability of such policy instruments. Government initiatives towards introducing thousands of Farmer Producers' companies (FPCs) in order to encourage entrepreneurship among farmers' and encourage them to engage in value-adding activities has also been done without conducting any study about the success or failure of the existing (FPCs).

Budget 2019 has withdrawn exemptions on custom duty as well as announced hike in customs duty for many items in order to encourage production in the MSME sectors, which is a welcome measure. Similarly, facilitating credit linked capital subsidy scheme for technology upgradation;

scheme of fund for regeneration of traditional industries; credit guarantee trust fund; credit up to 1 crore within 59 minutes are all good policy as long as they deliver the expected results. However, thrust is largely given to financing part of vulnerable entrepreneurs operating under unorganized sector without discussing the viability of these enterprises in terms of their success in product diversification, technological innovation, labour productivity and capital productivity. According to the latest National Sample Survey Organisation (NSSO) round, an average MSME unit can generate a maximum number of 2 employees.

16,578 start-ups exist in India as of today which is distributed largely in Maharashtra (19%), Karnataka (15%), Delhi (13%) and UP. Kerala ranked 9th position while Gujarat held 8th position. The major sectors are IT (15%), Healthcare and Life Sciences (9%), Education (8%), Finance and Technology (3%), Renewable Energy (3%), Hardware of Technology (3%), Internet of things (3%), Agriculture (3.7%) and Food and Beverages (4%). Tax concession, along with many subsidies is given to those entrepreneurs to start new start-ups. However, the mortality rate of such start-up is not discussed in any part of the Survey or Budget documents. Given the growth strategies followed by many successful start-up entrepreneurs, how far India can depend on such companies for boosting production activities and employment generation is not clear. The most recent example is the sale of India's prestigious start-up, Flipkart which was started in 2007, to Walmart without having much discussion, by the regulatory agencies such as Competition Commission of India (Saraswathy, 2018).

External Sector

The debt statistics reveal that external debt of India has been increasing and it stood around US$521 billion as of 2018-19. Net international investment deficit has been deteriorating and reached to the level of US$438 billion. However, the economic survey claimed that debt service ratio is quite sustainable, and India is depending more on stable sources of finance for funding Current Account Deficits. It further stated that the share of Net FDI inflows in the total liabilities of India's international investment position has constantly increased while the same ratio of FPI has declined since 2013. The survey further added that the large presence of FDI and the acceleration in the rate of growth of remittances has compensated for the deterioration of CAD and do not need to worry about the capital flight. Accordingly, the Budget 2019 has announced the new policy in order to attract more FPI. But the latest study by Rao and Dhar (2018) argued that the FDI statistics are highly inflated. According to this study, out of the total FDI flows into India during 2014-17, real FDI accounted for only 58% while 27% of that FDI was in the form of FPI. The rest of FDI is contributed by India-related investors directly or together with foreign private equity investors. Similarly, though India claimed to be one of the leading countries in the world in terms of remittances, it is on the decline since 2013-14. These pieces of evidence raise the validity of the claims that are made by the *Economic Survey*.

CAD to GDP ratio and trade deficit to GDP ratio have been increasing tremendously and reached to the level of 2.4 and 6.7 per cent respectively during 2018-19, which is a matter of concern. Export has declined in absolute terms consistently for the last five years, which has led to the widening of trade deficit. Though petroleum, pearl, precious and semi-precious stone, drug formulation and biologist and gold other precious metal jewellery, and Iron and steel together accounted for major share of India's total exports, as on 2017-18, the other important exporting sectors are RMG cotton including accessories, motor vehicles/cars, marine products and organic chemicals. The similar condition exists during 2018-19 as well except that the Electric machinery and equipment has become the ninth leading exporting product. Similarly, petroleum: crude, precious stone, gold, and petroleum products accounted for major import share, the electronic and telecom components are the other leading imported items. The US, China, and the UAE continue to be the major trading partners.

Conclusion

The protectionist policy imposed by the US, the EU, and Canada and the trade war between the US and China could adversely affect India's trade position. The trade protectionism followed by developed countries along with the new FDI/FPI policy of India can only widen the trade deficit and Balance of Payments. Overall, one tends to believe that Government of India is busy designing new policies and creating infrastructure in order to facilitate MNCs to sell their products through retail or e-business instead of transforming India as a manufacturing hub and thus 'Make in India' concept would remain only a slogan rather than a reality.

References:

Beena, P.L. 2018. *Mergers and Acquisitions: India under Globalisation*, Routledge, UK, India.

Beena, P.L. 2018. 'Outward FDI and Cross-border M&As by Indian Firms: A Host Country-Level Analysis', WP No. 479, CDS, Trivandrum.

Government of India. 2019. *Economic Survey.*

Government of India. 2019. *Union Budget*

Rao Chalapati KS and Biswajit Dhar. 2018. 'India's Recent Inward Foreign Direct Investment: An Assessment,' ISID.

Saraswathy, Beena. 2019. 'The Flipkart-Walmart Deal in India: A Look into Competition and Other Related Issues,' *The Antitrust Bulletin,* Vol. 64, No.1.

ROLE OF PRIVATE INVESTMENT: DISCUSSION OF ECONOMIC SURVEY

M. Parameswaran

This note comments on Chapter 1 of the Economic Survey 2019 Vol. 1. The chapter presents a blueprint of the economy for the next five years in terms of economic growth, job creation and exports. It restates the vision, articulated by the Prime Minister, that India aims to grow into a $ 5 trillion economy by 2024-25, which would make India the third-largest economy in the World. To attain the targeted GDP level, the Survey notes, real GDP has to record an annual growth rate of 8 percent for the next five years. This chapter is important as it presents the overall framework, based on which policy measures are suggested for attaining the target.

On the basis of the recent growth experiences of countries across the world, particularly of China and East Asian countries, the Survey presents a growth model for India. The "growth model views the economy as being in *constant disequilibrium - a virtuous cycle or vicious cycle*. When the economy is in a virtuous cycle, investment, productivity growth, job creation, demand and exports feed into each other and enable the animal spirits in the economy to thrive" (page 5, emphasis is original). By generating a virtuous cycle process, the economy is expected to move to the targeted level of GDP. The Survey postulates investment as the "key driver" capable of generating a self-sustaining virtuous cycle. Though investment can be either public or private, the Survey stresses investment by the private sector and elaborates on its virtues. Apart from private investment, the Survey also prescribe other measures that can generate and sustain a virtuous cycle in the economy. To quote the Survey "By presenting data as a public good, emphasising legal reform, ensuring policy consistency, and encouraging behaviour changes using principles of behavioural economics, the Survey aims to enable a self-sustaining virtuous cycle" (page. 1). The Survey claims that this new way of viewing economic progress in terms of virtuous cycle is of very recent origin, emerged from the economic literature following Global financial crisis, and it is a departure from the traditional Anglo-Saxon view of the economy. In more than one place, the Survey highlights the merits of this "new" way of imagining economic progress over the earlier strategy of five year-plans. To quote the Survey "An economy that is in a constant state of disequilibrium needs a new approach to navigate. The earlier attempt to create five-year plans, largely using the equilibrium framework, failed because it was too prescriptive for an inherently unpredictable world" (page.12).

This note examines the two claims made by the Survey regarding the characterisation of the economic progress in terms of virtuous cycle, (1) it is of very recent origin and is a departure from the traditional way of thinking in economics and (2) this way of imagining economic progress was absent when India was formulating its planned economic development in the 1950s. The note also comments on two other related issues.

Modelling economic progress in terms of virtuous cycle is not of recent origin, and it dates back at least to Young (1928). The literature also uses the term cumulative causation in place of virtuous cycle, as the mechanism essentially implies each state of the economy drives itself to the next higher level. Hence, in this note, we use the terms virtuous cycle and cumulative causation interchangeably. Young (1928) imagines a process of cumulative causation in industrialisation due to increasing returns arising from the division of labour. Hirschman's (1958) unbalanced growth strategy is also based on the generation of a virtuous cycle in a poor economy by creating a disequilibrium through investment in some selected sectors. Similarly, Myrdal's (1957) idea of growth as an endogenous cumulative change is also a reflection of the idea that economic growth proceeds on a path of cumulative causation.

The sources of cumulative causation in modern industrial economies include division of labour, knowledge spillovers, and learning by doing. In real life these three sources work together and reinforce each other, creating strong increasing returns at the aggregate level, which would result in increasing growth rate of the economy over time (Romer, 1986; Balakrishnan, Das, and Parameswaran, 2017). In modern industrial economies, division of labour is nothing but adoption of roundabout methods of production in which many different specialised inputs are used to produce final goods (Rodríguez-Clare, 1996). The literature modelling economic progress based on these ideas suggests that there would be multiple equilibria - an equilibrium at lower level of income characterised by shallow division of labour and weak or absence of knowledge spillovers and an equilibrium at a higher level of income featured by deeper division of labour and extensive knowledge spillovers. As increasing returns to scale technologies need a certain scale of operation to break even, in these multiple equilibria models, the process of cumulative causation works only after the economy crosses a threshold size (Balakrishnan, Das, and Parameswaran, 2017). Therefore, for an underdeveloped economy to move out of the lower level equilibrium trap, it needs to be positively shocked by investing in sectors having greatest linkages and spillover effects. Once it is shocked and crosses a threshold size, the economy would be able to move up through a virtuous cycle path. The underlying driver of this process is the ever-increasing productivity owning to realisation of increasing returns. However, this process is not automatic; it needs to be lubricated by providing productivity-enhancing environments like improvement in the quality of institutions and governance, better provisioning of public goods, and so on.

A reading of writings on economic planning in India in the 1950s convince one that Indian planners did aware of the presence of a virtuous cycle mechanism in the economic growth process. For instance in a paper titled "Some Observations on the Process of Growth of National income", Mahalanobis (1953) conclude on the possible path of the ratio of increment in income to investment (β) that "A steady increase of β may be, therefore, a characteristics of harmonious development." (page: 311). Here one point needs to be clarified. Five-plans in India were the instances of state direct action to accelerate economic growth in an underdeveloped economy. On the other hand, virtuous cycle represents the internal dynamic of a growing economy. Of course, to be more effective, state action in the form of economic planning must recognise and utilise this internal dynamic. As evident from the following statement of Mahalanobis (1955), made while elaborating the context and logical and statistical basis of the plan-frame of the second five-year plan, it is clear that planning in India recognised this internal dynamic.

I shall now consider the proportion of investment that should be allocated to industries producing investment goods (λ_k) through planning. We found from available data that β_k is usually much smaller than β_c (that is, the marginal increase of income per unit of investment is much less in basic industries producing capital goods than in industries producing consumer goods). This being so, the larger the value of λ_k, the smaller is the increase in income in the short run; but, after a critical period of several years, income begins to rise steeply. (Mahalanobis, 1955, p.28-29).

In a recent paper, Balakrishnan, Das, and Parameswaran (2017), while explaining the growth acceleration of the Indian economy since the end of the 1970s, provides empirical evidence for the presence of virtuous cycle. The virtuous cycle is emanating from the positive feedback relationship between manufacturing and services sectors, which can increase the growth rate of the economy over time, as shown in the paper. The paper dates the beginning of this mechanism to 1965-66 - fifteen years after the starting of planned economic development in the country. As anticipated by Mahalanobis (1955), public investment during the first 15 years of planning must have provided life to this mechanism.

There are also problems in the empirical evidence provided to support the presence of virtuous cycle in the growth process of China and East Asian countries. By plotting saving and investment rates against per capita GDP and GDP growth of these countries, the Survey concludes that "The evidence in this section suggests that saving and investment and GDP growth grown in the virtuous cycle in high growth economies" (p.8). This conclusion is very tenuous as a positive correlation between two variables does not imply virtuous cycle. Virtuous cycle requires two-way causation, that is each variable is feeding the other that cannot be inferred from simple correlation between them.

After setting the target and strategy, the Survey suggests continuous recalibration of policies based real-world evidence derived from observations (data analysis). Here, a recommendation is made for making data a public good within the legal framework of data privacy. The chapter also argues for adapting economic theories to Indian realities and makes case for theory building on the basis of observations (data analysis) instead of testing theories derived axiomatically using data. Here the issue is that, in abstract subjects like economics and other social sciences, concepts and variables are framework dependent. Therefore, the choice of which variables are to be selected and what kind of relationships among them are to be tested depends on the theoretical framework one holds. Hence, proceeding to the data analysis without a framework is meaningless. As the following quote from Albert Einstein reveals, this is the case even in natural sciences where concepts can be concrete.

"It is the theory which decides what can be observed."

References

Balakrishnan, P., M. Das, and M. Parameswaran. 2017. 'The Internal Dynamic of Indian Economic Growth,' *Journal of Asian Economics*, 50, 46–61.

Hirschman, A. O. 1958. *The Strategy of Economic Development*. Yale University Press, New Haven, CT.

Mahalanobis, P. C. 1953. 'Some Observations on the Process of Growth of National Income,' *Sankhyâ: The Indian Journal of Statistics (1933-1960)*, 12(4), 307–312.

____(1955): 'The Approach of Operational Research to Planning in India,' *Sankhyâ: The Indian Journal of Statistics*, 16(1/2), 3–130.

Myrdal, G. 1957. *Economic Theory and Underdeveloped Regions*. Methuen, London.

Rodríguez-Clare, A. 1996. 'The Division of Labour and Economic Development,' *Journal of Development Economics*, 49(1), 3–32.

Romer, P. M.1986. 'Increasing Returns and Long-Run Growth,' *Journal of Political Economy*, 94(5), 1002–1037.

Young, A. A. 1928. 'Increasing Returns and Economic Progress,' *Economic Journal*, 38(152), 527–542.

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NATIONAL FLOOR MINIMUM WAGES IN INDIA

Vinoj Abraham

An overwhelming majority of the workers in India are not covered under any social security, does not belong to any collective bargaining arrangements and remain poor even to meet basic necessities. Further, these workers are not covered under any labour legislations that protect them against the various vulnerabilities of work life. Against this background, the Minimum Wages Act of 1948 assumes tremendous significance to the working poor. This is the only Act that provides legal support to unorganised wage workers in India. But the implementation of the Act is rift with problems.

Minimum wages are scheduled for industries and occupations separately in both central and state spheres. Moreover, each state in India separately implements minimum wage rules for state-specific employments and job categories. As per the economic survey, 2018-19, there are more than 429 scheduled employments and 1915 scheduled job categories for unskilled workers in India. Firstly, this multiplicity of minimum wages across states and centre for different occupations has made monitoring of the working of the Act an enormous task. Inspectorates of Minimum Wages in most states are understaffed to monitor these scheduled employments. Multiplicity of minimum wages also implies that there are large variations in minimum wages across regions and occupations. Compliance to the Act is compromised as multiplicity of categories and Wages makes the Act intractable. Secondly, even though Minimum Wages Act is arguably the last resort for the working poor, the Act does not cover all the wage workers. The Act stipulates that a state needs to declare a minimum wage for an industry only if there are at least 1000 workers in the industry. So a number of workers in small industries get excluded from the purview of the Act. Thirdly, revision of minimum wages as stipulated in the Act, to be done at least once in five years, has often been delayed.

Against this background, the government of India has introduced the labour code bill in the parliament aimed at amalgamating 44 different labour legislations into four different sets of codes namely wage code, code on social security, code on industrial relations and code on industrial safety. These four codes aim to reduce the multiplicity of labour market regulations to enhance implementation and compliance. The Minimum Wage Act of 1948 is part of the proposed wage code.

The economic survey proposes that the central government should notify a ‘national floor minimum wage’ that can vary across five geographical regions. Thereafter, states can fix state-specific minimum wages, which are not to be less than the floor wage. In light of the issues cited above the proposal to rationalize the minimum wages across the country seem to be a welcome move. Apparently, compliance and monitoring of minimum wages could improve with a simpler minimum wage system applicable across the country.

But let us look at some of the arguments that stand against a unified national floor minimum wage. What does a minimum wage mean? The Act is ambiguous on the determination of the minimum and leaves it as the discretion of the appropriate government. The Fair Wages Committee of 1949 and the 15th session of the Indian Labour Conference in 1957 established the ground rules for estimation of the minimum wages in India. The Indian Labour Conference set basic standards of worker consumption units in terms of food, clothing and housing. Following the Supreme Court judgment on Workmen v. Reptakos Breet& Co. Ltd in 1992, the interpretation of minimum wages expanded to include not only physical subsistence, but also children's education, medical requirement, minimum recreation including festivals and ceremonies, and provision for old age, marriages etc. which should account for 25% of the total minimum wage.

It should be kept in mind that minimum wage is not conceived as returns to work; rather, it guarantees a basic minimum standard of living for the workers and their household members. Now the question arises as to what is subsistence for households across the country? Firstly, while the basic physical requirements of the average individual may not vary from across regions, the household size would vary across regions depending on their place in the demographic transition. For instance, states such as Kerala and Tamil Nadu may have smaller household size due to their transition into the final stage of the demographic transition while state such as Bihar and Uttar Pradesh may have much larger households as they belong to an earlier phase of the demographic transition. Secondly, the number of workers in households may vary according to the level of development of a region. For instance, states with an ageing population may have lesser number of workers than a state with a younger population. Finally, can we think that the consumption basket of the households across regions would be homogenous? Even if the requirement is of physical subsistence, the availability of such goods and therefore their price may also vary substantially. Given these facts, a basic minimum national wages may be difficult to be justified.

The compliance of the minimum wages need not necessarily improve by simplification of the minimum wages rules. Simplification and standardization would help the administrators to trace who is complying and who is not. However, the issue of compliance is not just a lack of official capacities. Even if monitored well unless all the stakeholders are on an equal footing to bargain, the Act may not be implemented in its spirit. If industrial and agricultural lobbies are successful in negotiating with the government in power, then bureaucratic or even technological interventions may not lead to better implementation of the act. In the current context of weakening bargaining power of the workers and the impending labour code that would make the labour market more flexible, standardization of the minimum wages on its own may not lead to the desired outcomes. The introduction of new technologies in minimum wage monitoring such as the e-payment system and bank-based payment system may, to some extent, enhance the compliance of employers to the Act. Yet there are multiple ways of evading the Act even after payment of the wages such as advance cheque collection from the employees.

Finally, though small, there are a number of sectors such as information technology, bio-technology and automobile which earn large surplus and are capable of paying wages much higher than a stipulated national minimum wage. In these sectors, at least the government can move towards a fair wages regime. Not doing so may act against the interest of the workers wherein employers may use the national floor minimum wage as the benchmark for wage setting.

BEHAVIOURAL ECONOMICS APPLICATIONS FOR POLICY IMPLEMENTATION

Vinoj Abraham

The economic survey of 2018-19 has, for the first time, introduced a chapter on the applications of behavioural economics for implementation of various policies. In summary, the chapter provides a justification for the use of behavioural economics, followed by illustrations from successful cases of policy implementation in other countries. Thereafter the chapter gives a broad theoretical overview of the specific tool, nudge and then proposes certain applications in various sectors such as health and sanitation, environment and education of girl children.

Human beings are conditioned by their cognitive boundaries, and their decisions are structured and biased to act within these boundaries. The choices that are visible to a decision making individual is blurred by these boundaries. Nudge is a way to restructure the choice architecture for the individual such that more desirable behavioural outcomes are chosen by the person.

Social norms followed within the society draws cognitive boundaries for people in a society. Many a time, these social norms are not ideal or socially desirable. Nudge can be a way to gently push people to move from what is practised of social norms to what is socially ideal. In doing so, nudge uses the mental maps of people within which the society is situated. For instance, the economic survey argues that in a patriarchic society where education of girl children has not been valued the campaign of “selfie with my daughter” by their father would invoke pride in girl children. The larger society would learn from such role models and gradually help in nudging to change the mental map such that their attitude towards girl children would change.

While nudge seems to be an effective policy tool in various contexts, the specific manner in which the economic survey views nudge is problematic. Firstly, the economic survey claims that the Indian culture is religion-based, and the cultural values embedded in such a religious society could be leveraged towards achieving policy goals. The chapter cites extensively from Hindu, Islamic and Christian scriptures to establish certain prototypes of universal values. Further, it is claimed that appealing towards socially desirable goals through these cultural values would be an effective way of nudging.

This view of the economic survey is parochial and problematic. Why does the economic survey use religion as the mental map of culture for nudge. India is a cultural mosaic, drawing from multiple cultures even within the same religion. And, India is a divided society, especially on the basis of religion. Using religion to achieve policy goals may produce the immediate social goals but in the long run, maybe feeding into religion-based identity building and creating fissures within the society. Using religious values may enhance the policy goals but at the cost of enriching hosts of conventions and traditions associated with religious practices that may work against what is social ideal for an aspiring secular modern republic.

At least in some cases, the Economic survey seems to be over-optimistic with regard to the policy relevance for nudge. A case, in particular, is the instance where The Economic Survey points out that much can be achieved by behavioural changes in reducing open defecation. Changes in attitude towards open defecation certainly can have an effect on reducing this. There has been a dramatic reduction in open defecation, as shown in the Survey. However, this is largely due to the access to toilets rather than behavioural changes as shown in the study by Gupta et al. (2018)[4].

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4 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjkxbT31-vjAhWMMY8KHb6DC1gQFjAAegQIARAC&url=https%3A%2F%2Friceinstitute.org%2Fwp-content%2Fuploads%2F2019%2F01%2FChanges-in-open-defecation-in-rural-north-India-2014-%25E2%2580%2593-2018.pdf&usg=AOvVaw1UIgA-wPs6NlEqixBc7XgJ

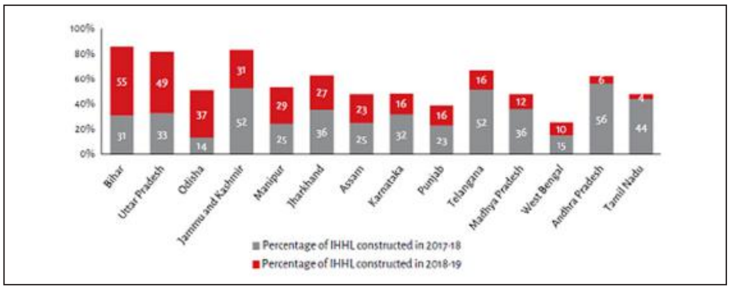
SWACHH BHARAT SUNDAR BHARAT

G. Murugan

Swachh Bharat - a flagship programme of transforming the country completely open defecation free, launched in October 2014 aims to attain sanitation facilities to all by 2nd Oct. 2019. Compared to that of the previous year, 2019-20 has a total outlay 31% less; 9994 crore. The physical achievements denoted in the Economic Survey shows that 98% of households and 30 states have already reached their destinations, with Bihar Orissa, West Bengal, Telangana and Goa as laggards. In order to completely avoid the exclusion errors, the Government of India has introduced a new addendum to the programmes left out in a new category of beneficiaries known as "left out of baseline" and is programmed to cover around 37.77 Lakh households additionally.

The guidelines for Swachh-Bharat demarcates 8% of their budget for utilization under Information, Education and Communication activities, which the government rarely meet the targets in any year. The aim of this allocation in the budget is to facilitate and prepare the community to take up and lead the sanitation through effective communication and polarisation of the programme. This under achievement of target show the lack of initiative on the part of those administering the programme, that negatively tells upon the underutilisation of the goods delivered, particularly the IEC and dissemination of information. It is also surprising that in some states more than 25% of the constructions have taken place in 2018-19, and even more than 50% in Bihar and Uttar Pradesh, as evident from the Figure 1 below. It needs to be specifically mentioned that as on 30-6-2018 around 23.9% of the districts in the country out of 699 districts, more than 70% of households are left uncovered, with another 5.2% of districts more than 60% of households are without any latrine. (see Murugan, 2019) Both together constitute almost 1/3rd of the districts in the country. Hence if at all the present claim of GOI is true, it is possible only through massive construction on contracting that does not serve the purposes envisaged in the Swachh Bharat guidelines, as it is known to any knowledgeable person that community construction takes time for completion. The rates of construction during '17-'18 and 2018-19 are depicted in Figure 1. It may be noted that in laggard States more than and some cases almost 50% of the constructions have taken place during 18-19, which is very much doubtful considering the previous experience in performance.

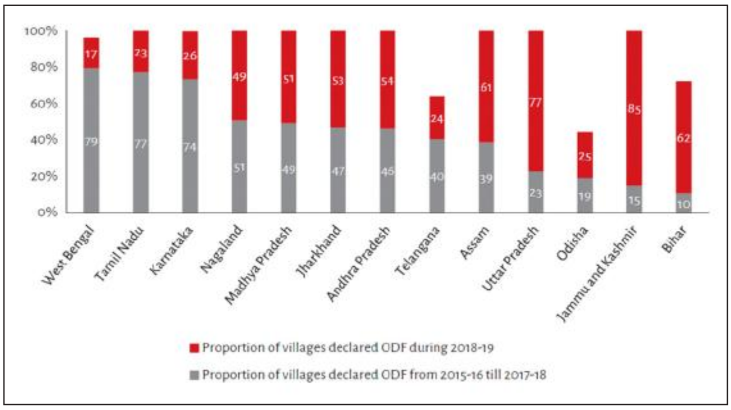
Figure 1: IHHL Construction in 2017-18, and 2018-19



Source: SRM dashboard, www.sbm.gov.in

Further, the declaration of ODF in the villages has also taken place during the fag end of the targeted period. Even if one admits that there can have some lag in the construction and declaration of ODF. Figure 2 shows a disproportionate ratio of declaration at the terminal year, generating doubts on the authenticity of the figures and veracity of achievements reported.

Figure 2: Proportion of Villages Declared ODF, 2015-19



Source: SRM dashboard, www.sbm.gov.in

Environment-friendly treatment and disposal of Solid-Liquid Waste in the villages is another aim targeted in Swachh Bharat. Only around 4% of the state's expenditure and 4% of the central expenditures during 2018-19 were on SLWM. These too, have taken place only in states that have already declared a majority of their villages ODF years back, like that of Himachal Pradesh, Arunachal Pradesh, Kerala and Mizoram. Barring these states, the expenditures in others is only to the tune of around 1%.

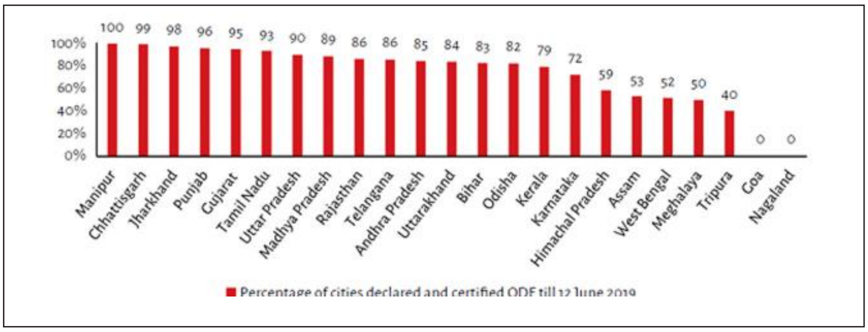
Swachh Bharat - Urban

Outlay for the current year SBM-U has hiked its outlay by 6% than that of the revised estimate of the previous year making it to 2650 crore. Since the onset of the programme 57.63 lakh new Individual Household Latrines have been constructed, accounting for 87% of the revised target. About 97% of the community latrines and public toilets have also been completed, although its utilization is not known nor made any attempt to explore the use. Unlike rural, urban sanitation is more complex and large sewerage systems still need proper disposal and construction, and are in various stages. Twenty-three states and UTs have been declared to be ODF still leaving many states. Release of funds to the states by the government of India (GOI) too are much slower, that only 57% of GOIs total mission allocation of 14623 crores have been released. As the release is based on previous expenditures certified by the concerned states, it is possible that expenditure might be low, telling again on the nature of the progress.

SBM-U aims to cover 4041 statutory towns as identified during Census 2011. Allocation of funds to the states too were disproportionate. While states like Chattisgarh, Andhra Pradesh, Rajasthan and Gujarat have received 97%, 88%, 87%, and 86% respectively of their release of funds, in many other states, their release of funds stands to be less than 50%. Expenditure was also abysmally poor in many states. Out of the 529 crores released to states only 45 crore (9%) are spent during 2018-19 leaving huge - 91% - balance of unspent.

A key component of SBM-U is the IEC and allocation to it. The total allocation for IEC during the mission period earmarked to be 1828 crore, between 2014 and Jan 2019 only 653 crores have been released, which is only 45% of the GOI allocation to states. Thus in all tunes both in allocation and release; and in expenditures, the performance is poor, very much tell upon the progress of sanitation in the towns and cities. Twenty-three states have declared ODF in their cities and even among them, many could not reach full coverage. Figure 3 below gives us an idea of the scenario of these states, signifying that other states have to make serious effort to reach the target. Further, the figure reveals that only 6 states have crossed 90% and only Manipur could reach 100, thanks to the institutional structures and specificities prevalent in the state.

Figure 3: Percentage of Cities Declared and Certified ODF till 12 June 2019



Source: ODF Certification Portal, www.sbmodf.in

Solid Waste Management (SWM): Management of Solid Waste in cities and towns is a serious issue in many states. As of June 2019 full door to door collection of waste, is practised in 90% wards, yet only 42 percent of the wards do have segregation of waste at source. Similarly, the capacity of waste processing is also very low in towns. Although 1.45 lakh metric tonnes of waste are generated per day only 54% of it is being processed, leaving a huge dump of waste and its resultant aftermath, generating '*negative public goods*' quite often. SWM guideline refers to a systematic process of ensuring that solid waste is disposed off in a sustainable manner without polluting the environment. Under SBM – U a total of 7366 crore has been earmarked for improving SWM, however with a few months left for the completion of the mission only 56% (4057 crore) had been made available to the states till January 2019. This again signify the inactivity on the part of urban local bodies and the State Governments.

Economic Survey: Chapters 2 and 8 of Economic Survey makes tall claims about the performance of Swachh Bharat, sometimes knowingly or unknowingly hiding the actual field truth. Indeed it is commendable that the political will of the government could achieve some remarkable progress in the constructed latrines, but the real achievement of 'NUDGE' is a matter of debate and dispute, despite some efforts. The claim of Economic Survey that already 30 states and UTs have 100 % coverage with IHHL is of serious doubt considering the facts put forth. Even if we assume that there is full achievement in these states, which is quite unlikely as revealed from the data of MDWS – IMIS (see Murugan, 2019), experience suggests that it depend on; usage practices of people; quality of construction owing to contractual interventions and community avoidance; inappropriate technology use and negligible diffusion of technologies among the common people; faulty technology options in the absence of dissemination; corruption; and dysfunctional toilets; behaviour of the people adapting to seasonal changes etc. Results of the survey carried out by CPR, 2017 reveals that in 45% of the households surveyed the reason for building latrines were because of the pressure from officials. This gives us the clue that most of these latrines would be sparingly used or if at all used only by the female or elderly persons, a failure of the animosity of 'nudge.'

Since the states were given the option to use their choice of technology, many states have opted for the single pit; rather than the twin pit, which is summarised in Table 1 (see Murugan, 2019).

Table 1: Single Pit and Container Chamber, Focus States, Bihar, UP,MP, and Rajasthan

	Percent
Focus State	71
Bihar	79
Uttar Pradesh	76
Madhya Pradesh	86
Rajasthan	60

This gives rise to another set of problems of faecal sludge management and its treatment in the years to come. Further because of the fear of pit emptying and related surmounting cost involved, members of rural households would abstain from using it. There exist many dysfunctional toilets because of the inappropriate use of technology and the contractual system followed for construction of latrines in order to achieve physical targets in many states. This, itself is a failure of the triggering as envisaged in the Community-Led Total Sanitation (CLTS) model, wherein the process of triggering and community achievement and participation; a way to 'Nudge'; is an essential component. In this process what happened is not 'nudging' but targeting to some physical achievements, and that too is found to be erroneous in line with the opinions of Cornea and Stewart (1993), Sen (1995) and Atkinson (1995).

The study carried out by the Public Affairs Foundation of India in 2017, three years after the onset of swachh bharat, provides us with a picture that full usage does not take place in many districts, as revealed from Table 2 below.

Table 2: Use of SBM-G toilets, and Open defecation, 2017

% partial usage of households with SBM-G toilets (see below for categories. HH with complete usage are not included) > - 2017

Public Affairs Foundation 2017

	Some members use all the time	Some members use during certain seasons	Nobody uses the toilet
Dhenkanal > - Odisha	12%	5%	16%
Sambalpur > - Odish	4%	6%	17%
Baleshwar > - Odisha	14%	3%	3%
Angul > - Odisha	12%	4%	7%
Ganjam > - Odisha	14%	2%	3%
Cuttack > - Odisha	7%	2%	2%
Dharmapuri > - Tamil Nadu	4%	1%	7%
Krishnagiri > - Tamil Nadu	4%	1%	3%
Perambalur > - Tamil Nadu	4%	1%	2%
Tiruchirapalli > - Tamil Nadu	2%	2%	2%
Tirunelveli > - Tamil Nadu	1%	0%	0%
Kanyakumari > - Tamil Nadu	0%	0%	0%

% of rural households with toilets has at least one member practicing open defecation - 2017#

Water aid 2017

Korba # - Chattisgarh	56%
Durg #- Chhattisgarh	15%
Kanker# - Chhattisgarh	1%

Further, the Volunteer verification carried out in 2017 also supports the same, which is shown in the following Table 3.

Table 3: Open Defecation Villages, 2017

% of open defecation villages despite ODF decalred status (rounded off) volunteer verification- 2017

Sambhal ~ - Uttar Pradesh	60%
Amroha ~ - Uttar Pradesh	60 %
Moradabad ~- Uttar Pradesh	50 %
Bijnor~- Uttar Pradesh	30 %

Sources: Volunteer verifications as informed in IDS interviews and field investigations; # Wateraid Verification Survey 2017; $Aiyar et al 2016 / Accountability Initiative; > Public Affairs Foundation, 2017; ^ Hajra and Dutta, 2016; * Coffey et al, 2014; \ Clasen et al 2014; / Jenkins et al 2014; & Patil et al 2014;) Barnard et al 2013. Not included in the table are anecdotal figures received between 20-25% partial usage in North Karnataka districts / 97% in Tamil Nadu and findings from the QCI Swachh Survekshan Gramin Report 2017,

A recent study carried out during 2018 and published in 2019, further emphasizes the fact that the process of 'nudge' as envisaged in the CLTS model does not take place at all. Table 4 reveals the picture of open defecation under weighted and unweighted measures and from different sources. Specifically, open defectation is quite high in staes of Bihar, Rajastan and Uttar Pradesh. This also reveal the fact that, it is the contractor led construction that have taken place in these States and one can read this with the low expenditures on IEC. Thus in all measures 'nudging' and CLTS have not taken place by and large in many states.

Table 4: Open Defecation in Rural North India 2019

Sample	Latrine owners	Weight	Focus States	Bihar	Madhya Pradesh	Rajasthan	Uttar Pradesh
All	Owners & not	no weight	42%	59%	24%	52%	38%
All	Owners & not	Census	44%	60%	25%	53%	39%
All	Owners & not	DHS weights	57%	77%	29%	62%	53%
Adults	Owners & not	no weight	41%	57%	23%	52%	38%
Aduls	Owners & not	Census	43%	57%	23%	54%	38%
Aduls	Owners & not	DHS weights	54%	73%	27%	61%	50%
All	Latrine owners	Census	23%	21%	16%	40%	21%
Adults	Latrine owners	C1ensus	23%	19%	15%	41%	21%
Adults F	Owners & not	Census	41%	57%	21%	53%	34%
Adults F	Latrine owners	Census	20%	18%	13%	39%	17%
Adults M	Owners & not	Census	44%	56%	25%	56%	41%
Adults M	Latrine owners	Census	25%	21%	17%	43%	24%

This is tested by the authors, Gupta et. al. (2019) using the Kitawaga decomposition, (Table 5) which reveals that only in 1% households the triggering effect of CLTS has taken place. With this, one could clearly point to the fact that the success of 'nudge' in the case of sanitation in India is a failure and only constructions have taken place. If at all people are using it; it is out of sheer necessity and hence the reason for high percentages of partial usage.

Table 5: Changes in Open Defecation, 2014-2018

	Focus States	Bihar	Uttar Pradesh	Madhya Pradesh	Rajasthan
Census weighted means					
Open defecation, 2018	44%	60%	39%	25%	53%
Open defecation, 2014	70%	75%	65%	68%	76%
Open defecation Change	26pp	15pp	28pp	43pp	26pp
Latrine Ownership, 2018	71%	50%	73%	90%	78%
Latrine Ownership, 2014	37%	29%	42%	43%	31%
Latine Ownership Change	33pp	21pp	31pp	47pp	47pp
Kitawaga Decomposition					
OD Due to Behaviour	1pp	1pp	3pp	7pp	-7pp
OD Due to ownership	25pp	15pp	23pp	37pp	30pp
% change due to Ownership	96%	97%	89%	84%	130%

Economic Survey claims that SBM adopts a multifaceted approach as spelt out below.

– Community participation - The participation of the community is very much limited; hence the claim is not true at least in some states as evidence shows.

– Flexibility in choice - Choice is very much dependant on levels of information and the agency role of institutions that are expected to facilitate and improve delivery to the common man. The state, being the implementing agency, limits the choice for ease of doing things to the actual user, thereby depriving the flexibility and it exists only in papers.

– Technology options – Actual diffusion of technology is very much dependant on the actual dissemination of knowledge among the end-users and also availability of materials and implementing tools and institutions. In order to achieve the target of ODF, many states have conveniently avoided the technology bundles and provided only the single pit.

– Capacity building – Though the guideline specify swachhgrahis and 'nigrani samithis', in effect they rarely practised nor focused on capacity building, as the focus was more on construction. They simply served as mediating organizations between the common end-users and the funding routes.

– Instill behaviour change – Behaviour change as formulated and practised in the CLTS requires triggering and knowledge sharing among the beneficiaries and the 'swachhgrahis' and 'nigrani samithis' are the supposed facilitators. It involves time to reach the last mile, and the actual construction takes place as expected in a co-operative manner. But this has not been practically implemented in the field for several reasons, as described in Murugan (2019).

– Broad-based engagement - Though resources from many other sources are made available by the GOI, like swachh bharat ghosh funds, only very few takers have utilized it, leaving it largely underspend.

– Use of technology - Geo tagging made as a prerequisite for making payments along with the photograph of the family can ensure only the presence of a latrine construction but not the use nor the quality of construction. Poor quality quite often makes the stakeholders not to use it.

– Diarrhoea cases reduced – Economic survey claims that diarrhoea cases have reduced. It is expected too, but the figure provided in the survey shows that it is not true. In some states, it has even increased.

– Low birth weight has declined – It is true that there is a relationship between low birth weight and sanitation and also stunting and sanitation in the rural areas. However, sanitation may not be the only contributor to it; rather it acts as a facilitator with other variables. (See Murugan, 2019).

Sewerage: Yet another important fact that needs to be focused on making sunder bharat is the treatment and disposal of sewerage in the cities and towns. Liquid waste management in many of the towns in the country is quite precarious as evident from the statistics available. Approximately 62,000 Million Litres of Sewerage is generated each day. Of this only 35 % is treated and safely disposed off, leaving a giant share of 65% untreated. These sewers are usually opened to neighbouring rivers and streams, making the entire water body unusable to anyone and also polluting the entire environment, leave alone the fact that many of these sewers carry hazardous waste too, that enters the water body.

Swasth Swachh Sunder: In the way forward, the Economic Survey envisages cleaning of water bodies, scientific waste management, dealing with plastic menace and controlling air pollution. If the government of India is really interested in achieving this, it requires huge capital investment and a devoted team to lead and supervise. There should also be a very stringent regulatory mechanism and a functioning resource recovery, operational system. As regards eco-friendly sanitation technologies, it is not lack of technologies that have driven to the present situation, it already exists, yet what is needed is more and more dissemination of it and careful and devoted management and diffusion among the common end-users. With all these under the existing scenario and pattern of operational mechanism, one can imagine how long it takes to be sunder unless the political will makes way for reaching the target.

References

Anthony B. Atkinson. 1995. ‘On Targeting Social Security: Theory and Western Experience with Family Benefits,’ in Dominique Van de Walle and Kimberly Nead (ed) *Public Spending and the Poor: Theory and Evidence*, The Johns Hopkins University Press, Baltimore.

Giovanni Andrea Cornia and Frances Stewart. 1993. ‘Two Errors of Targeting,’ *Journal of International Development,* September/October, John Wiley & Sons.

Government of India (2019) *The Economic Survey.*

Sen, Amartya. 1995. ‘The Political Economy of Targeting,’ in Dominique Van de Walle and Kimberly Nead (ed) *Public Spending and the Poor: Theory and Evidence,* The Johns Hopkins University Press Baltimore.

Murugan, G. 2019. ‘Swachh-Bharat 2019: Will Rural India be ODF/Swachh?,’ *Commentary on India’s Economy and Society Series- 8,* Centre for Development Studies, Trivandrum.

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DEMOGRAPHIC AWAKENING: RECOGNITION AND REFLECTIONS

Udaya Shankar Mishra

The economic survey makes an explicit acknowledgement of the reduction in population growth rate in recent times and its implication towards social infrastructure, employment and trends in attainment in human development. While such an acknowledgement is very much welcomed and offers a realistic understanding of the evolving circumstance, there still remain spaces of greater clarity to remove a whole lot of misunderstanding. This particular engagement is primarily motivated by the distinct state of demographic dividend on one hand and commitment towards compliance with the SDGs and its corresponding indicators on the other. India's demography as it is talked about in popular parlance has reference to a young population, and therefore this human resource holds a lot of promise for the Indian economy of the future when contrasted against the global conditions. Considering this stance, India's population growth trajectory with its regional variation demonstrates an optimistic trend towards the attainment of replacement level of fertility in two years from now which ensures a path towards population stabilization in the near future.

The first and foremost indicator for population stabilization has been in terms of the reduction in Total Fertility Rates (TFR) and its due convergence across regions. This expected reduction in TFR values towards a perfect replacement level promises two things; one a reduced count of child population alongside a greater share of the working-age population having its own implication for reduced dependency. Rising count and share of working-age population has been claimed consistently for a while now as the 'demographic dividend' advantage for India. And the duration of this dividend is also claimed to stay for two more decades for the nation as a whole but with differential stake across regions with a few having passed this stage and others yet to begin the same. This specific consequence of fertility transition is largely governed by its pace, and therefore, the duration of demographic dividend or its bearing on per-capita GDP remains different across nations as illustrated in the report. The most crucial aspect missing in the analysis of population trends and its composition is the tempo effect, i.e. the population transition has a lot to derive from past levels of fertility and mortality which skews the composition of the working-age population to be younger or older.

Examining the changing age composition of the population in broad age brackets informs more of complementarity in the sense that if the child population share reduces, it will reflect in working ages or share of old age. Such share complementarity informs less than desirable. The optimism of demographic dividend is loaded with more '**ifs**' in the sense that they can be reaped to the optimum with human capital formation. This does not appear in the horizon when one sees them in efforts and commitments made on health and education sector. On the contrary, satisfaction is revealed as regard improvement in quality as quantity is lowered.

The declining share of young population is highlighted owing to the realization of lower fertility. However, population transition read in such divides makes little sense because it has differential underpinnings like improvement in the quality of children or the future workforce. Such improved quality will result in postponement in entry into the workforce. The claim of a rising share of the working-age population is not sufficient to support the realization of demographic dividend. It is not merely the share but its composition and characteristics that can materialize the dividend in real sense. In fact, the entry and exit from the working-age bracket is all the more important as there may be greater exit due to the stringency of retirement age and late age at entry owing to a quality build-up of the future workforce. Essentially reading this requires a cumulative approach for comparison over time and across regions.

Viewing this working-age population and its regional distribution offers an immediate solution to the labour deficient regions and their replacement. However, when the same is evaluated in a global context, it requires a different evaluation in comparable terms of quality against other nations.

As regards the implication of this emerging population dynamic, the two distinct aspects of bearing discussed relate to education and health. With declining school-going age population, the quality of schooling is said to improve. But on the health front, the experience is the opposite with the rising need not matched with the provisioning of infrastructure. However, such observation has its own limitation in the sense that the private sector details are not duly incorporated into the computation. Another implication notified relates to the revision in retirement age owing to the improvement in healthy life expectancy beyond the age of sixty years. In fact, these warrants a discussion on defining old age itself with its multiple facets like expected years of life along with characteristic features of the capability of future elderly. Redefining old age in consideration of multiple dimensions of well being in old age not only makes an eligible comparison of ageing across circumstance but also helps in fixing the age at retirement. A position taken in favour of increasing age at retirement is perhaps to guarantee minimum working years across different cohorts.

Recognition of changing population dynamics and its implied dividend seems to have been defended with a noticeable increase in health sector allocation that has risen from 1.2 per cent of GDP to 1.5 per cent and similarly the education sector allocation has gained from that of 2.8 per cent of GDP to 3 per cent. As regard improvement in skill development, the survey suggests the following

1. Introduction of the skill vouchers as a financing instrument to enable youth to obtain training from accredited training institutes.

2. Involving industry in setting up of training institutes in PPP mode; in curriculum development; provision of equipment; training of trainers etc.

3. Personnel of Railways and para-military could be roped in for imparting training in difficult terrains.

4. Create a database of Instructors, skill mapping of rural youth by involving local bodies to assess the demand-supply gaps are some of the other initiatives proposed.

Further commitment towards health promotion rests with the national health mission and the Ayushman Bharat scheme of govt of India. Alongside, there is a promotion of national Ayush mission towards provisioning of cost-effective and equitable AYUSH health care throughout the country to address the issue of affordability and barriers to accessing health services.

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SOME REFLECTIONS ON THE IMPLICATIONS OF THE UNION BUDGET 2019-20 ON ECONOMY

Hrushikesh Mallick

The government budget contains significant policy statements besides projecting receipts and expenditures of the government, providing appropriate directions to the economy. Budget shapes the economy, and in turn, itself is shaped by the economy. The budget 2019-2020 seems to be more of a rhetoric as regards to the introduction of various reform measures and pronouncing to achieve a significant transformation of the whole economy towards imagining a New India. It claims transforming the lives of common people in both the rural and urban areas in a variety of ways, but without undertaking any intensive and effective policy measures on any of those aspects and thereby losing its major focus and direction. It does not adequately illuminate about the allocation made for various programmes under each of those individual heads, how those allocations are going to intervene the economic and social outcomes or achieve the desired goals set in the budget.

For instance, it claims to transform the lives of every rural family by evoking that the soul of India lives in its villages, but without any lead, how it can influence raising the productivity in agriculture. All the households are assured that they will have electricity and gas connections by 2022. There is complete silence as regards to the sustainability in the use of those connections and raising greater productivity on account of these provisioning. Such ad hoc populist provisioning overlooks sustainable means of raising the livelihood of rural poor households and thereby helping them to improve their standard of living.

An important positive consideration has gone into this budget, as the FM has identified some critical traditional sectors (viz. bamboo, khadi and honey) for which it has aimed to set up 100 clusters and common facility centres to make these sectors productive, profitable and capable of generating employment. This is a much-desired step to revive these agro-based sectors having the long-run potential for generating rural employment. However, this is going to merely absorb 50,000 artisans to join the value chain and few innovative entrepreneurs with some subsidiary employment opportunities in these agro rural industry sectors. The issue remains as to whether creating some small scale employment in the traditional agro-based industries, will be sufficient to realise the dream of a transforming rural economy of India?

As far as expenditure allocations are concerned, crop husbandry is the single largest head under economic services of revenue account, where major incremental resource allocation is made. The allocation on this is raised to as much as by 88%. However, the budget did not devote a line on the significance of this huge allocation and its consequences. Rural India needs massive amounts of funding for the provision of public goods in areas of health, mass transportation system (not just road), quality education etc. which have their own major bearing on quality of rural livelihood. These aspects are absent.

The improvement in urban living also greatly depends on the improvement in rural living standards and vice-versa. Unless India improves her rural infrastructures, it is not going to transform the quality of living in cities. There will be an influx of people in huge numbers in search of employment opportunities in cities for earning their daily livelihood without water, food and shelter, as major cities are experiencing at the moment including congestion, scarcity of clean water and air pollution. Since major cities in India have witnessed increased investment in infrastructure development projects under the smart city programme and received various other development funds through centrally sponsored schemes, the FM should have been more specific on account of such improvements in urban infrastructures. Such specificities could have been in terms of the kinds of cities that the government is targeting to improve now, and the infrastructures that are planned in keeping with their varying circumstances and developmental challenges. Given the emerging complexity of urban living, there needs to clarity on priorities as regards to the provision of water and air quality vis-a-vis setting up few new rail line connections and establishing some dedicated freight rail corridors which are expected to mitigate the congestion of railway networks benefiting the common people at large as is hugely pronounced or highlighted in the budget.

The government is also inconsistent in its fiscal policy stance. While there is a proposal for massive investment in infrastructure for faster growth, squeezing up allocations to capital expenditure sounds unreasonable. This budget projects the share of revenue expenditure in total expenditure to almost 88% and the rest to be allocated for the capital expenditure. The government tries to pass the benefit of low tax burden to the lower and middle income classes of population, against the rich, which may be a fair to achieve an egalitarian society but alternatively intends to tax all of them on a daily basis on their transportations as it wishes to grab revenues on a favourable condition of declining international price of oil without committing its withdrawal in a reverse instance.

The budget proposes to hike the surcharges for the super-rich population on top of the applicable income tax rates. It offers the argument that the rich have a duty towards the development of the nation. However, this would definitely discourage new investors and exacerbate migration of high net worth and highly skilled individuals to other low tax destinations in a liberalised era when both financial and human capital is highly mobile — imposing surcharges also counter to the idea of promoting domestic investments and promoting skilful entrepreneurship. The costs of such a policy decision may surpass the tax benefits to the exchequer. The new tax, including enhancement of short term capital and long term capital gain tax, would hit the investment trusts through which many foreign investors route their investible funds to India’s stocks. Frequent changes in export and import duties along with an unstable GST regime also create a climate of uncertainties in business and investment, thereby affecting output and employment generations in the economy.

Budget projects GDP growth rate at 12%. In case growth rate falters on account of pressures on foreign investment or rich taxpayers or any other exogenous and endogenous distortions, fiscal deficit to GDP is very much likely to exceed 3.3% as projected. The stock of external debt of the central government is piling up over time; however, overpast couple of years government instead of adding external borrowings, is repaying the external loans created in past as reflected in reduced external borrowings. Notwithstanding this, the FM suggests for issuance of sovereign bonds denominated in foreign currencies. Whether the objective is to take advantage of the low-interest regime in foreign countries or facilitating easy access of domestic investors, to India's domestic credit market by complementing with low domestic savings is not clear. This policy step constitutes a reversal of India's earlier policy of reducing foreign currency risk exposures to our sovereign bonds (fiscal policy). If the intention is to increase the availability of domestic funds for domestic investment, the government could have encouraged foreign investor's participation in India'sdomestic rupee bond markets by raising the existing ceilings on foreign portfolio investment in government rupee bonds. Thereby, rupee perhaps would have gained some strength in the global currency market, the way China does for gaining internationalisation of its local currency. This would have helped India to index its own local currency bonds in the global index of bonds in international currencies. The effect is same – greater foreign inflows – but the government security would be issued in domestic currencies. By not adhering to the fiscal glide path of the 2017-18 union budget, the government of the day is visibly noncommittal to its commitments made in the past, implying loss of credibility and vulnerability of international ratings. The budget ultimately seems to be a document of noble intentions with self-defeating policy prescriptions.

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TECHNOLOGY AND INNOVATION ISSUES

Sunil Mani

It was in the Economic Survey of 2017-18 that technology and issues got mainstreamed for the first time in so many years. A full chapter (viz., Chapter 7 of Volume 1) of that survey was devoted to S&T issues. However, the Economic Survey of 2018-19 does not have any discussion of S&T issues excepting that Chapter 8 of the survey focused on leveraging S&T for Direct Benefit Transfer (DBT) for various governmental schemes. But the union budget has a number of schemes and tax concessions for diffusing various types of new technologies such as diffusing a cashless economy to Electric Vehicles. In this way, the economic survey and the budget have given fair importance to four aspects of new technologies: first, improving the ecosystem for new startups to emerge, second the faster diffusion of new technologies, third, the domestic manufacturing of a number of high technology products and fourth the use of new technologies for Direct Benefit Transfer.

The previous budgets focused a bit more on incentivizing the generation of innovations, and the main instrument that was employed was an R&D tax incentive. Beginning with the budget of 2016-17, this was made stable in the following manner. In 2016-17, R&D tax incentive was reduced in a stepwise manner as follows: from 2017-18 through 2019-20, it was reduced from 200 per cent to 150 per cent, and from 2020-21 onwards this is going to be further reduced to 100 per cent, and thereafter it will remain stable at that rate. However, the amount of tax that is lost due to R&D tax incentives has been rising from Rs 2839 crores to almost Rs 8000 crores in 2018-19. But this does not seem to have enabled India to increase its GERD to GDP ratio, which even now stands at around 0.7 per cent of GDP although the number of patents granted to Indian inventors at the USPTO has increased to 4200 patents in 2018. But the majority of these patents are filed by affiliates of MNCs operating from the country.

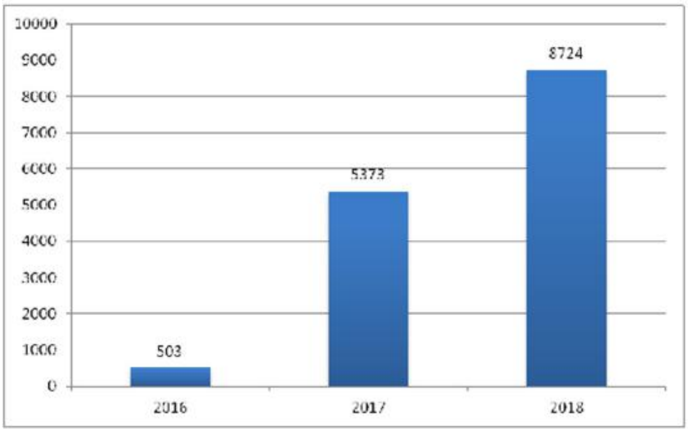
Against this background, we critically examine the identified three issues:

Resolution of the Angel Tax issue for Startups: This should be seen as part of the government's attempt at promoting innovations in the economy. Innovations could be promoted in two ways. First, the government could encourage existing enterprises to commit more resources to R&D and thereby increase innovations through increased investments in R&D. The main instrument that was used for this purpose was the R&D tax incentive. Second, the government has improved the ecosystem for startups to emerge by providing them with a range of incentives, especially since 2016. This incentive system ranged from "Simplification and handholding", "Funding support and incentives" and "Industry-academia partnership and incubation. One of the main barriers to the creation of startups was the availability of risk capita, and one source of it is from angel investors. But there was a long pending income tax issue known as the angel tax. This is a term used to refer to the income tax payable on capital raised by unlisted companies via the issue of shares where the share price is seen in excess of the fair market value of the shares sold. The excess realization is treated as income and taxed accordingly. The tax was introduced in the 2012 Union Budget by the then finances minister Pranab Mukherjee to arrest laundering of funds. It has come to be called angel tax since it largely impacts angel investments in startups. At least 80 startups have received notices to pay angel tax since 2018-19. Many founders have said they have been asked to pay up as much as 30 per cent of their funding as income tax. Angels have also received multiple notices asking them to furnish details on their source of income, their bank account statements and other financial data. Procuring valuations from merchant bankers is also a more expensive proposition for startups than going through chartered accountants.

In order to resolve this issue, the Budget has stipulated that the "start-ups and their investors who file requisite declarations and provide information in their returns will not be subjected to any kind of scrutiny in respect of valuations of share premiums. The issue of establishing identity of the investor and source of his funds will be resolved by putting in place a mechanism of e-verification[5]". Further, the budget has also extended tax breaks to investments in startups.

In short, the proposals in the budget is a logical sequencing of the government's efforts towards improving the ecosystem for startups and the number of startups in the country has been increasing steadily since 2016-17 (see Figure 1)

Figure 1: Growth of Startups in India, 2016-18



Source: Startup India, Department for Promotion of Industry and Internal Trade

5 Budget Speech of Nirmala Seetharaman, Union Budget 2019-20, July 5, 2019, https://www.indiabudget.gov.in/budgetspeech.php

Faster Diffusion of Electric Vehicles and a Cashless Economy

Over the last few years, the government has been striving to diffuse a number of new technologies, which range from AI and Robotics to Electric Vehicles (EVs) and to a cashless economy. Of these, the ones that the government has been doggedly pursuing are the ones on EVs and a more cashless economy. We start with the case of EV.

i. Electric Vehicles

The government have been considering a policy proposal to ban all ICE-driven two-wheelers under 150cc by 2025, and three-wheelers by 2023. Nearly 80 per cent of all vehicles sold in India are two and three-wheelers. However, the EV industry in India is at a very nascent stage. According to the Society of Manufacturers of Electric Vehicles (SMEV), 2.18 EVs were sold, which worked out to just 1 per cent of total vehicle sales. There are, at present, more than 4 lakh electric two-wheelers and a few thousand electric cars that are being used in India. The industry volumes have been fluctuating, mostly depending on the incentives offered by the government. More than 95 percent of EVs on Indian roads are low-speed electric scooters (less than 25km/hr) that do not require registration and licenses. The country has been providing a fair amount of fiscal incentives for faster diffusion of EVs through essentially a scheme called Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME). In March 2019, the government announced phase 2 of the FAME scheme with a total outlay of Rs 10000 crores for three years till 2022. The government will offer incentives for electric buses, three-wheelers and four-wheelers to be used for commercial purposes. Plug-in hybrid vehicles and those with a sizeable lithium-ion battery and electric motor will also be included in the scheme, and fiscal support offered depending on the size of the battery[6]. The target is to incentivize the purchase of 7090 electric buses by State Transport Undertakings, 35000 four-wheelers, 50000 three-wheelers and 20000 hybrids. Further, the government had already moved the GST council to reduce the GST rate on electric vehicles from 12 per cent to 5 per cent. So the government's policy, so far, has been subsidising the purchase of EVs by potential consumers.

The present budget has continued this practice and has further extended this by providing income tax relief to potential purchasers of EVs. This is by way of providing additional income tax deduction of Rs 1.5 lakh on the interest paid on loans taken to purchase electric vehicles, and this works out to a benefit of around 2.5 lakh over the loan period to the taxpayers who take loans to purchase EVs.

However, apart from price subsidies, there are two main technological barriers to a faster adoption of EVs. They are (i) the availability of charging stations at reasonable distances; and (ii) the availability of Lithium-ion batteries. The budget does not have anything for increasing the number of charging stations, but it does address itself to the domestic manufacturing of lithium storage through the provision

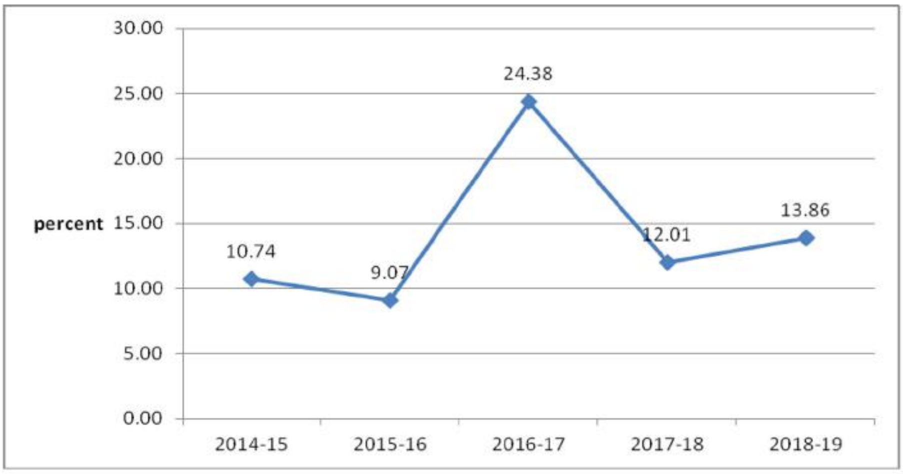
6 The centre plans to roll out an incentive of Rs 10,000 per kilowatt (kW) for two-, three- and four-wheelers, based on the size of their batteries.

of investment-linked income tax exemptions under section 35 AD of the Income Tax Act, and other indirect tax benefits. In the past, such incentive induced investment promotion has not succeeded in effecting the required investments.

ii. Cashless Economy

On November 8, 2016, Government of India demonetized two of its largest circulating bank notes, which accounted for about 86 per cent of the notes in circulation at that time. The sudden and abrupt decision has attracted considerable attention from commentators, much of it, journalistic. However, there has also been a very quick and detailed analysis of this event which is now referred to as the most significant economic event of recent times. The objectives and the design and implementation of the scheme have drawn much flak from all quarters, although there has been very little opposition to this measure from anywhere in the country. On the contrary, a survey done among slum dwellers in Mumbai showed the counter-intuitive result that despite experiencing a fall in their monthly incomes by as much as 10 per cent, majority of those suffering the fall welcomed the demonetization policy. Although it was not the initial objective, over time government has shifted the aim to ushering in a cashless economy, which *inter alia* may promote better tax compliance and hence more tax collection. In order to promote the growth of a cashless economy, a number of incentives have been put in place. Nevertheless, the growth of a cashless economy, in terms of value of such transactions, has been much less than what was observed during the period of demonetization (Figure 2). Currency in circulation as a per cent of GDP has in 2018-19 reached 11 per cent- just a per cent less than before demonetization implying that people have been going back to cash for transactions.

Figure 2: Growth of a Cashless Economy, 2014-15-2018-19



Source: Computed from payment systems indicators, Reserve Bank of India

So in order to encourage cashless transactions, the budget has proposed two policy changes with respect to transactions:

- To discourage the practice of making payments in cash, the government has proposed to levy tax deducted at source (TDS) of 2% on cash withdrawal exceeding Rs 1 crore in a year from a bank or post office account;
- Business establishments with an annual turnover of more than Rs 50 crore will need to offer low-cost digital modes of payment (such as BHIM UPI, UPI, Aadhaar Pay, debit cards, NEFT and RTGS to customers). Customers and merchants will not be charged the Merchant Discount Rate (MDR).

It will be useful to have more positive encouragement to cashless transactions rather than negative ones.

Domestic Manufacturing of High Technology Products

In order to boost economic growth and *Make in India* programme, the government will launch a scheme to invite global companies through transparent, competitive bidding to set up mega manufacturing plants in "sunrise and advanced technology" areas such as:

- Semiconductor Fabrication (FAB),
- Solar Photo Voltaic cells,
- Lithium storage batteries
- Solar electric charging infrastructure,
- Computer Servers,
- Laptops, etc

The mode of support envisaged in the budget is to provide them investment-linked income tax exemptions under section 35 AD of the Income Tax Act, and other indirect tax benefits.

Domestic manufacture of most of these technology products involves lumpy investments, and the country does not seem to be having the requisite technology itself. Past attempts at precipitating domestic investments in Semiconductor Fabrication especially has not fructified into any actual investments. Also, incentive induced stimulation of investments has a large welfare consequence as it involves taxing the citizens of a state or country and passing on the benefits to a private entrepreneur who ultimately may or may not set up a manufacturing facility in the chosen area of technology. At the very same time, lumpiness of investments requires that some sort of subsidy is absolutely required as well. So it all depends upon how the government goes about spelling out the finer details of this policy statement.

Leveraging Technology for Direct Benefit Transfer (DBT)

This is the only technology issue that has been explicitly discussed in the current Economic Survey[7]. DBT has now been applied to, according to the government, about 439 schemes across 55

7 See Chapter 10 of Volume 1 of the Survey, 'Effective Use of Technology for Welfare Schemes – Case of MGNREGS' https://www.indiabudget.gov.in/economicsurvey/doc/vol1chapter/echap10_Vol1.pdf (accessed on August 5, 2019)

Ministries. The estimated savings is a whopping Rs 141,677 crores. For instance, in MGNREGS, the total fund transfer and the total number of bank accounts of beneficiaries seeded with *Aadhar* has shown an increase in 2018-19. After DBT was introduced in 2016-17, the share of payments done within 15 days has increased from 43 per cent in 2016-17 to about 90.4 percent in 2018-19. However, Swamy and Narayanan (2019) have expressed certain doubts about the efficacy of technology in making the MGNREGS more efficient. The authors have shown that while the time taken by blocks to generate electronic Funds Transfer Orders (FTOs) and have it sent digitally to the central government has been reduced, those taken by the central government to process these FTOs and transfer wages to workers have not been reduced. According to them, only about 30 per cent of the payments have been credited on time. So it looks like the positive effects of technology are somewhat exaggerated.

Reference:

Swamy, Rakshita and Rajendran Narayanan. 2019. 'A Misleading Presentation of A Labour Programme', *The Hindu*, July 23.

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