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INDIAN PUBLIC POLICY REVIEW

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India's Human Capital: The Regulatory Context for Leveraging Federalism

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Abstract

Investing in human capital through interventions in nutrition, health, and education is critical for achieving sustainable inclusive growth. However, despite many public interventions, India's human capital indicators remain low, and have likely worsened from the disruptions caused by the COVID-19 pandemic. There are also significant inter-State disparities. India's human capital interventions have been marked by growing centralisation, not just by the Centre vis-à-vis the States, but also by the States vis-à-vis local governments, that form the third tier in India's federal structure. This growing centralisation may have misaligned incentives with respect to accountability and effective delivery of public services. Drawing from international best practices and an analysis of the constitutional scheme, a more decentralised and targeted approach within the contours of India's federal structure may be the best way to build civil society engagement, address failures in accountability, and ultimately, improve India's human capital outcomes.

Keywords: Regulatory issues, State and Local Government, Public Health, Education

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I Introduction

Image capital has been defined as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic wellbeing (United Nations Economic Commission for Europe, 2017). It 'consists of the knowledge, skills, and health that people invest in and accumulate throughout their lives, enabling them to realise their potential as productive members of society' (World Bank, n.d.). According to the World Bank's 2020 Human Capital Index, a child born in India will only be 49 percent as productive when she grows up as she could have been if she had enjoyed complete education and full health as compared to the benchmarks developed by the index (World Bank, 2020). India ranked at 116 out of 174 countries on this index. Investing in human capital through well-targeted interventions in areas such as nutrition, health, education, and employment, is critical for addressing poverty, especially in a country like India which has one of the youngest populations in an ageing world.

This paper looks at some of the relevant national and state-level indicators and statistics related to India's human capital outcomes. Subsequently, it gives an overview of India's human capital interventions, including specific schemes and spending patterns. It then covers relevant international regulatory experiences, followed by an analysis of India's constitutional scheme and its division of powers and responsibilities in areas related to human capital. Subsequently, it examines the de facto centralisation that has been apparent in India's human capital interventions. This centralising trend is also explored in the context of the third tier in India's federal structure. Finally, it proposes a way forward for India to improve its human capital outcomes, with specific recommendations for each tier of government.

II The status of India's human capital

India as a whole

It is well established that India performs poorly compared to other countries on multiple human capital indicators.

- In a cross-country comparison of India's performance on key health outcomes such as life expectancy, maternal mortality, and child stunting, India's statistics are found to be behind those of other Asian and BRICS countries (Table 1).
- The 2020 Global Hunger Index, another cross-country comparison, ranked India at 94 out of 107 countries (von Grebmer et al, 2020). This placed India behind its neighbours such as Sri Lanka, Nepal, Bangladesh, and Pakistan.
- The 2020 Global Innovation Index assessed India's performance in education as part of the Innovation Input Sub-Index's Human Capital & Research Pillar (Cornell University, INSEAD, & WIPO, 2020). India ranked 107 out of 131 countries in primary and secondary education, which is below expectation for its level of development (Figure 1).

Country	Populatio n (millions)	Fertility (children per woman)	Life Expectancy (years)	Under-five Mortality (per 1,000 live births)	Maternal Mortality (per 100,000 births)	Child Stuntin g (%)
Bangladesh	167	2.1	72	30	173	36
Brazil	210	1.7	75	14	60	7
China	1,400	1.7	76	9	29	8
India	1,352	2.2	69	37	145	38
Indonesia	267	2.3	71	25	177	36
Malaysia	33	2.0	76	8	29	21
Russia	147	1.8	72	7	17	5
S. Africa	59	2.4	64	34	119	27
Sri Lanka	22	2.2	77	7	36	17
Thailand	68	1.5	77	9	37	11
Vietnam	95	2.0	75	21	43	25

Table 1: Key Health Outcomes: India and Other Countries, 2011-19

Source: FC-XV (2020)

Figure 1: India's performance in primary and secondary education compared to its level of development and other countries¹



Sources: Cornell University et al (2020); Economic Survey 2020-21, Ministry of Finance (2021b)

India's national performance on other health indicators such as malnutrition, anaemia, and maternal mortality ratio is just as worrying and, in some cases, worsening.

On malnutrition:

- A Lancet study of malnutrition indicators from 1990 to 2017 found that malnutrition was the predominant risk factor for death in children younger than five years of age in every Indian State (while also noting substantial variations in malnutrition across States; Swaminathan et al, 2019). There is a direct link between malnutrition and diseases, and it is especially lethal in combination with infectious diseases (Press Trust of India, 2021).
- The first-phase data of the National Family Health Survey (NFHS) 5 for the year 2019-20 shows that malnutrition indicators have stagnated or worsened in most States and Union Territories as compared to NFHS-4 (2015-16) data (Figure 2).



Figure 2: State-wise Changes in Proportion of Stunted Children

Source: MoHFW (2020)

Similarly, on anaemia:

• The NFHS-5 indicates that anaemia among pregnant women has increased in several States compared to NFHS-4 data (2015-16) (Press Information Bureau [PIB], 2020).

India's maternal mortality ratio has improved, but there is still a long way to go:

- In recent years, India has made progress in improving its maternal mortality ratio, which has reduced from 556 per 100,000 live births in 1990 to 130 per 100,000 in 2016 (Central Bureau of Health Intelligence, 2019).
- While this is encouraging, it is almost double the Sustainable Development Goal target of 70 per 100,000, to be achieved by 2030.

As for education, both the National Achievement Survey (NAS) 2017 and the Annual Status of Education Report (ASER) 2018 show poor learning outcomes, especially in rural areas.

- The NAS 2017 revealed that 33 percent of students in the third grade could not read small texts with comprehension, and this number increased to 46 percent by the eighth grade. 44 percent of students in the third grade could not use basic math to solve daily life problems, and this increased to 62 percent in the eighth grade (National Council of Educational Research & Training [NCERT] & Ministry of Human Resource Development [MoHRD], 2019).
- The ASER 2018 showed that 73 percent of students in the third grade in rural India could not follow second grade textbooks and 72 percent of such students could not do subtraction (ASER Centre, 2019). The inability to read is a critical stumbling block and is one of the primary reasons for children being "left behind", i.e., not being at the expected level of their grade despite being enrolled in school (Banerji, 2021, pp. 181-2).
- India's Gross Enrolment Ratio (GER), i.e., the student enrolment as a proportion of the corresponding eligible age group in a given year, was 96.1 percent in elementary schools (first to eight grade) in 2018-19, but this figure reduced to 76.9 percent and 50.1 percent in secondary (ninth and tenth grade) and senior secondary school (eleventh and twelfth grade), respectively, for the same year (Ministry of Finance [MoF], 2021b).

To a large extent, these failures appear linked to absenteeism among public providers of health and education, the inability to link payment to performance, and the resultant capture and leakage of public funds (including in other government subsidies) by special interest groups. These are symptoms of a lack of accountability and are symbolic of the effects of command-and-control systems that have been observed in countries with a centralised governance structure (Muralidharan, 2019; Devarajan, Khemani, & Walton, 2014).

Inter-State disparities

Beyond cross-country comparisons and national-level indicators, we now look at comparisons of human capital indicators across individual Indian States. Generally, there are significant inter-State disparities in this regard, which mirror the effects of command-and-control systems of governance on political incentives at the State level, similar to the national level. States that have empowered their third-tier local governments to a greater degree appear to have performed better in terms of human capital outcomes. This is not surprising, given that decentralised systems tend to have better accountability, civic engagement, and service delivery.

Inter-State disparities in certain health indicators are illustrated below.

Life expectancy:

• Life expectancy at birth ranges from 65.2 years in the State of Chhattisgarh to 75.3 years in the State of Kerala (Office of the Registrar General & Census Commissioner, 2020c).

Fertility rates:

Sikkim, Goa, and Kerala have total fertility rates of 1.1, 1.3 and 1.8, respectively, which are similar to those in advanced countries, but in Meghalaya and Bihar the rates are much higher at 2.9 and 3.0, respectively (Ministry of Health & Family Welfare [MoHFW], 2020).

Infant and children under-five mortality rates:

 In 2018, the infant mortality rate ranged from four infant deaths per 1,000 live births in Nagaland, to 48 deaths per 1,000 live births in Madhya Pradesh (Registrar General & Census Commissioner, 2020a). On mortality rates for children under five, States such as Kerala, Tamil Nadu, Maharashtra, and Punjab have achieved the Sustainable Development Goal target (Fifteenth Finance Commission [FC-XV], 2020). However, other States need significant improvements to meet this target.

A similar picture emerges in the case of education indicators as well.

Literacy rates:

 As per National Sample Survey data for 2017-18, while the national literacy rate is 77.7 percent, this figure varies considerably across States, from 66.4 percent in Andhra Pradesh to 96.2 percent in Kerala (National Statistical Office, 2020).

Enrolment ratios:

- According to first phase NFHS-5 data for 2019-20, Sikkim had the highest enrolment rate in pre-primary school for children aged five years at 41.2 percent. Among the States assessed, Assam had the lowest percentage, at a significantly lower 4.4 percent (MoHFW, 2020).
- While the GER in 2018-19 at the elementary level was above 90 percent in 29 States and Union Territories, it was only 77.9 percent in Jammu & Kashmir. At the secondary level, while nearly two-thirds of States and Union Territories had a GER above 90 percent, it was a considerably lower 57 percent in Bihar (MoF, 2021b).

Quality of education:

- The NAS 2017 shows that the performance on language tests among third-grade students ranges from 79 percent in Andhra Pradesh to 58 percent in Uttar Pradesh, and on mathematics test it ranges from 75 percent in Karnataka to 56 percent in Punjab (among large States).
- Similarly at the fifth-grade level, Karnataka has the highest language and mathematics scores at 71 and 67 percent respectively, with Punjab and Uttar Pradesh having the lowest language scores at 50 percent each, and Punjab having the lowest mathematics score at 43 percent (NCERT & MoHRD, 2019).

III Overview of India's human capital interventions

The status of India's human capital is a cause for concern, and the statistics mentioned above do not take into account the effects of the COVID-19 pandemic. Yet, human capital has not been ignored by Indian policymakers. Over the last several decades, there has been a plethora of government policies and schemes that have sought to address human capital issues.

For example, on health and nutrition:

 In 2017, the Union Ministry of Health & Family Welfare brought out a new National Health Policy which aimed to inform, clarify, strengthen, and prioritise the role of the Government in shaping health systems in all its dimensions, including investments in health, organisation of healthcare services, prevention of diseases, access to technologies, developing human resources and better financial protection strategies, and strengthening regulation (MoHFW, 2017).

- In the same year, the NITI Aayog published its influential National Nutrition Strategy (NITI Aayog, 2017). Based on this strategy, the Poshan Abhiyan (a Centrally Sponsored Scheme or CSS) was launched. This scheme, along with six other schemes, comprised the Umbrella Integrated Child Development Scheme (ICDS). In her speech introducing the budget for the year 2021-22, the Union Finance Minister announced that four of these schemes would be merged to form the new Mission Poshan 2.0 (Pant & Ambast, 2021).
- The National Health Mission which comprises the National Rural Health Mission and the National Urban Health Mission is a major health CSS.
- In 2018, the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PM-JAY) was launched for providing health insurance.

Notwithstanding these interventions, the reality is that healthcare in India remains predominantly private.

On education:

- The National Education Policy of 2020 highlights the importance of universal provisioning of quality early childhood development, care, and education, and the need to achieve this as soon as possible and no later than 2030 (MoHRD, 2020).
- The Samagra Shiksha Abhiyan, which comprises the old Sarva Shiksha Abhiyan and two other schemes, has been the Centre's flagship education CSS since 2018.

Quality aside, it is worth noting that India spends just 4 percent of Gross Domestic Product (GDP) as public expenditure on human capital, specifically 1 percent on health and 3 percent on education.² This compares poorly with India's peers and is especially concerning given the gaps in India's public financial management system, which has a significant effect on expenditure efficiency and outcomes.

Figure 3 illustrates this in the context of health expenditure, revealing that government expenditure on healthcare is significantly higher in countries such as Sri Lanka, Thailand, Brazil, and South Africa. Moreover, the biggest share of health expenditure in India is borne by household out-of-pocket payments to the private sector, which is also subject to significant inter-State variations. Compared to this, in developed countries such as Japan, the United States of America, Canada, and Western European and Scandinavian countries, the share of household out-of-pocket payments is remarkably low. The bulk of health expenditure in these countries is either from government schemes or compulsory contributory health insurance schemes.

The Economic Survey 2020-21 observed that there is a negative correlation between the level of government expenditure and out-of-pocket expenditure across countries and between Indian States. Particularly, at lower levels of government expenditure (less than 3 percent of GDP), even a marginal increase in government expenditure, provided it is well-managed, can lead to a substantial decrease in out-of-pocket expenditure. In India's case, it stated that if government health expenditure were to increase from the current 1 percent to about 2.5 to 3 percent of GDP, as envisaged in the aforesaid National Health Policy 2017, then the share of out-of-pocket spending could reduce from 65 percent

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Figure 3: Current Health Expenditure by Financing Schemes: Cross-Country Comparison

Table 2: India's Current Health Spending v. National Health Policy 2017 targets

National Health Policy (2017) - Targets	Current Position (2018-19)
Increase public health expenditure to 2.5% of GDP,	0.96% of GDP*
in a progressive manner by 2025 [#]	
Increase State sector health spending to more than	5.18% of total States' expenditure *
8% of their budget by 2020#	
Primary health expenditure to be two-thirds of the	53% (approx.) ^
total health expenditure [#]	

Sources: # MoHFW (2017); * State Finance Accounts, 2018-19; ^ Ministry of Health & Family Welfare, Government of India

In her 2021-22 budget speech, the Union Finance Minister mentioned an increase of 137 percent in the outlay for health and wellbeing compared to the previous year's budget (Government of India, 2021). However, this figure includes the outlays for indirect health determinants such as water, sanitation, and nutrition in the health budget.³ For primary healthcare and the public health system, the increase is closer to 10 percent; and the outlay for nutrition is, in fact, significantly lower compared to the previous budget (Datta & Chaudhuri, 2021; Pant & Ambast, 2021).⁴

Figure 4 and Table 3 include details regarding State health expenditure as well. The overall health expenditure by the Centre and the States as a percentage of GDP has barely increased in recent years (remaining below 1 percent of GDP). The States are responsible for about 70 percent of the total health expenditure, with the Centre contributing only 30 percent. However, State expenditure on

Source: RBI (2020)

health as a percentage of Gross State Domestic Product (GSDP) remains very low, at an average of just 0.86 percent.

There are also large inter-State variations in the per capita spending on health:

- The per capita health spending of Bihar, Uttar Pradesh, and Jharkhand is about half of that of Kerala and Tamil Nadu (FC-XV, 2020).
- A study found that Indian States could be divided into two distinct groups, where States in the first group (including Uttar Pradesh, Bihar, Gujarat, Orissa, and others) were found to have higher quality of healthcare coming at higher costs. States in the second group (including Kerala, Tamil Nadu, Chhattisgarh, Uttarakhand, and others) had achieved high levels of quality at lower per-patient costs compared to similar-performing States in the first group. Thus, inter-State disparities in healthcare exist in terms of quality as well as costs, with certain States not only having higher public expenditure on health, but also more efficient expenditure (Das, Daniels, Ashok, Shim, & Muralidharan, 2020).

In case of education as well, Figure 5 illustrates that India's public expenditure is much lower than advanced countries.



Figure 4: Healthcare Expenditure of Centre and States (as percentage of GDP)

Sources: Union Budgets; State Finance Accounts; Ministry of Statistics & Programme Implementation, Government of India

State	Total Health Expenditure as % of Total Expenditure	Health Expenditure as % of GSDP	Per Capita Health Expenditure (Rs)
Andhra Pradesh	4.92	0.86	1441
Arunachal Pradesh	6.15	4.54	6937
Assam	6.8	1.43	1360
Bihar	4.96	1.31	616
Chhattisgarh	5.11	1.21	1303
Goa	7.2	1.24	6207
Gujarat	6.14	0.66	1478
Haryana	4.3	0.55	1422
Himachal Pradesh	6.49	1.46	3074
Jammu & Kashmir	6.85	2.87	3145
Jharkhand	5.41	1.1	913
Karnataka	4.66	0.62	1429
Kerala	5.91	0.91	2048
Madhya Pradesh	4.5	0.96	947
Maharashtra	4.28	0.49	1069
Manipur	5.32	2.32	1813
Meghalaya	9.06	3.1	3055
Mizoram	6.18	2.62	4907
Nagaland	4.98	2.28	2968
Odisha	5.18	1.15	1308
Punjab	4.1	0.62	1059
Rajasthan	6.33	1.26	1552
Sikkim	6.2	1.52	6165
Tamil Nadu	5.48	0.75	1653
Telangana	4.19	0.62	1405
Tripura	6.95	1.84	2340
Uttar Pradesh	4.89	1.09	807
Uttarakhand	5.44	0.85	1878
West Bengal	5.35	0.82	983
All States	5.18	0.86	1218
General States	5.04	0.8	1148
North-East and Himalayan States	6.48	1.72	2256

Table 3: Health Expenditure by Indian States (2018-19)

Source: State Finance Accounts, 2018-19; Ministry of Statistics & Programme Implementation, Government of India

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Source: FC-XV (2020)

As opposed to the slight increase in health expenditure as a percentage of GDP, education expenditure by the Centre and the States had reduced from 2.78 percent in 2015-16 to 2.64 percent in 2018-19 (Figure 6).⁵ The National Education Policy 2020 aims to increase this to 6 percent of GDP over the next decade, but that target remains far away. An increase in education expenditure must be accompanied with improved expenditure efficiency and public financial management processes, as highlighted by the Fifteenth Finance Commission (2020).

In the Union Budget for 2021-22, the allocation for the Ministry of Education (MoE; formerly, the Ministry of Human Resource Development) was reduced by 6 percent compared to the allocation in the previous year's budget, with the School Education & Literacy Department's allocation being reduced by almost Rs 5,000 crore (Chopra, 2021). The amount allocated to the MoE forms about 2.67 percent of the Central Government's estimated expenditure for 2021-22.

While about 84 percent of total expenditure in the education sector is done by the states, there are significant differences among states on the extent of their expenditure on education (FC-XV, 2020). Moreover, state education spending has not increased significantly over the years (Reserve Bank of India [RBI], 2020):

- In the budget estimates for 2020-21, education expenditure as a ratio to aggregate expenditure ranged from 23.2 percent in the Union Territory of Delhi to a mere 6.5 percent in Telangana.
- In their 2020-21 budgets, all States and Union Territories had estimated that they would spend, on average, 14.7 percent of their aggregate expenditure on education, down from 16.3 percent in 2011-12.

 The education spending as a percentage of GSDP among States was, on average, 2.8 percent in the State budget estimates for 2020-21, which was a slight increase compared to 2.5 percent in 2011-12.



Figure 6: Expenditure on Education by Centre and States in India (as percentage of GDP)

Sources: Union Budget; State Finance Accounts; Ministry of Statistics & Programme Implementation, Government of India

IV International Regulatory Experience

The need for a bottom-up regulatory approach is now being recognised internationally. This approach entails accounting for territorial diversity, different levels of government working together, and enabling local institutions that are more accountable to be at the forefront of food security and nutrition (OECD, FAO, & UNCDF, 2016). Across countries, there has been a gradual process of fiscal decentralisation, with a trend shift in the distribution of expenditures and revenue towards subnational governments accompanied by rising decentralisation of health and education spending. For example, in most OECD (Organisation for Economic Co-operation and Development) countries, health and education have been effectively decentralised to subnational governments (James, 2019), and that is also the case to some extent in unitary states (such as the Scandinavian countries, Japan, and the United Kingdom). Decentralised responsibilities do not necessarily mean decentralised financing. There can be bloc financing with general conditions that allow significant subnational discretion. However, it has also been observed that large-scale crises such as financial shocks and global pandemics constitute critical junctures during which transformative changes in inter-governmental

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relations can follow. This often results in greater centralisation in fiscal relations, and there is a risk of this repeating because of the COVID-19 pandemic.

By taking government 'closer to the people', a decentralised system facilitates better information about citizens' needs and wants, greater participation of citizens in selecting, planning, and executing public projects that respond to those needs and wants, and greater accountability of public officials to citizens for their decisions and use of resources (Faguet, 2014; Faguet & Pöschl, 2015). Not only do local governments in a decentralised system have better access to information regarding citizen needs, they also have greater incentives to respond to those needs and ensure that public service providers fulfil them. Decentralisation thus paves the way for human capital interventions that are more customised to local needs and preferences, which tend to vary across different regions. These advantages of a decentralised system point towards a democratic deepening that produces betterquality public goods and more effective government (Faguet, 2014; Faguet & Pöschl, 2015).

Compared to a decentralised system that is complex and based on the coordination and cooperation of multiple levels of government, a centralised command structure may be simpler to manage, but more susceptible to government failures at different points in the chain of relationships involved in the formulation and implementation of public policy (World Bank, 2003). While the greater complexity of a decentralised system can be more difficult to manage, it is more robust since it implies greater suppleness in the system's response to failure in any of its parts (Faguet, Fox, & Pöschl, 2015).⁶ Moreover, there is evidence to suggest that government failure in such a system is less likely, given the incentives that local governments have in building civic engagement and ensuring effective service delivery. Ultimately, decentralised systems of governance are likely to be more accountable, and this leads to better-designed and implemented human capital interventions.

These international trends towards decentralisation and the theoretical benefits of such a system are backed by studies that demonstrate a positive correlation between decentralisation and human capital (Blöchligeri & Égerti, 2013). For instance, the experiences of Brazil and Argentina illustrate the benefits of decentralising healthcare to urban local bodies. Argentina's Plan Nacer, which involved city governments receiving funds from the national health ministry based on population coverage, has had a positive effect on health outcomes. The probability of low birth weight, for example, fell by as much as 23 percent in Argentina (Badgaiyan & Kumar, 2021).

In a study of Bolivia and Columbia, it was found that decentralisation led to greater public investment into primary social services such as education, water, and sanitation (Faguet & Sánchez, 2008). In Bolivia, public investment in education became more responsive to local needs, rising disproportionately in areas with the worst education indicators. In Columbia, school enrolment increased in districts that had greater control over educational finance and policymaking (and were not bound by centrally controlled criteria). Similarly, in a study of Swiss cantons, the degree of decentralisation was found to be positively related to educational attainment (Barankay & Lockwood, 2007). Another study of 21 OECD countries over the period 1970-2000 found that higher fiscal decentralisation (up to a point) was beneficial for the efficiency of the public sector in providing health and education services (Adam, Delis, & Kammas, 2014).

V The nature of India's constitutional scheme

In recent years, India has taken some steps towards fiscal decentralisation which have implications for its human capital. This is highlighted by the Fourteenth Finance Commission's (2014) recommendation to increase the States 'share in tax devolution from 32 to 42 percent, which was effectively retained by the Fifteenth Finance Commission (2020).⁷ The significance of this can be appreciated when seen in the context of the Indian Constitution's federal structure.

But before exploring this structure, it is worth noting that the Constitution recognises health and education as fundamental rights and includes them under several directive principles of State policy (India Const. arts. 41, 45, & 47). The Supreme Court has, in several judgments, held the right to health as being part of the right to life (India Const. art. 21; Bandhua Mukti Morcha v. Union of India, 1984; Consumer Education & Research v. Union of India, 1995; State of Punjab v. Mohinder Singh Chawla, 1997). After the 86th constitutional amendment in 2002, the right to education for children between the ages of six and 14 is now constitutionally recognised (India Const. art. 21A). Under the directive principles contained in Part IV of the Constitution, the State is required to direct its policy towards securing the health and strength of workers, men, and women, and ensuring that children are given the opportunities and facilities to develop in a healthy manner. The State also must make effective provision for securing the right to work, the right to education, and the right to public assistance in cases of unemployment, old age, sickness, and disablement. The State is also expected to endeavour to provide early childhood care and education for all children below the age of six years. Finally, the State is also conferred with a primary duty to improve public health and raise the level of nutrition and the standard of living. While these directive principles are not enforceable in court, they are expected to be fundamental in the governance of the country (India Const. art. 37).

The Constitution envisages three tiers of government, viz. the Centre, the States, and local governments which comprise panchayats for rural areas and municipalities for urban areas. Legislative and executive powers are divided among the first two tiers by the Constitution itself, according to the list system of the Seventh Schedule (India Const. arts. 73, 162, 246, & sched. VII). The Union List comprises matters over which Parliament and the Central Government have exclusive powers, and the State Legislatures and State Governments have exclusive powers over State List matters. The Centre as well as the States have powers over the Concurrent List, but the Centre's powers prevail in case of a conflict over any matter from this list. This means that the provisions of a central law will prevail over the conflicting provisions of a state law on a Concurrent List matter and can also limit a State Government's executive power over such a matter (India Const. art. 254, cl. 1 & art. 162). As far as matters relevant to human capital are concerned, public health and hospitals are included in the State List, and the broader subject of economic and social planning is found in the Concurrent List (India Const. sched. VII, list II, entry 6 & list III, entry 20). Interestingly, education was shifted from the State List to the Concurrent List by the 42nd constitutional amendment in 1976 (India Const. sched. VII, list III, entry 25).

Fiscally, while the Constitution assigns the bulk of expenditure responsibilities to the States, it is the Centre that has the major revenue sources. To address this vertical imbalance, the Constitution provides for fiscal transfers through tax devolution and grants-in-aid from the Centre to the States in accordance with recommendations of the Finance Commission (India Const. arts. 270, 275, & 280). In addition to these, the Centre can make 'grants for any public purpose', even if the purpose in

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question is a matter in the State List (India Const. art. 282). These grants are outside the purview of the Finance Commission, which effectively means that the Centre can freely exercise its discretion in making these grants. Also, while fiscal transfers that are part of tax devolution are unconditional, i.e., States can choose to use that money as per their own discretion, transfers under grants-in-aid or Centrally Sponsored Schemes (CSSs) under Article 282 can be conditional. Therefore, an increase in the States 'share of tax devolution, as recommended by the Fourteenth Finance Commission, represents a more meaningful form of decentralisation. The States are free to use the funds they receive through the tax devolution route in any manner.

The third tier, comprising panchayats and municipalities, received constitutional recognition only in 1992 after the 73rd and 74th constitutional amendments (India Const. parts. IX & IXA). The Constitution envisages these bodies as exercising powers over matters contained in the Eleventh (for panchayats) and Twelfth (for municipalities) Schedule lists. From the point of view of human capital, relevant matters include education, health and sanitation, women and child development and social welfare for panchayats, and public health and planning for economic and social development for municipalities (India Const. sched. XI, entries 17, 23, 25, 26, & sched. XII, entries 3, 6). However, unlike in the case of Seventh Schedule matters vis-à-vis the first and second tiers, powers over Eleventh and Twelfth Schedule matters are not automatically conferred upon the third tier. Instead, the Constitution leaves it up to individual States to determine the extent to which they wish to empower third tier governments within their State (India Const. arts. 243G & 243W). States can also decide the types and extent of taxes that panchayats and municipalities can levy, collect, and appropriate, and are also responsible for transferring funds to the third tier in the form of tax revenue sharing and grants-in-aid (India Const. arts. 243H & 243X). Thus, there is potential for vast disparities in the roles played by third tier governments across States, both in terms of the responsibilities entrusted to them and in their fiscal capacity to perform them.

Overall, from the scheme of distribution of powers outlined above, the Constitution indicates a clear preference for lower-level governments to take the lead in health and education, which are critical for human capital. Even when the Constitution allocates a role for the Centre in this area, it does so through the Concurrent List and not the Union List. The fact that States have powers over the Concurrent List as well, unlike in the case of the Union List, has important implications for the manner in which the Centre ought to design its interventions in Concurrent List matters. On an analysis of the origins of the list system contained in the Indian Constitution, it emerges that the rationale for placing matters in the Concurrent List was that while such matters may be more naturally suited for the State List, certain overarching considerations warrant the Centre's involvement (Chatterjee, Agarwal, James, & Sengupta, 2019). Originally, these considerations were threefold: the interests of uniformity, encouraging States to innovate, or accounting for inter-State effects (Joint Committee on Indian Constitutional Reform, 1934).⁸ This explains why, for instance, public health as aforesaid is in the State List, but preventing the inter-State spread of infectious diseases is in the Concurrent List (India Const. sched. VII, list III, entry 29). This also helps contextualise the transfer of education from the State List to the Concurrent List and how it ought to be interpreted: not as the States being completely sidelined from education, but rather, as the Centre's intervention being seen as necessary to encourage State innovation in this critical sector (through, for example, mandating minimum standards or establishing broad frameworks).

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A constitution bench of the Supreme Court has observed in a landmark case that "...federalism in the Indian Constitution is not a matter of administrative convenience, but one of principle..." (*S.R. Bommai v. Union of India*, 1994, p. 217). The Seventh Schedule contains the principled bedrock of Centre-State relations, and its scheme, far from being a dead letter, should inform and animate the actions of the Centre and States. For the Centre's human capital interventions to be grounded in the letter and spirit of the aforesaid constitutional scheme, they should be broadly oriented towards planning, coordinating, facilitating, and encouraging State actions.

VI Centralisation in practice

Despite significant shifts towards greater State autonomy in the political, economic, and social policy spheres, the overall centralised nature of India's fiscal architecture persists. Indeed, in practice, India has witnessed an entrenched and growing centralisation. Apart from the aforesaid transfer of education to the Concurrent List, this can also be seen from the passing of central laws such as the Right of Children to Free and Compulsory Education Act, 2009, the National Food Security Act, 2013, as well as the highly centralised handling of the COVID-19 crisis (James, 2020; Sahoo & Ghosh, 2021). Another significant area in which this is illustrated is the manner and extent of the Centre's use of CSSs in human capital interventions.

CSSs have formed a sizeable chunk of inter-governmental fiscal transfers over the years and are set to comprise around 23 percent of the total transfers that will be made to States in 2021-22 (MoF, 2021a). In fact, from 1950 to 2014, CSSs used to be part of plan transfers which were made systematically and periodically as per the recommendations of the Planning Commission, an extraconstitutional body set up by the Centre through an executive resolution (Singh, 2016). Resorting to CSSs has also been seen as a means through which the Centre has responded to political challenges, such as the strengthening of regional political power that accompanied the initial decade of economic liberalisation (Singh, 2017). The prominence that the Centre has historically given to CSSs as the preferred route for making grants to the States is questionable for several reasons.

On a combined reading of the provisions contained in Chapter I of Part XII of the Constitution (Articles 264-291), it appears that grants under Article 282 (CSSs) were not originally meant to play such an outsized role. This provision is categorised under the sub-chapter 'Miscellaneous Financial Provisions', unlike Articles 270 (tax devolution) and 275 (grants-in-aid) which are categorised under the sub-chapter 'Distribution of Revenues between the Union and the States'. The latter sub-chapter also includes Article 280 which provides for the Finance Commission that is empowered to make recommendations to the Centre regarding transfers under Articles 270 and 275. Together, Articles 270, 275, and 280 represent a comprehensive and finely balanced fiscal federal framework, envisaging regular inter-governmental fiscal transfers guided by a dedicated and neutral constitutional body. In this context, it is worth noting that the constitutional expert Nani Palkhivala, in an opinion submitted to the Ninth Finance Commission, had characterised the power under Article 282 as more of a residuary power. In his view, grants-in-aid under Article 275 as per Finance Commission recommendations were the more appropriate, regular route for making grants (Ninth Finance Commission, 1989).

It has also been argued before the Supreme Court that the use of Article 282 as an alternative channel of regular transfers from the Centre to the States disrupts the delicate fiscal equilibrium which the Finance Commission is expected to bring about through the regular channel under Article 275. While the Supreme Court in that case ultimately gave a wide interpretation to Article 282 and did not restrict the use of CSSs, it also noted that "Article 282 is normally meant for special, temporary or ad hoc schemes." (*Bhim Singh v. Union of India*, 2010, p. 578). Thus, although the pervasive use of CSSs under Article 282 is not unconstitutional per se, there is a strong case to be made that it deviates from the spirit of the constitutional scheme and strays from the intentions of the framers of the Constitution (Singh, 2021). Through mainstreaming the CSS route and by creating a parallel institutional framework with the Planning Commission for many years, the Centre has arguably been upsetting the Constitution's federal balance (Sharma, Gupta, & James, 2021).

Aside from constitutional issues, there are well-reported issues in the design of CSSs as well. The conditions attached to CSSs are often rigid, overly prescriptive, and uniform across States. They are also typically input-based, i.e., focused on the intended use of funds, as opposed to output-based. Minute implementation details such as the process of hiring and training modules are generally determined by the Centre, and the fixed norms do not leave much room for States to customise the schemes to their specific needs (Kapur, 2020). Against this, international experience reveals a growing consensus that output-based conditions are more effective and efficient in bringing about the desired results. For example, a condition could be set to achieve an output such as increasing the rate of high school graduation, without imposing conditions on inputs such as the number of teachers. This might be a better way of achieving the desired outcome of increasing the number of skilled professionals, and it allows for State-level flexibility in approaches as well. A specific example of a simple and effective output-based conditional transfer that may be cited here is Canada's health transfer programme (FC-XV, 2020).

Moreover, CSSs typically have a cost-sharing model, with the States expected to provide a portion of the funding, even though they do not have any effective say in the planning of the scheme itself. This is quite incongruous, especially given that many CSSs cover subjects in the State and Concurrent Lists, such as the health and education CSSs mentioned earlier. In fact, as per the calculations of the Fourteenth Finance Commission (2014), the Centre's spending on state subjects increased from 14 percent to 20 percent between 2002-2005 and 2005-2011, and from 13 percent to 17 percent in the same period on concurrent subjects. Such cost-sharing arrangements pre-empt the States 'fiscal space and leave lesser room for States to design their own schemes.

More concerning are studies which suggest that States with lower per capita income and weaker fiscal and institutional capacity find it difficult to avail the benefits of CSSs (Rao, 2017). In other words, States that are most in need of central assistance are likely getting the least of it, meaning that CSSs appear to be worsening the existing horizontal imbalance between States. While it is technically open for States to say no to CSSs, given the vertical imbalance and the Centre's continued reliance on CSSs as a major instrument of fiscal transfers, most States cannot afford to exercise this option.

Thus, through the extent and nature of its use of CSSs, the Centre has been effectively directing the minutiae of human capital interventions. This goes against the international and empirical evidence cited above that indicate that interventions from lower levels of government are better suited for building civic engagement, changing political incentives, and improving governance and human capital outcomes. It is also at odds with the constitutional scheme that envisages a different, more facilitative and coordinating role for the Centre, and also a more sparing use of CSSs. The influence exercised by the Centre on State expenditure priorities through the planning process and CSSs has contributed to poor service delivery and inefficient expenditure (Singh, 2017).

As mentioned above, the Fourteenth Finance Commission's recommendation to increase the States 'share in tax devolution from 32 percent to 42 percent appeared to be a welcome step towards meaningful decentralisation. In principle, States were set to have more funds at their disposal to use unconditionally, according to their own localised priorities. However, the increase in tax devolution was offset by reductions in central contributions to CSSs (requiring States to pay more) (Aiyar & Kapur, 2019), and by an increase in cesses (Daniyal, 2019). Since cesses do not form part of the divisible pool that is subject to tax devolution, an increase in cesses meant that the divisible pool shrunk, and ultimately lesser money was received by States. As for CSSs, States were forced to use their increased tax devolution money to fund their now-enhanced contributions to CSSs (which remained conditional).

What this meant, overall, was that the Fourteenth Finance Commission's recommendations did not in fact lead to greater decentralisation. Strategic changes in other components of the fiscal architecture effectively counteracted the greater flexibility that should have flowed from enhanced tax devolution. This is reflected in the fact that in the years after the commission's recommendations, State expenditure did not shift across sectors, but rather continued as per the existing status quo at the time (Aiyar and Kapur, 2019).

VII Centralisation and the third tier

Ironically, States, too, have been responsible for centralisation insofar as third tier governments are concerned. As aforesaid, the Constitution leaves it up to the States to determine the extent of devolution to third tier governments, with the subjects in the Eleventh and Twelfth Schedules not being automatically vested in the latter. In the words of Sivaramakrishnan (2016, p. 571), who was one of the bureaucrats involved in the drafting of the 74th constitutional amendment, this is "The most significant lacuna in the constitutional framework on local government..." Most State laws on panchayats and municipalities do not clearly demarcate functions for the third tier, and as Figure 7 illustrates in the case of panchayats, there is significant variation in the extent of devolution across States.

Instead of adequately devolving powers and responsibilities to the third tier, States have often created parallel executive bodies to carry out those very functions. For example, even though planning for social and economic development is included in the Twelfth Schedule for municipalities as aforesaid, many States have established Development Agencies that perform this function and are directly controlled by the State (Sivaramakrishnan, 2016). This practice was challenged before the Supreme Court, but the court upheld it (*Bondu Ramaswamy v. Bangalore Development Authority*, 2010).



Figure 7: Devolution of Subjects (no.) by States to Panchayats (from the 29 Eleventh Schedule Subjects)

Source: Ministry of Panchayati Raj [MoPR] & Tata Institute of Social Sciences [TISS] (2016)

Third tier governments are not fiscally empowered either. These bodies, especially rural local bodies, have meagre own revenue sources and are significantly dependent upon the Centre and the States in this regard. In addition to this, the introduction of the Goods and Services Tax further took away some of their traditional revenue sources such as entertainment tax, entry tax, stamp duty, and mineral royalties. The collection of property tax, another major source of revenue for third tier governments, is also very low in India (only 0.1 percent of GDP, as compared to 3 percent of GDP in countries like the United States of America, the United Kingdom, and Canada) (FC-XV, 2020). The Thirteenth Finance Commission (2009) had recommended that all States set up dedicated Property Tax Boards to assist municipalities in developing independent and transparent procedures for assessing property tax. However, most States have failed to do so. To substantiate the resources of local governments, all Finance Commissions since the Tenth Commission have been devolving resources to the third tier.⁹ The Fifteenth Finance Commission (2020) recommended Rs 4,36,361 crore to the local bodies for the period 2021-26.

The Constitution also envisages State Finance Commissions that would make recommendations for tax devolution, grants-in-aid, assignment of taxes, etc. from the State to the third-tier governments (India Const. arts. 243-I & 243-Y). State Finance Commission recommendations are also expected to form the basis on which Union Finance Commissions recommend measures to supplement the resources of local bodies (India Const. art. 280, cl. 3(bb) & cl. 3(c)). However, most States have not constituted these commissions on time, and their reports have not been submitted on time either. The Fifteenth Finance Commission (2020) has recognised this issue and recommended that no grants should be given to any State after March 2024 that does not comply with the constitutional provisions pertaining to State Finance Commissions.

Ultimately, as Sivaramakrishnan (2016, p. 560) observed, "...although local representation has been achieved, we are still struggling to attain local self-government." States have thus constrained civic

engagement and improvements in accountability that tend to accompany truly decentralised systems of governance and service delivery.

VIII Towards a solution

Addressing Pritchett's (2009, p. 4) characterisation of India as a "flailing state", Singh (2017) has argued that government failure in India is the result of over-centralisation, recommending that greater expenditure and revenue authority needs to be pushed down to lower levels of government. The preceding sections of this paper have shown that India is performing poorly on most human capital indicators (with considerable inter-State disparities), that international and empirical evidence as well as the constitutional scheme point towards decentralisation as the appropriate means to address this; and yet, India has been employing a centralised approach. In order to improve India's human capital, it is critical to rejuvenate India's federal structure. For this, changes are required at several levels.

At the Central level

To begin with, the Centre needs to increase its spending on health and education in real terms, unlike the recent instance of modifying the definition of the health budget and reprioritising existing programmes. Beyond increasing the quantum of expenditure on human capital, the Centre should also reconsider the manner in which it spends this money, focusing on building openness and civic engagement in the reporting and assessment of public spending. Given that public health is a state subject, and that education and socio-economic planning are concurrent subjects, the Centre should design and orient its approach accordingly. This means that the Centre should play an enabling and facilitative role, coordinating State-led efforts.

The Centre could play this coordinating role by encouraging knowledge-sharing between States by developing knowledge platforms that promote cross-State learning. India's health and education systems are a rich canvas of experimentation and variations in implementation, particularly in the area of service delivery. But the insights and lessons derived from this heterogeneity have not been systematically documented across States. Some of the modalities through which the Centre could contribute here include creating institutional hubs, organising learning events, partnering with academia, and facilitating exchanges between practitioners. The Centre should create and support independent and credible institutional mechanisms to support information exchange and monitoring (Boex & Martinez-Vázquez, 2004). The Centre could also actively encourage innovation by funding pilot schemes on a range of health system issues such as last-mile service delivery in remote areas, urban health innovations, telemedicine, and private sector engagement models. These pilots should necessarily involve effective monitoring and evaluation in order to generate evidence, whether positive or negative, that can then be used by relevant implementing agencies across the country.

Further, on the aforesaid point of institutional mechanisms, the Centre should revive institutional forums of inter-State dialogue and cooperation. The Planning Commission used to function as such a forum along with the National Development Council where State Chief Ministers could negotiate plan transfers that were linked to CSSs. But after the Planning Commission's abolition in 2014, followed by the creation of the NITI Aayog, there has been an institutional vacuum (Aiyar & Tillin,

2020) and decisions over central transfers to the States have been appropriated by central line ministries and the Union Ministry of Finance (Swenden & Saxena, 2017).

To address this, the Centre should consider revitalising the Inter-State Council, a constitutional body under Article 263 that was set up in 1990 (and last met in 2017). It is specifically charged with the duty of investigating and discussing subjects in which the Centre and the States have a common interest, and with making recommendations for better coordination of policy and action (India Const. art. 263). It includes the Prime Minister and other cabinet ministers from the Centre, and State Chief Ministers, and it has occasionally functioned as a forum for formalised collective discussion and approval of various matters that have federal implications (Singh, 2016). In addition to this, Article 263 has also been used to set up the Central Council of Health and Family Welfare (which last met in 2019), an advisory body that includes Health Ministers from the Central and State Governments (PIB, 2019). It is mandated to consider and recommend broad lines of policy with respect to all aspects of health and to promote and maintain cooperation between the health administration at the Centre and State levels. Centre-State cooperation should be meaningful and institutionalised, and not merely ad hoc. In the context of this institutional vacuum, the Chairman of the Fifteenth Finance Commission observed in a recent lecture that "... there needs to [be] serious consideration on building entities by way of a permanent consultative mechanism" (Singh, 2021, p. 22). As seen above, there are many existing options that can be revived in order to address this gap.

The Centre should refrain from offsetting the tax devolution amounts that are payable to States, as it has done in the past by altering the cost-sharing ratios of CSSs and through cesses. The Fifteenth Finance Commission has retained the higher level of tax devolution that was recommended by the Fourteenth Finance Commission, and the unconditional nature of these vertical transfers should be effectuated in spirit. Concomitantly, the heavy reliance on CSSs should be reduced, and tax devolution and grants-in-aid should be the primary sources of vertical fiscal transfers.¹⁰

The remaining, restructured CSSs should be made more flexible so that States are allowed and encouraged to innovate and adapt these schemes to meet their unique requirements. As noted by the Fifteenth Finance Commission (2020), the PM-JAY allows States to co-brand it with their own schemes, choose whether to adopt a trust or insurance mode, use the Central Government's Information Technology system or their own system, to adapt the benefit package and eligibility/coverage groups, and so on. As opposed to this, the erstwhile Rashtriya Swasthya Bima Yojana (RSBY) required States to contract insurance companies to fulfil the role of health care purchasers with no option to establish a government trust. The RSBY insisted on the use of its own Information Technology system and did not allow any co-branding with existing state insurance schemes. The National Health Mission has moved towards greater flexibility as well (FC-XV, 2020).

There should be greater collaboration between Central and State governments in the design of CSSs from the outset (Sengupta, Sharma, Gupta, Ravindran, & Sengupta, 2018). This should reflect in CSSs having customised terms for individual States rather than the one-size-fits-all MoUs that States currently sign with the Centre for CSSs. Even with standardised CSSs, greater flexibility and effectiveness will result from switching to output-based conditions from the current input-based ones, as seen from international experience. As recommended by the Fifteenth Finance Commission (2020, vol. 1, p. 279) on this point:

There is a need to shift the focus of inter-governmental fiscal health financing from inputs to outputs/outcomes while advancing the measurement agenda as an accountability tool. Complementary to this flexibility, the Union Government can shift the focus of CSS and transfers away from line-items and activities and towards outputs and outcomes, with States being empowered to choose their own pathways to achieve results. Financing can be provided based on bilaterally agreed 'compacts' related to specific objectives (for example, service delivery outputs or specific outcomes) instead of exhaustively discussed implementation plans. To support this approach, the Union Government can support initiatives to enhance data systems, monitoring and evaluation and transparency. One recent example is the NITI Aayog Health Index, which produces an annual report documenting progress among states across twenty-three key health indicators.

While it is desirable for CSS conditions to be customised and flexible, one area in which standardised processes would be beneficial is in monitoring and evaluating the use of CSSs across States. For CSSs to effectively achieve their outcomes, they should be supplemented with measurable indicators of performance and processes of reporting on those indicators that are transparent, credible, and consistent (Sengupta et al, 2018). Performance indicators should be jointly defined and determined by the Centre and States, which would help reinforce the values of joint ownership and accountability towards achieving shared goals (Shah, 2010). Standardised reporting processes across CSSs will help in assessing their effectiveness in a uniform manner (Sengupta et al, 2018). This should be complemented with improvements in the coverage, timeliness, quality, and integrity of fiscal reporting generally as part of public financial management reforms at the Centre and State levels (Singh, Patel, & James, 2021). In line with these principles, the Fifteenth Finance Commission (2020) has recommended performance-based education grants to incentivise improvement in learning outcomes in States, measured by a subset of the MoE's Performance Grading Index (PGI).¹¹

Such standardised processes can help establish an environment of predictability and transparency, safeguard the credibility of evaluation, help in effectively managing non-compliance, and institute a system of checks and balances to ensure accountability (Spahn, 2012). It would also be in keeping with the facilitative role that the Centre needs to perform in this area.

At the State level

For States to play a bigger and more meaningful role in human capital interventions, they need to have adequate fiscal resources that they can use as per their discretion. As discussed above, a lot depends on the Centre, for this. At the same time, the States should also improve their planning capabilities and rationalise their own programmes and spending priorities in order to focus on human capital development. They should also work towards improving their public financial management systems and facilitating more civic engagement and accountability.

The Fifteenth Finance Commission (2020) has recommended that health spending by States should be increased to more than 8 percent of the States' budgets by 2022. It also proposed that primary health care should be the number one fundamental commitment of each and every State and that primary health expenditure should be increased to two-thirds of the total health expenditure by 2022. For enhancing service provisioning and ensuring the availability of trained human resources, the commission also recommended starting specialist DNB (Diplomate of National Board) courses in district hospitals and investing in the training of the allied healthcare workforce. It also recognised

the need to invest in critical care hospitals and public health laboratories to address regional health inequities and pandemic-preparedness. The commission's sectoral grants for health specifically included allocations for all these sub-components.

The Fifteenth Finance Commission (2020, vol. 1, pp. 56-8) has also made several specific reform suggestions pertaining to education. For building resilience in India's public education system, it suggested:

In the light of the Covid-19 pandemic, it is necessary for states to design an amalgamation of digital and physical classes curriculum. To ensure that children do not suffer because of closure of schools, every school must have an information and communication technology (ICT) lab and smart classroom. Underprivileged children should be given pre-loaded devices.

For improving learning outcomes in schools:

- Attaining foundational literacy and numeracy for all children should become the core target for States.
- State Governments need to work towards having *functional schools* which have minimum size, adequate teachers, and basic infrastructure.

And specifically, on the use of technology:

- MIS [Management Information System] needs to be put in place by all States which can have information like teacher attendance, enrolment data and learning levels. It may also contain feedback. This can become a basis for making policy decisions.
- Based upon the information from MIS, a targeted approach can be followed where the schools at the bottom on certain parameters can be identified and resources may accordingly be devolved.
- All out-of-school children need to be mapped digitally in order to bring them back to school. Similar system needs to be developed for vulnerable children. The data should be fed into a centralised database.

At the third tier level

Beyond the Centre and the States, a functionally and fiscally empowered third tier that can effectively intervene in health and education and build civic engagement would not only be more in keeping with the constitutional spirit, but also lead to better human capital outcomes. Local governments are better placed to understand the needs of local citizens and have greater incentives to ensure that these needs are fulfilled. As mentioned previously, improvements in accountability lead to better service delivery. The example of Kerala during COVID-19, where local governments were effectively able to deliver healthcare services, reinforces this point (FC-XV, 2020; RBI, 2020).¹² This was a direct consequence of Kerala's efforts towards meaningful third tier empowerment, especially since its 1996 reforms where 35-40 percent of the State's development budget was unconditionally transferred to third tier governments (FC-XV, 2020). This was critical, given that the spending capacities of local bodies depends heavily on fiscal transfers from their State Governments (Figure 8).

Another example of the link between empowering local governments and improving human capital outcomes can be seen from the negative correlation observed between the maternal mortality rate and the index of devolution to local bodies. This implies that States which have devolved more functions, functionaries, and funds to local bodies have lesser maternal mortality rates (Figure 9).





Source: RBI (2020)



Figure 9: States with a higher Index of Devolution for local bodies have lower maternal mortality rates

Sources: Registrar General & Census Commissioner (2020b); MoPR & TISS (2016)

The true governance potential of our federal structure will only be realised once third tier governments are enabled to contribute meaningfully. For this, firstly, panchayats and municipalities across the country need to be vested with the functions that are listed in the Eleventh and Twelfth Schedules. The 73rd and 74th constitutional amendments had placed the onus for this on the States, but in the three decades since the enactment of these amendments, third tier governments still have

very few powers and responsibilities. Given this, it might be time for constitutional amendments to Articles 243G and 243W that make it mandatory for States to empower the third tier in this regard.

Secondly, just like States themselves, the third tier needs to be fiscally empowered too. To increase the revenue sources of the third tier, States should improve the collection of property tax by taking measures such as setting up Property Tax Boards, as recommended by the Thirteenth Finance Commission (2009). In accordance with the Fifteenth Finance Commission's (2020) recommendation, a constitutional amendment is needed to Article 276 for enabling higher collection of professional tax. Presently, Article 276 provides an upper limit of Rs 2,500 per annum, per person, for professional tax. Instead of this, the power to prescribe an upper limit should be vested in Parliament, acting in accordance with the recommendation of the President, which in turn is made in pursuance of a Finance Commission recommendation. Moreover, the proceeds of this tax should directly go to the third tier, which is presently the case only in certain States (Visakha & Sharma, 2020). Apart from bolstering the third tier's direct revenue sources, they need to receive adequate fiscal transfers through tax devolution and grants-in-aid from States. Since the Constitution envisages State Finance Commission recommendations in this regard, it is essential that these bodies are appointed in a timely and consistent manner by all States.

The Fifteenth Finance Commission (2020) in its report has recognised that third tier governments can play a key role in the delivery of primary healthcare services. In fact, of the total Rs 1,06,606 crore that it has recommended as health grants, Rs 70,051 crore have been earmarked for local governments. This includes specific grants for supporting diagnostic infrastructure to primary healthcare facilities, block level public health units, building-less sub-centres, primary and community health centres, urban health and wellness centres, and conversion of rural sub-centres and primary health centres to health and wellness centres. It observed that involving local governments would make the health system more accountable to the people. At the same time, recent collaborations between the civil society organisation Pratham and the Maharashtra and Uttar Pradesh State governments are indicative of the potential to improve education outcomes by mobilising local governments and communities (Banerji, 2021).

All these measures taken together should help India to reorient its efforts towards improving human capital. Leveraging the true potential of its multi-level federal system represents the best way forward.

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Notes

¹ Brazil (BR), China (CH), Japan (JP), Italy (IT), the United Kingdom (UK), France (FR), Canada (CA), Germany (GR), and the United States of America (US).

² Data compiled from State Finance Accounts and Union Budget, 2018-19.

³ It is debatable whether expenditure on water, sanitation, and nutrition can be considered as part of healthcare expenditure. They are excluded from healthcare expenditure under the System of Health Accounts, a globally accepted standard in this regard (Datta & Chaudhuri, 2021).

⁴ Moreover, the funds allocated in the 2021-22 budget to the Pradhan Mantri Atmanirbhar Swasth Bharat Yojana which is aimed at improving public health infrastructure did not represent an additional health outlay. Instead, funds for this new scheme are to be carved out from the National Health Mission, meaning that it was only a reprioritisation of existing programmes (Rao, K.S., 2021).

⁵ The budget estimates for 2020-21 indicate that this had increased to 3.5 percent (MoF, 2021b).

⁶ Faguet, Fox, and Pöschl (2015) cite an example where corruption or ineptitude among officials responsible for local education in a centralised system can have serious consequences for education in that area. This is contrasted with a decentralised system, where such failings can be attenuated by actions of higher levels of government that share responsibility for local education.

⁷ The Fifteenth Finance Commission recommended a tax devolution of 41 percent to States, after adjusting for the erstwhile State of Jammu and Kashmir.

⁸ The report of the Joint Committee on Indian Constitutional Reform (1934) formed the basis of the Government of India Act, 1935. The latter contained a Seventh Schedule which was retained with modifications in the Constitution of India.

⁹ Since the Tenth Finance Commission (1994) was constituted prior to the 73rd and 74th constitutional amendments, its Terms of Reference did not include recommending measures needed to supplement the resources of local bodies. Despite this, it recommended grants amounting to 1.38 percent of the divisible pool to local bodies, in recognition of its new responsibilities in light of the aforesaid amendments.

¹⁰ There have been some attempts to reduce and rationalise the number of CSSs in the past (Planning Commission, 2011; NITI Aayog, 2015).

¹¹ The annual PGI of States is published by the MoE based on 70 parameters covering five domains, viz. (a) learning outcomes and quality (b) access, (c) infrastructure and facilities, (d) equity, and (e) governance processes. The Fifteenth Finance Commission (2020) chose certain equity outcome indicators within PGI to form the basis of its performance-based education grants to States.

¹² Innovative and successful local government interventions in dealing with the COVID-19 pandemic were also observed in States such as Odisha, Maharashtra, and Rajasthan (Singh, 2021).

Dual Problem of FPTP Electoral Systems: Evidence from the Indian States

Vivek Jadhav*

Abstract

Democracy across the world has witnessed the evolution of the electoral system. First-Past-The-Post (FPTP), practiced in India has certain disadvantages in terms of disproportionate representation. This paper aims to construct the Gallagher Index, Gini Coefficient, and Generalized Entropy Index to measure and analyse the political concentration and inefficiency that characterise such disproportionate representation. The Gallagher Index measures the disproportionality between seat share and vote share; as it captures the disproportionality between votes received and seats won in the house. This can be viewed as a measure of inefficiency in representing the population, inasmuch as parties with a low vote share can have a high seat share. In other words, even though voters are not preferring the particular party or set of parties, these parties can still get enough seats to govern the particular state. Further, this paper tries to build the association between inefficient representation and concentration of power. We show that the high level of inefficiency in representation observed in the Indian State Assemblies is associated with the concentration of power at the state government level. We suggest that since FPTP in Indian democracy is associated with the dual problems of inefficiency and concentration, alternatives to FPTP should be considered.

Keywords: Inefficient Representation, Gallagher Index, Generalized Entropy Index, Concentration of Power

JEL: D72, K16, H11, P48

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I Introduction

Recent literature in political science as well as in social science focuses on the role of institutions in political as well as economic development. North (1991) defines institutions as the 'rules of the game' in society; more specifically, as humanly devised constraints that shape human interaction. Similarly, Ostrom (2009) defines an institution as the prescription used by humans to organize all forms of repetitive and structured interactions within rule-structured situations. These definitions include rules of the game, which create constraints on human behaviour, as well as incentives (through which institutions exert their influence.) As far as constraints are concerned, it consists of both informal constraints like sanctions, taboos, and customs, as well as formal constraints such as laws.

Democracy, in its broadest sense, refers to rule by the people. In narrow terms, democracy is defined as a collection of institutional structures, designed to reach decisions on public problems, and to promote effective governance, which includes realisation of liberty and equality (Morlino, 2004; Shi and Lu, 2010). Almost all definitions highlight the importance of the electoral system. The electoral system is the political institution that shapes the behaviour of key players in a democracy. Therefore, the electoral system plays an important role in the survival as well as the revival of the democracy, as it translates votes into seats, which become the basis for government formation.

As the electoral system translates votes into seats, it affects the formation of parties, the nature of government, and the behaviour of voters. The electoral system consists of factors like the electoral formula used for electing the representatives, ballot structure, and the number of representatives elected. These factors decide who will run the government, and how power will be transferred from one government to the next.

Even given a certain electoral system and design, its impact on the political system may be different, as the impact of the electoral system is influenced by "outside factors" such as ideological, regional, ethical as well as class factors, as also the nature and age of the democracy (Reynolds, Reilly and Ellis (2008)). Therefore, the electoral system has an important role in "meaningful election¹" as well as post-election government formation and governance.

What is a meaningful election? Reynolds, Reilly and Ellis (2008) suggest that for a meaningful election, the elected representatives should have a role in the formation of the government as well as in the policy formation. The electoral system is mainly divided into three categories: Plurality/Majority, Mixed, and Proportional Representation (Reynolds, Reilly and Ellis (2008))². Further classification can be done. For instance, Figure 1 suggests that around 40% of the countries which go through election use a list proportional representation system. India follows the First Past the Post (FPTP) system. FPTP fits in Majority system. FPTP is viewed as the simplest form of the electoral system, as each voter can give only one vote, and the candidate with the highest number of votes wins, even if they do not have the absolute majority in the constituency.

FPTP does have disadvantages. FPTP favours major parties, and can exclude small and regional parties, which means the FPTP system tends to create a single party which forms the government3. Gallagher and Mitchell (2005) suggest that proportional representation (PR) leads to a multiparty system; however, it may not give direct representation for localities, especially in countries like the Netherlands (where PR is implemented with one constituency covering the whole country.) They

argue that FPTP gives direct representation for localities but with disproportionality, whereas PR provides proportionality but without direct representation to localities.



Figure 1: Electoral System for National Legislature

Source: International IDEA databases (In 2021)⁴ Abbreviations:

List PR	List Proportional representation	NDE	No Provision for Direct Elections
FPTP	First Past the Post	PBV	Party Block Vote
TRS	Two-Round System	SNTV	Single Non- Transferable Vote
BV	Block Vote	STV	Single Transferable Vote
MMP	Mixed Member Proportional System	AV	Alternative Vote
LV	Limited Vote		

FPTP also creates a discrepancy between the vote share obtained by the parties and the seat share they win. In terms of preferences, voters may not vote for optimal preference in the FPTP system, in order to avoid 'wastage' of their vote (Monroe (1995)). Such behaviour by voters creates a problem for small parties. As far as Indian democracy is concerned, despite the FPTP system being implemented, small and regional parties are well-established and continue to survive – an exception to Monroe's conclusions. But Indian democracy does witness the discrepancy between vote share and seat share.

Duverger (1959) also discusses how electoral system affect the election outcome. Duverger's 'Three Laws of the Effects of Electoral Systems' are that:

- 1. Proportional representation tends to lead to the formation of many independent parties,
- 2. The two-ballot majority system tends to lead to the formation of many parties that are allied with each other,
- 3. The plurality rule tends to produce a two-party system.

Duverger (1959) does highlight that FPTP (which is a subset of Plurality Rule systems) tends to produce a two-party system. India, on the contrary, has a multiparty system – albeit with high level of

disproportionality, where one party tends to emerge as dominant after votes are translated into seats (Sartori (1986), Chhibber and Murali (2006)).

Figure 2 suggests that the number of political parties is increasing rapidly over a period of time. With coalitions and alliances, the number of parties forming the government is also increasing. This trend is contrary to what we expect from an FPTP system, as the multiparty structure is developing. More precisely, Chhibber and Murali (2006) find that Duverger's law gets violated in states like Bihar and Uttar Pradesh (Hindi Belt), whereas in Southern states, the situation is close to Duverger's law. Chandra (2007) suggests that ethnic identity can be a reason for high number of parties in Uttar Pradesh (which violates Duverger's law.) The geographically concentrated minority parties can also play an important role.

The important question is thus whether, in multiparty systems, there is 'a coexistence of disproportionality and dominant party'. If it exists then it means with smaller vote shares, parties have won the seats; the parties with the highest seats have formed the government, despite not having received the majority of votes. In fact, majority of voters may not have voted for the winning party. Therefore, it becomes important to understand and analyse such coexistence of disproportionality and dominance of a party. Such dominance of a party is referred to as 'concentration power'. To have majority in house, if coalition of parties is inevitable, then it means there is no concentration power at one party. But if a party has a majority in a house, then it means it has a dominance in forming the government, which suggests that there is a concentration of power in that particular party.





Data source: Election Results, Full Statistical Reports, the Election Commission of India (<u>https://eci.gov.in/statistical-report/statistical-reports/</u>)



Figure 3: Seat shares and Seat to Vote ratio of top ten political parties

Data source: Election Results, Full Statistical Reports, the Election Commission of India (https://eci.gov.in/statistical-report/statistical-reports/)

Figure 3 on the other hand suggests that most of the time, the ratio of seats won to vote received by political parties is more than 1, which means the seat share of the top parties⁵ is higher than the vote share they receive. The lowest seat share obtained by the first party is 26.7%, whereas the highest seat share obtained by the first party is 76.52%. The mean seat share obtained by the first party is 49.7%. This suggests that there is both disproportionality and concentration of power in the winning party.

Taagepera and Shugart (1989) also suggests that the FPTP suffers from the problem of 'overamplification', which is when a small shift in vote share can generate drastic changes in seat share. Overamplification can be seen as a biproduct of disproportionality, in that disproportionality means that a candidate with a small vote share can manage to win, and hence a small change in vote share can change that result.

Tillin (2015) finds disproportionality in national elections in India. The Law Commission of India 2015 Report on electoral reforms also highlights the disproportionality problem; that said, it finds that even if the FPTP system supports the dominance of the winning party, even such a dominant party can't uphold majoritarianism in a multiparty system, because a candidate who receives as little as 20-30% of vote share can manage to win⁶. Similarly, the Report of the Committee on Electoral Reforms, 1990 shows disagreements among the members regarding the continuation of the FPTP system due to the issue of disproportionality⁷.

Iyengar (2017) also notes the disproportionality in the Lok Sabha and suggests that the house is unrepresentative because of the approach used to determine the winning candidate, in that the winning candidate is decided based purely on highest number of votes, even if that candidate is not preferred by majority of voters. Therefore, this approach becomes unrepresentative.

Mishra (2018, April) suggests that many elected representatives, as they receive votes below 50%, don't represent the majority of the population. If these candidates belong to the party which is forming the government, then the representativeness of such government becomes questionable. Therefore, disproportionality and concentration are serious issues which should be discussed in academic as well as policy environment.

The alternatives for the Indian electoral system should be investigated. The PR system reduces the disproportionality (Gallagher (1991), Powell and Vanberg (2000)). On the other hand, due to many parties, PR system can witness instability. Taagepera and Shugart (1989), however, suggest that over a period of time PR system will not be unstable, and a plural system will not remain unrepresentative.

The issue of disproportional representation, as well as unrepresentative houses, is not just a national-level problem. State assemblies witness disproportionality as well. In this paper, different indicators are formed to identify inefficient representation at the state assembly; further, the link between inefficient or disproportionate representation and the concentration of power is discussed.

II Data and Methodology

This paper uses the following indices to understand disproportionality and concentration (i.e. dominance of a particular party) in forming the government:

Indices	Description and usefulness in general sense	How it used in this paper	Interpretation
HHI	Herfindahl-Hirschman Index (HHI) is proposed by Hirschman (1958) to measure market concentration, thus helping to identify market concentration and competitiveness	In this paper, it is used to measure the concentration (i.e., dominance of a party) in forming the government.	HHI lies between 0 and 1. More the HHI, higher the concentration, which means a small number of parties are forming the government.
Gallagher Index	Gallagher Index is developed by Gallagher (1991) to measure the disproportionality between the seats won by the party and votes received by the party.	Gallagher Index is used to measure the disproportionality between the seats won by the party and votes received by the party.	Gallagher Index is always positive. A higher Gallagher Index suggests that there exists high level of disproportionality.
Gini Coefficient	Gini coefficient is given by Gini (1912). It is widely used to measure inequality i.e., income inequality, wealth inequality etc.	In this work, Gini coefficient is used to measure the inequality based on the seat/vote ratio. It measures the disparity among parties' seat/vote ratio.	Gini coefficient lies between 0 and 1. If it is higher then, it means few parties have high seats but have received the low vote share, which again suggests disproportionality.
Generalized Entropy	Generalized Entropy is used to measure income inequality.	In this work, Generalized Entropy is used to measure the inequality based on the seat/vote ratio.	GE (Generalized Entropy) is a measure of disparity. It has variations based on the weight provided (GE(- 1), GE(0), GE(1), GE(2)). For all weights, a higher GE represents high disparity among parties based on seat/vote ratio, which suggests the disproportionality.

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HHI = $\sum_{i=1}^{n} (s_i)^2$ where s_i is a seat share obtained by the *i*th party.

HHI is constructed for Sixteen Indian States, for all elections held since the formation of these states. To construct the HHI, seat share is used to measure the concentration. In Indian democracy, the government is formed on the basis of seat-sharing, hence seats won by the parties play a more important in government formation than votes won by the parties. The higher the HHI, the higher will be a concentration of power -- very few parties are forming the government -- compared to a low level of HHI, where many parties are forming the government.

For representation inefficiency, Gallagher (1991) proposed the disproportionality index, also known as the Gallagher Index, which measures the disproportionality between the seats won by the party and votes received by the party.

Gallagher Index = $\frac{1}{2} * \sum_{i=1}^{n} (v_i - s_i)^2$ where v_i and s_i are percentage of vote and seat obtained by the ith party.

Higher the Gallagher index, higher will be the disproportionality, which means the parties winning higher seats are actually receiving fewer votes. Therefore, the government formed by these parties can be viewed as relatively less representative. The Special Committee on Electoral Reform (a Canadian Parliamentary Committee) suggests that for Canada, the Gallagher Index should be 5 or lower. This Committee also recommends the government take efforts to reduce the Gallagher Index, so that more efficient (i.e., inclusive) representation can be brought into politics.

Adding to Gallagher Index, this paper attempts to construct additional measures of disproportionality by using inequality indices. The Gini coefficient is used to measure inequality⁸. The Gini coefficient can be calculated by using Lorenz Curve⁹. In income inequality, Lorenz curve is basically plotting cumulative income share against cumulative population share (the cumulative population share is on X-axis and the cumulative income share is on Y-axis). In the Lorenz curve, the 45-degree line is the line for equal distribution. The area between the curve and the 45-degree line represents the unequal distribution.

In figure 4, area A represents the income inequality while Gini Coefficient = $\frac{A}{A+B}$

In this work, the Gini coefficient is used to measure the inequal distribution of seats i.e., disproportionality between seats and votes.



Figure 4: Lorenz Curve for Income Inequality





In above figure, Gini Coefficient = $\frac{V}{V+S}$. The equal distribution line represents the equal seat share is supported by the equal vote share while the area A shows the unequal distribution where the seat shares are higher for those who have less or equal votes compared to the others.

The Gini Coefficient is also written as

Gini Co-efficient =
$$1 + \left(\frac{1}{n}\right) - \left(\frac{2}{mn^2}\right)\sum_{i=1}^n (n-i+1) * \frac{s_i}{v_i}$$

 s_i is number of seats won by the ith party, v_i is number of votes won by the ith party, m is $\frac{\sum_{i=1}^{n} \frac{s_i}{v_i}}{n}$ i.e., average of total seats. And n is total number of parties.

Another widely used indicator of inequality is Generalized Entropy.

G.E. (
$$\alpha$$
) = $\left(\frac{1}{\alpha * (1 - \alpha)}\right) \left[\frac{1}{N} * \left(\sum_{i=1}^{n} \left(\frac{\frac{S_i}{v_i}}{\left(\frac{S_i}{v_i}\right)_{mean}}\right)^{\alpha} - 1\right)\right]$

The parameter α represents the weight given to distances between incomes at different parts of income distribution. The higher the values of α , the more weightage given to the upper end of distribution. For lower values of α , the index is more sensitive to changes in the lower end of distribution.

Widely used indices are G. E. (0) and G. E. (1) G. E. (0) is known as Theil's L index and G. E. (1) is known as Theil's T index.

G.E.(1) =
$$\frac{1}{N} * \sum_{i=1}^{n} \left(\frac{\frac{S_i}{v_i}}{\left(\frac{S_i}{v_i}\right)_{mean}} \right) * \ln \left(\frac{\frac{S_i}{v_i}}{\left(\frac{S_i}{v_i}\right)_{mean}} \right)$$

And

G.E.(0) =
$$\frac{1}{N} * \sum_{i=1}^{n} \ln \left(\frac{\left(\frac{S_i}{v_i}\right)_{mean}}{\frac{S_i}{v_i}} \right)$$

III Result

The level of disproportionality, on average, is very high for all states. The average Gallagher Index is more than 10 where average Gallagher Index, reaching a high of over 21 for Tamil Nadu. Bihar is at top as far as average Gini coefficient is concerned. HHI is moderate on average, with Madhya Pradesh showing the highest level of concentration at an HHI of 0.44.

State	HHI	Gallagher Index	GE (-1)	GE (0)	GE (1)	GE (2)	Gini
Andhra Pradesh	.415	17.998	1.711	.427	.278	.282	.345
Bihar	.284	16.375	1.685	.551	.379	.356	.437
Chhattisgarh	.371	15.871	1.375	.301	.148	.111	.21
Goa	.265	13.481	.546	.276	.19	.16	.29
Gujarat	.435	15.117	1.62	.403	.225	.179	.296
Haryana	.344	17.261	1.091	.435	.295	.264	.373
Himachal	.433	16.885	.92	.346	.221	.183	.294
Pradesh							
Jharkhand	.159	13.084	.902	.394	.264	.228	.367
Karnataka	.366	14.528	1.537	.398	.243	.208	.323
Kerala	.213	12.154	.798	.322	.224	.206	.329
Madhya Pradesh	.44	19.243	2.674	.54	.291	.238	.348
Maharashtra	.294	12.779	2.081	.466	.26	.214	.325
Orissa	.394	18.64	1.373	.436	.269	.224	.343
Punjab	.353	16.926	1.445	.481	.302	.26	.36
Rajasthan	.378	15.524	1.583	.45	.273	.229	.346
Tamil Nadu	.395	21.063	3.082	.649	.371	.326	.411
Uttar Pradesh	.347	18.441	2.945	.606	.368	.33	.427
Uttarakhand	.346	20.612	.879	.384	.25	.207	.333
West Bengal	.389	17.919	1.874	.518	.333	.298	.395

Table 1: Descriptive statistics (Mean) - by (State)

Data source: Author has formed the indices based on the statistics from the Election Commission of India.

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State	Average Life of	Average Life of	Average Life of	Average Life of
	the assembly from	the assembly	the assembly	the assembly
	formation	since 1990	since 2000	since 2010
Andhra Pradesh	4.57	5	5	5
Bihar	4.57	5	5	5
Chhattisgarh	5	5	5	5
Goa	4.54	4.67	4.5	5
Gujarat	4.58	4.5	4.75	5
Haryana	4.33	4.57	4.75	5
Himachal	4.54	4.5	4.75	5
Jharkhand	4.67	4.67	4.67	4.5
Karnataka	4.69	4.83	4.75	5
Kerala	4.21	4.83	5	5
Madhya Pradesh	4.47	4.67	5	5
Maharashtra	4.75	4.83	5	5
Orissa	4.53	4.83	4.75	5
Punjab	4.64	5.33	5	5
Rajasthan	4.78	4.67	5	5
Tamil Nadu	4.45	4.5	5	5
Uttar Pradesh	4.13	3.86	5	5
Uttarakhand	5	5	5	5
West Bengal	4.33	4.83	5	5

Table 2: Average life of Assembly

Note: The average year of assembly is calculated based on the years one legislative assembly completes. If one assembly faces the sudden crisis and faces new election before completing 5 years, then the life of that assembly will be the years elapsed between formation of old assembly and new assembly after new election.

Figure 6 and figure 7 show the bivariate map for Indian states. The darker the shade, the higher the level of concentration as well as level of disproportionality in that state. Both HHI-Gallagher and HHI-Gini map suggest that most of the Indian states have a moderate level of coexistence of concentration and inefficiency.



Figure 6: Concentration-Inefficiency (HHI-Gallagher Index)



2014



2019



Figure 7: Concentration-Inefficiency (HHI-Gini Coefficient)

Data source: Author has formed the indices based on the statistics from the Election Commission of India.



Figure 8: Scatterplot between HHI and Inequality indices as well as Gallagher Index

Data Source: The author has constructed the Indices based on the election result statistics from the Election Commission of India.

The figure shows that there is a positive correlation between HHI and inequality indices.

Table 3 shows the correlation of the inequality indices and the Gallagher Index with HHI¹⁰. Correlation is significant, with the correlation being very high for Gallagher Index and low for Gini Coefficient.

Variables	Correlation with HHI
	(p-value)
Gallagher Index	0.818***
	(0.000)
GE (-1)	0.460***
	(0.000)
GE (0)	0.610***
	(0.000)
GE (1)	0.561***
	(0.000)
GE (2)	0.471***
	(0.000)
Gini	0.392***
	(0.000)

Table 3: Pairwise correlations

The correlation between HHI and all other indices formed to identify the disproportionality is positive. This suggests the coexistence of concentration and inefficiency in all states that form part of this sample.

The panel Graph for HHI and Gallagher Index (Figure 9 shown in the Appendix) follows the same pattern. HHI index and Gallagher Index is moving in an exact similar direction. When HHI reaches a peak for given state, the Gallagher Index also reaches a peak for the same state. HHI which measures the concentration index is calculated after government formation i.e., it reflects the post-government scenario. On the other hand, the Gallagher Index is constructed on the basis of the information available before government formation i.e., it reflects the post-government formation scenario. In other words, the logical sequence is first Gallagher Index and then, after government formation, HHI comes into the picture. This means that first inefficiency (disproportionate seat share relative to vote share) is observed, then the concentration of power (share of seats held by the winning party) is observed.

The same pattern is observed for all other inequality indices. The GE (-1) has less variation compared to other Generalized Entropy indices. The possible reason is that GE (-1) is sensitive towards bottom seat distribution and that is not changing rapidly. While other indices are sensitive towards the top seat distribution, as top seat distribution is changing, GE (1), GE (2) and Gini coefficient are showing the variation which is similar to the concentration index. The representative inefficiency and concentration of power follow a similar pattern -- a pattern that is not good for Indian democracy.

IV Concluding Remarks: FPTP a dual problem

Under FPTP electoral system, India is witnessing the coexistence of disproportionality and concentration of power in government formation. As long as FPTP continues to be the electoral system of India, disproportionality is inevitable, as it is well noted fact that disproportionality is a feature of FPTP. The coincidence of this phenomenon with one party dominating the government further suggests that government itself is formed on the basis disproportionality.

The literature also suggests that a proportionate representation (PR) electoral system provides less disproportionality, but it comes with political instability. A stable government with efficient representation can be the best combination for any democracy, wherein votes are getting translated into representation in the house, and a relatively large share of the representatives are involved with governing the state.

Table 4 suggests the different combination of representation and concentration.

Who forms the government	Political Concentration	Inefficient Representation	Nature of Political Power
Single party or very few parties with high seat share but comparably low vote share	Yes	Yes	The political power gets concentrated in hands of the parties which have no proper representation
Single Party or very few parties with high seat share as well as high vote share	Yes	No	The political power gets concentrated in hands of the parties which have fair representation
Coalition of the parties which together have majority seats but comparably low vote share	No	Yes	The political power gets shared by different parties which have no proper representation with less stability.
Coalition of the parties which together have a majority and do have an equivalent vote share	No	No	The political power gets shared by different parties which have fair representation but with less stability.

Table 4: Government Formation

The trends analysis of Gallagher Index and HHI are showing the possible transformation of inefficiency in representation into the political concentration. And this coexistence of the poor representation and political concentration is creating a dual problem for Indian democracy.

Our analysis suggests that the FPTP electoral system is generating this disproportionality. And although a multi-party system exists in India, the recent trends show that one party is dominating the government formation. Under FPTP, the candidate with highest vote wins the election. But it is not necessary that the given candidate is preferred by the majority of voters (i.e., above 50% vote share). This is unrepresentative, and the unrepresentative nature of the result gets amplified when one party dominates the government formation.

This coexistence has to be addressed by making adjustments to the electoral system. The FPTP system does provide the benefits over PR system of giving stability to the government. Therefore, changing the existing system to PR system would also be problematic. A Mixed electoral system, such as Mixed-Member Proportional Representation (MMPR), has the potential to minimize the disproportionality without hurting the stability.

In 2019, South Korea adopted a MMPR system. In the house of 300 member, 253 seats are allocated for single-member constituencies through plurality voting, and 47 seats are reserved for PR voting. In the Indian context, this could take the form of keeping existing single member district election, while introducing more seats to maintain proportionality, by giving one more vote to each

voter. These additional seats can be allocated to parties based on their vote share in the second class of votes. These are new experiments which might have some issues in theory as well as in implementation, and a detailed discussion is needed to understand these further.

The association between concentration and inefficiency also needs more detailed investigation. The more detailed association can be identified after controlling the impact of social factors like polarization in society, conflicts between two political and social groups, and economic factors like change in prices during election years. The econometric analysis can be done, but the main problem is that the indices like HHI, Gallagher Index, Gini coefficient are formed for assembly years i.e., for years when new assembly is constituted. But the state-wise data for economic factors like prices, poverty and unemployment is available only for recent periods; therefore, controlling for such factors becomes difficult. Simply adding these factors with disproportionality indices will reduce the number of observations, which will make the model meaningless.

The average Gallagher Index for India since the first assembly election is 16.58 which is very high. This is a very high number, and its association with the concentration index is even more troubling. FPTP is, after all, the simplest method of electing representatives. Democracies around the world have witnessed the evolution of the electoral system and institutions. For India too, the electoral system should evolve, and if possible then alternatives for FPTP should be investigated again -- not just to correct the disproportionality, but also to ensure fair participation of the political parties in governance.

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Appendix

Figure 9: HHI vs Gallagher and Inequality Indices





INDIAN PUBLIC POLICY REVIEW



Data Source: The author has constructed the Indices based on the election result statistics from the Election Commission of India.

Descriptive Statistics

	Descriptive statistics – by (Year)								
Year	HHI	Gallagher Index	GE (-1)	GE (0)	GE (1)	GE (2)	Gini		
1951	.489	23.314	4.654	.719	.401	.343	.421		
1952	.58	31.123	2.427	.793	.511	.462	.489		
1955	.369	22.705	.742	.478	.392	.385	.442		
1957	.43	18.951	1.186	.419	.289	.309	.32		
1960 1961	.275 .343	16.49 13.845	.505 .981	.233 .451	.169 .298	.155 .252	.298 .383		
1962	.389	13.558	1.512	.519	.34	.3	.4		
1965	1	10.732	.433	.223	.154	.127	.275		
1967	.244	13.097	1.154	.377	.248	.219	.344		
1968	.351	14.035	1.322	.523	.348	.306	.414		
1969	.2	11.735	1.54	.424	.268	.234	.358		
1970	.074	6.788	.299	.175	.132	.117	.265		
1971	.59	17.883	2.247	.67	.374	.294	.388		
1972	.523	20.032	2.656	.589	.334	.276	.379		
1974	.241	12.516	2.415	.535	.305	.26	.396		
1975	.109	6.546	.832	.289	.188	.154	.298		
1977	.459	21.627	1.82	.508	.333	.3	.399		
1978	.312	13.812	1.403	.367	.223	.192	.328		
1980	.422	18.158	1.741	.555	.357	.318	.409		
1982	.204	10.454	.659	.269	.182	.157	.281		
1983	.329	13.423	.574	.257	.194	.188	.289		
1984	.339	21.686	1.034	.381	.266	.244	.371		
1985	.481	18.943	1.535	.484	.306	.263	.377		
1987	.329	20.657	.857	.408	.31	.294	.389		
1989	.418	19.382	2.177	.56	.332	.295	.363		
1990	.355	17.997	1.497	.431	.272	.237	.348		
1991	.352	19.003	3.336	.66	.376	.333	.434		
1992	.553	24.301	2.635	.871	.542	.476	.495		
1994	.317	15.714	1.44	.399	.257	.222	.338		

INDIAN PUBLIC POLICY REVIEW

SEP 2021

1995	.28	15.658	1.179	.39	.264	.25	.34
1996	.28	16.361	2.401	.492	.269	.222	.341
1997	.294	15.32	2.049	.536	.33	.296	.405
1998	.375	14.537	2.469	.534	.286	.235	.33
1999	.277	11.666	1.007	.334	.211	.179	.306
2000	.237	15.124	1.092	.391	.269	.251	.383
2001	.267	15.508	1.217	.492	.342	.323	.422
2002	.266	13.089	1.264	.352	.203	.162	.293
2003	.409	18.674	2.154	.451	.229	.18	.311
2004	.225	13.229	1.195	.287	.169	.143	.256
2005	.294	18.109	1.381	.531	.358	.324	.428
2006	.258	15.21	2.191	.547	.36	.335	.422
2007	.276	12.8	1.322	.367	.214	.173	.304
2008	.272	13.693	1.133	.293	.158	.12	.242
2009	.279	14.707	1.73	.453	.265	.22	.351
2010	.233	17.442	1.611	.551	.339	.289	.401
2011	.307	16.817	2.003	.551	.336	.293	.394
2012	.286	13.324	1.344	.316	.183	.152	.268
2013	.443	19.034	1.366	.396	.242	.208	.309
2014	.301	15.177	1.558	.431	.268	.235	.363
2015	.206	15.577	2.281	.529	.251	.181	.328
2016	.308	16.802	2.857	.546	.295	.252	.351
2017	.421	18.478	1.361	.388	.247	.215	.313
2018	.339	15.953	1.611	.318	.163	.125	.232
2019	.365	18.749	1.366	.332	.199	.161	.283

Descriptive statistics - by (State)							
State	HHI	Gallagher Index	GE (-1)	GE (0)	GE (1)	GE (2)	Gini
Andhra Pradesh	.415	17.998	1.711	.427	.278	.282	.345
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Uttarakhand	.346	20.612	.879	.384	.25	.207	.333
West Bengal	.389	17.919	1.874	.518	.333	.298	.395

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
HHI	241	.356	.179	.049	1
Gallagher	241	16.584	6.718	4.258	33.02
index					
GE (-1)	241	1.677	1.6	0	16.036
GE (0)	241	.455	.213	0	1.376
GE (1)	241	.282	.12	0	.582
GE (2)	241	.247	.117	0	.727
Gini	241	.352	.093	0	.547

Notes

¹Reynolds, Reilly and Ellis (2008) suggests for meaningful election, the elected representatives should have a role in the formation of the government as well as in the policy formation

²The idea behind plurality system is simple. After counting the votes, the party or candidate who won highest votes will be declared as winner. FPTP which is also known as plurality single-member district system is a subset of plurality system. In FPTP, candidate with the most vote is declared as winner but that candidate may not have absolute majority in terms of votes. (Reynolds, Reilly and Ellis (2008)). Proportional Representation however provides more importance to disparity between party's vote share and seat share in the house (Reynolds, Reilly and Ellis (2008)), Therefore in Proportional Representation, if one party receives 30% vote share then that party should also have approximately 30% seat share in the house. This is a noted difference in FPTP and Proportional Representation system. In FPTP, the disparity is higher as it considers highest votes only not absolute majority. Mixed system uses the characteristics of both proportional representation as well as plurality systems. For example, Mixed-Member Proportional Representation (MMPR). In this system, voters have to vote twice. One to decide the representative of the constituency and second for a political party. The seats in house filled firstly by the winner of constituency based on FPTP and secondly by parties candidates based on the vote share received by the parties.

³Refer to Reynolds, Reilly, and Ellis (2008)). In FPTP, every voter can give one vote and the candidate who receives the highest votes wins the election. Therefore, votes received by minor parties or parties representing a smaller section of the population can be seen as wasted votes as these votes don't get any "voice" and "value" in parliament. Therefore, even those voters who prefer smaller parties can vote for other parties rather than "wasting their votes".

⁴ For the entire electoral systems database and a glossary of the different terms, see https://www.idea.int/data-tools/data/electoral-system-design

⁵Since each election, different parties receive different vote share as well as seat share, the top ten parties keep changing for every election.

⁶Refer to Law Commission of India, Report No. 255 Electoral Reforms March 2015

http://lawcommissionofindia.nic.in/reports/report255.pdf

⁷Refer to Report of the Committee on Electoral Reforms, May 1990, Government of India, Ministry of Law and Justice, Legislative Department,

https://adrindia.org/sites/default/files/Dinesh%20Goswami%20Report%20on%20Electoral%20Reform s.pdf

⁸Gini coefficient is developed by Gini (1912)

⁹Lorenz (1905) develops the Lorenz curve to measure inequality.

¹⁰ Pairwise correlation shows the strength of a linear relationship. It lies between -1 to 1. If it is zero then it means there is no relationship. If it is close to -1, then there exists an inverse relationship between the given variables, and it if it close to 1 then there exists a positive relationship. (Pairwise correlation only shows the power of linear relationship, it does not talk about causality).

Shaping Narratives Through Selective Use of Numbers: A Covid-19 Case Study

Aarushi Kataria*#

Abstract

In the period between March 2020 and May 2021, India's Ministry of Health and Family Welfare produced 1,324 press releases, at an average of three per day. At different times, these press releases provided different numbers relating to the COVID-19 crisis: number of cases, number of recoveries, number of deaths, quantity of medical supply, recovery rate, and case fatality rate. This paper analyses the content of the press releases and identifies patterns that correspond to specific narratives such as hope, confidence, electoral emphasis, and deflection. The paper argues that the press releases served as a mechanism for the government to drive narratives in a manner that showed it in a favourable light, irrespective of the actual performance.

Keywords: Narratives, Numbers, Crisis Management, Political Messaging, COVID-19

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I Introduction

umans rely on stories and narratives to make sense of the world around us (Pirson 2017, Boris 2017). The narratives that a person is exposed to can shape their views. As Barbara Hardy (1968, 5) wrote, "We dream in narrative, we daydream in narrative, remember, anticipate, hope, despair, believe, doubt, plant, revise, criticize, construct, gossip, learn, hate and love by narrative." Narratives shape not just one's imagination, but also one's actions, which in turn have an impact on those around us. Sometimes narratives are constructed from myths, sometimes they find their roots in history, and sometimes they are created using numbers.

Public perception of events is shaped by economic interests, biases, as well as culture (Kasperson et al. 1998, 178). Narratives are closely tied to perception; they are directly influenced by our biases. Narratives, especially in times of crisis, can amplify the messages that are being sent from the source of information. Narratives are symbols present in messages that are designed to trigger a particular response from the recipient. Each time a message is sent from an information source, it is interpreted, assimilated, and evaluated. The merit of a narrative lies in ensuring the least amount of discrepancy between the message sent and assimilated, especially in times of crisis and uncertainty (that is, risk) –

"The information system may amplify risk events in two ways: by intensifying or weakening signals that are part of the information that individuals and social groups receive about the risk; and by filtering the multitude of signals with respect to the attributes of the risk and their importance" (Kasperson et al. 1988, 181).

This paper presents analysis of the communications strategy of India's Ministry of Health and Family Welfare (MoHFW) with a focus on the narrative(s) the ministry built through official press releases in the period March 2020 through May 2021, corresponding roughly to the first year of the Covid-19 pandemic in the country. During this period, the MoHFW provided about three press releases per day on average. The deployment of narratives in MoHFW communications is not new. The MoHFW has previously deployed narratives around Polio, consumption of tobacco, and menstruation.¹ The communications on COVID similarly reveal the use of narratives to influence receivers' attitudes.

Humans amplify information when they communicate with others. The social amplification of risk has the ability to create mental perceptions and images, and to influence attitudes. Narratives are important in times of crisis as they can influence the trajectory of the behaviours by the people.

II Literature Review

What are narratives and how are they used?

Narratives are important - they are used to clarify the stance of the issuing authority and reduce ambiguity. For an authority, creating a narrative around a policy which relies on the assimilation of information by stakeholders makes it easier to implement the policy. If the people "appropriately interpret the policy measure, and the actions that they can take to support these policy measures" (Mintrom & O'Connor 2020, 208) then effective implementation of policy is more likely.

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Narratives are deployed to make a point and to generate a response from the listener/ passive observer (Ganz 2016, 10). Much like stories transfer us to the land they were written in, narratives take us to the story they're trying to tell. They're not mere cold facts but are experiential in nature. They aren't mere illustrations; they create the urge to act. One can think of any narrative as having three components: logos (the proof or reason), pathos (emotions and values), and ethos (speaker's character, credibility, and trust). In the narratives used by the MoHFW, the numbers were the logic of the argument, the pathos was the feeling they were trying to evoke— hope and confidence—or the one they ended up evoking— deflection and electoral— and the ethos is the credibility of the ministry. The response to the pandemic had to be urgent, that is, the choices of the people will shape the outcome. In such a situation, conveying hope is a strategy to move towards a better position (Ibid, 15). To generate a feeling of positivity, the MoHFW could not rely merely on stating the facts, but rather needed to present a narrative that achieved this purpose.

In large communities, the fear 'reaction' is countered with an agentic 'response' (Ibid, 4), one that allows a person to take control rather than be controlled by an emotion. There is a shift from an impulsive individualistic decision to a thoughtful collective decision; this shift occurs through the use of stories. During moments of crisis, stories become a resource to change one's response from one of fear to hope (Ibid, 4). When a voice with decision-making power (the leader) creates a narrative, there is a mobilizing of purposeful action. The leader often uses urgency, solidarity, and hope as motivators against inertia, isolation, and fear.

It is possible for a crisis to be gamified— game mechanics and techniques are integrated into nongame experiences. Some of the key components of gamification are goals, feedback, and motivation (Teodorescu 2018). In the pandemic, these terms were likely defined by the Union Government as: the goal was the well-being of the people, the feedback was provided indirectly through the number of active or new cases in the city/ country and motivation was provided intrinsically (a sense of pride) as well as extrinsically (praises from those in power that the people were doing well). Motivation, in this context, comes from stories of small successes. During the pandemic, this meant a rising number of recoveries every day, a low fatality rate, and the number of recoveries exceeding the active case load. To promote solidarity, leaders leverage mass celebrations. This includes the entire citizenry coming together to partake in a single activity.

Narratives use numbers to lend to themselves a characteristic of being unbiased and true. However, numbers are inherently political. When numbers are used, there is the "establishment of boundaries" (Stone 1988, 164), which means some of the count gets included and some of it doesn't. Numbers create challenges and insist on the exclusion of something the measure should include (Ibid, 166), they can result in incorrect counts. This raises serious concerns, especially during a pandemic where numbers are the sole source of understanding the gravity of the situation. When numbers are used, one must question their assumed neutrality (Ekowo 2016) and try to uncover the vested interests they might be serving. As Rose highlights, there exists a "constitutive interrelationship between numbers and a democratic government. The very existence of the government is based on numbers that lend it legitimacy" (Rose 1991, 675).

A way to look at the MoHFW's use of numbers, which were the focus of their daily press releases, is that "measuring a problem creates a subtle pressure to do something about it" (Stone 1988, 168).

The MoHFW had to be proactive in its response because the rising number of new cases was creating mounting pressure, both from within the government and from the people.

Some measures are double-edged swords: "it is good to be high on the measure but also good to be low" (Ibid, 169). An instance of this during the pandemic was the number of Covid-19 cases that were being reported. It was presumed that a low number of cases was a good sign for the country. However, the low number of cases in the early stages of the pandemic were at least partially a function of the limited testing capacity in this period. Thus, this is an example of a shift from "the correctness of a tally to a struggle over the interpretation" (Ibid, 169). In the pandemic, the MoHFW employed numbers to create narratives. The evolution of the pandemic, as reflected by the reported numbers, is a function of citizen's actions and the way these are reported by the MoHFW is an attempt to influence the citizens in a particular way - providing positive news, building confidence in the capacity to tackle the spread, etc. There is manipulation -- conscious and unconscious -- when measurement occurs; it occurs in the measurer, the measured and the interpreter (Ibid, 177).

Measurement tends to be post-facto. However, the awareness of being measured can lead to changes in behaviour that would distort the real count. This distorts the reporting and numbers reported to the public. There might be no falsification of numbers, but the response of the people has changed in response to the awareness that they are being measured, a change that wouldn't have been observed otherwise. During the early months of the Covid-19 crisis in India, there were instances where people didn't disclose details of their travel and health due to the social stigma attached to contracting the disease (Bhattacharya et al. 2020, 384). The reluctance of people to get tested would lead to a lower number of cases and paint a false picture. This raises a bigger question, is any number in the political arena authentic?

This paper builds on the research done on persuasion (Cialdini 2001) and applying the principles to public policy, the shaping of policy agenda (Cobb and Rochefort 1993), and alternatives with an emphasis on healthcare (Kingdon 1984). Mintrom (2020) has worked in a similar sphere, analysing the differences in narratives by government officials (Governors) in different states in the United States. Jerolleman (2021) writes about narratives and stories becoming the legacy of a crisis and a means of critiquing the policy decisions made by decision-makers. Lee and Jahng (2020) find that narratives can be used to maintain the level of trust in the establishment which reduces responsibility attribution.

A narrative framework includes a setting, characters, plot, and moral. The setting generally includes assumptions and facts that will not be disputed by the majority. According to Jones et al., a narrative will always have characters that include the hero (who will fix the problem), the villain (who has caused the problem), and the victims (who are harmed by the problem). Lastly, "a policy narrative usually offers a policy solution in the form of a moral of the story" (Jones et al. 2014, 7). In the case of the pandemic, this could include staying home or getting vaccinated at the earliest, both preaching the message that one must put collective well-being over individual wants.

In situations of crisis, like the pandemic, narratives carry the power to be a uniting force. India is an unambiguously heterogeneous society. A well-thought-out narrative has the power to form coalitions that reach out to the common denominator in the target—our humanity—and allows for the dissolution of larger differences like class and caste. Narratives become a strategic tool for leaders to understand and analyse a situation and partake in "meaning-making" (Mintrom & O'Connor 2020, 210). In India, the MoHFW played a crucial role in the meaning-making, given that they are theoretically one of the most trusted sources; trustworthiness plays a crucial role in persuasiveness (Petty et al. 2009, 137).

The more that is unknown about an event, the more likely it is to be discussed in social circles, as an attempt to gather more knowledge. Berry, Wharf-Higgins, and Naylor find that:

"Health topics were discussed in terms of risk almost three times as often as they were discussed in terms of prevention. This is important when considered in light of the work of Kasperson et al. (2000), who argued that, independent of accuracy, large volumes of information can amplify the perception of risk" (2007, 42).

This was true even for Covid-19, the early focus of communication was on testing numbers, the risk of contracting the virus if one doesn't follow social distancing and/ or wear a mask, and the number of deaths. The pandemic saw experts become an important part of determining policy response. Covid-19 was a crisis, and someone had to be blamed for it. Till now politicians could be blamed for the policies they implemented, but it is questionable if politicians can survive the political blow of mishandling a crisis of this scale given the idea of retrospective voting and democratic accountability. In an attempt to preserve their position of power, they brought in subject matter experts; any policy failure was because of the experts, not the politicians (Dimova and Flinders 2020).

Messaging employed in the United States

Mintrom (2020) analysed the narratives of the governors of California (CA), Florida (FL), New York (NY), and Texas (TX) during the first half of 2020. He found that in CA, the governor's messaging was clear—the policies were aligned with the narrative—this consistency generates trust in the people. The CA Governor invoked the image of being a protector to enforce the shutting down of beaches; he was focused on protecting CA first. Governor Cuomo (NY) on the other hand used the creation of a broad coalition, describing the virus as an enemy that doesn't adhere to state borders, and invoking the need to protect the nation. By emphasizing unity, there was creation of mass support and a distraction from the rising cases and deaths in NY. Governor DeSantis (FL) approached the issue with a divisive lens and tried to undermine collective trust. There is a heightened focus on the *rights and liberties* of individuals, rather than their responsibility towards each other. Governor Abbott (TX) placed economic well-being over the lives of citizens, by stressing that the negative economic impact of the pandemic was greater than the virus itself. Crises are a move away from status-quo; by allowing businesses to open, Abbott wanted a return to normalcy.

What was common to all of these was the crafting of narratives and policies keeping the cultural constraints of the constituencies in mind — the governors knew what would appeal to their people and have a realistic chance of successful implementation. Mintrom also finds that the messaging changed as the situation evolved: while the overarching message (in this case, "save lives") remains constant, the way it is conveyed changes.

III Methodology

Definitions of medical terms used in press releases

Number of tests done per day refers to the numbers of samples tested for Covid-19 across the country on a given day by permitted labs. These include tests performed using the Rapid Antigen Rests (RAT) or the Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) technique.² The type of test performed can impact the numbers, e.g., whether reported case numbers are an undercount (e.g., due to false negatives) or an overcount (due to false positives).

Secondly, testing numbers were being reported on a country-level. For instance, on August 23, 2020, the MoHFW said, "maintaining a daily testing spree of more than 8 lakhs, India tests more than 3.5 crore." These numbers hide disparities between states and their access to health and testing infrastructure.

Test positivity rate (TPR),

"the percentage of tests conducted whose results are positive. The chances that a Covid-19 test comes back positive is linked to the status of the person being tested" (Gupta & Jain 2021).

To lower the positivity rate, one merely needs to increase the number of people being tested (Dowdy & D'Souza 2020) (especially, if the tests are from areas with lower transmission). At the same time, a very high positivity rate can be linked to carrying out too few tests. In the early days of testing, the government followed a trace and test policy, which meant those who were being tested had a higher probability of having contracted the virus due to their social interactions.

TPR will also depend on the testing strategy adopted by the MoHFW— should only symptomatic people be tested or asymptomatic people as well. India's testing strategy relied on testing symptomatic and high-risk patients, yet the MoHFW found out that as of August 2020, 80% of Covid-19 patients in India were asymptomatic (Ghosh 2020).

Recovery rate is defined as "the number of recovered cases per total positive coronavirus cases" (Chattopadhyay & Singh 2020, 10). Recovery, in India, is when patients complete a 14-day isolation without getting admitted to the hospital or, if they're hospitalised, once they are discharged. The MoHFW celebrated the rising recovery rate; however, this recovery rate was a measure of only those who had tested positive and ignored asymptomatic patients. The Recovery Rate is bound to rise over time, since a person once tested positive will continue to be a part of the denominator, and the cumulative recoveries will always be rising. Thus, one must measure the proportion of deaths to recoveries among those who test positive in a given period of time, rather than recovery rate alone.

Case Fatality Rate (CFR) is the proportion of Covid-19 infected people who have passed away (due to the virus). According to the National Centre for Disease Informatics and Research (NCDIR),

"Covid-19 is reported to cause pneumonia / acute respiratory distress syndrome (ARDS) / cardiac injury / disseminated intravascular coagulation and so on. These may lead to death and may be recorded in line 'a' or 'b'" (2020)

of the Cause of Death section of Form 4 (institutional deaths) and Form 4A (non-institutional deaths) where 'a' refers to an immediate cause and 'b' is an antecedent cause. The immediate cause is the condition that directly led to death. BBC reports that there were two conditions that must be satisfied for a person to be counted as a Covid-19 caused death: they should have tested positive for the virus and died of 'viral pneumonia' (Biswas 2020). This is reinforced by the same NCDIR circular that lists respiratory acidosis as the immediate cause and Covid-19 as an antecedent cause. Additionally, India's health infrastructure has been undercounting deaths even before (Rukmini 2021); this was only exacerbated by the pandemic.

Data

The MoHFW is the primary agency of the government responsible for communicating information about health in general and the pandemic situation in particular. News media routinely carried reports based on press releases from the MoHFW. The MoHFW press releases, with their frequency and information content, are an important primary source to understand the government's view of the pandemic and the messages it wanted to send out and were thus chosen as a data source. The data for this paper comprised press releases from the MoHFW during the period March 1, 2020 to May 31, 2021, obtained from the Press Information Bureau (PIB) website. There were a total of 1,324 press releases by the ministry over 456 days, which is about 3 press releases per day. The consistent issuance of press releases by the MoHFW allowed for a thorough longitudinal narrative study.

The author read each press release during the entire period. The author identified key data points that appear in most of the press releases: daily recovery numbers, overall recovery numbers, recovery rate, number of new cases, and the fatality rate. While certain press releases had additional content, a majority of the press releases included one or more of the data points. The author identified 45 press releases that had substantive content beyond simple reporting of data points, or that occurred at inflection points during the pandemic. These 45 press releases are distributed over the 15-month duration and include sufficient content for cohesive narrative analysis. The author also read the news regarding Covid-19 as reported by Indian media during this period.

Coding Method

Qualitative research relies on conclusions drawn from observed patterns and relationships, based on subjective judgment of a reviewer. In the present study, the MoHFW press releases served as the primary material. Categorisation was performed using 'constant comparison' (developed by Glaser). Per this method, a taxonomy was developed based on preliminary observations (initial review of all press releases), with refinements performed based on review of the entire dataset. One begins by coding each datapoint in as many categories as may be relevant and comparing it with previous data points that have been coded in the same category. This constant comparison:

"Starts to generate theoretical properties of the category. One starts thinking in terms of...the conditions under which it is pronounced or minimised, its major consequences, the relation of the category to other categories" (Glaser 1965, 439).

As this process carries on, one stops comparing incidents with other incidents, and starts to compare them with the category they're being classified under. Constant comparison will bring out the underlying uniformities of the data points under a category. Credibility for categorization comes from presenting data, along with the coder's explanation for the same, which is the analysis of the numbers used and the narrative they create.

A peer review of the data was conducted. This was done to ensure credibility of the categorization, and replicability. In a qualitative study, it becomes important that the qualitative data is not impacted by biases and influences even if it is a product of them. Qualitative research relies on a certain degree of replicability. For this purpose, reviewers were asked to agree or disagree with the author's ratings. The author checked for inter-rater reliability (Trochim). The raters were provided the category definitions (see Section 4.4) and an example that wasn't a part of the dataset. Lastly, the author also coded each of these press releases according to the 'numbers' they used to see if a pattern emerged. The emerging pattern confirmed the qualitative categorization.

Based on a review of the entire set of 1,324 press releases, the author generated a taxonomy of different narrative strategies that were utilized over this period. The taxonomy includes 4 categories: hope, confidence, electoral emphasis, and deflection.

Category definitions

Hope: Hope as a narrative is a tool used to signal better things are coming soon. On the other hand, Thucydides called it 'danger's comforter' and highlighted that one realises the delusion caused by hope only when they are ruined (Strassler 1996, 353). A narrative of hope can make people turn blindly towards optimism and away from the reality they must face. If you repeat something enough times, it gains a semblance of credibility. It can deceive the powerful as well. However, the very fact that hope relies on a contingency makes its narratives fragile. Hope must be followed by something more concrete that will help create the vision one imagined.

Confidence: Confidence is defined as the feeling or belief that one can have faith in or rely on someone. A narrative of confidence aims to instil in people trust towards those creating the narrative. During a pandemic, confidence narratives become a way of gaining people's trust. People's trust in the government, in times of a health crisis, will be directly linked to their performance in protecting the citizens, and the level of trust is in turn directly linked to compliance with stringent government health measures (Pak et al. 2021, 294). The confidence narrative is used to qualify any and all statements made about the health infrastructure and the MoHFW's ability to control the pandemic. Confidence adds a sense of genuineness and truth to the narrative being created.

Electoral: An electoral narrative attempts to ward off "domestic and/ or internal threats to a leader's survival" (Mesquita & Smith 2003, 21) and in an attempt to keep a reign on power, leaders will attempt to distort reality, even if marginally. A political intuition is that a rational leader will do everything to remain in power. A lot of scenarios in politics can be traced back to the quest for political survival. In a democratic country like India, this decision lies in the hands of the electorate. The government can use all tools at its disposal, especially the very machinery of the state to propagate its narratives.

Deflection: Deflection as a narrative can be applied to shift the attention away from the one creating the narrative, such as by creating a momentary distraction. Machiavelli's 'blame avoidance'

suggestion has now become a political strategy as important as electoral considerations. Deflection tries to make the main problem disappear and presents an alternate subject for the receiver's attention.

An example of Hope narrative is from the MoHFW's Press Release on July 16, 2020: "As on date, the actual caseload of COVID-19 patients in the country is only 3,31,146. These contribute to a little more than a third (34.18%) of total cases detected so far."

This is to create an atmosphere of relief and hope amongst citizens-- only 1/3 of the actual case load is active cases.

An example of Confidence narrative is from the MoHFW's Press Release on May 25, 2020:

"India has significantly ramped up its domestic production capacity of PPEs and N95 masks, and the requirements of the States/UTs are being sufficiently met. Today, the country is producing more than 3 lakh PPEs and N95 masks per day. States/UTs as well as Central Institutions have been provided with around 111.08 lakh N-95 masks and around 74.48 lakh Personal Protective Equipment (PPE)."

This claim was made because minutes of a meeting stated that the production by Indian manufacturing units couldn't keep up with the rising demand.

An example of Electoral narrative is from the MoHFW's Press Release on December 29, 2020:

"Union Ministry of Health & Family Welfare conducted a two-day dry run for activities entailed in Covid-19 vaccination in four states Assam, Andhra Pradesh, Punjab and Gujarat on 28th and 29th December 2020".

With State Assembly elections in those states upcoming in March and April 2021, this seemed to be a signal that voting the BJP into power would ensure vaccine supply.

An example of Deflection narrative is from the MoHFW's Press Release on May 21, 2020:

"Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), the flagship health assurance scheme of the Government of India today marked 1 crore treatments."

This deflects from the fact that claims were down by 78% (Leo 2020) between February and May 2020, which means fewer people had been visiting the hospital since the pandemic began. The MoHFW chose to celebrate, nonetheless.

IV Results and Discussion

Categorization results

Each of the 45 press releases identified for analysis were studied and categorized under one of the categories.³ The categorization was independently performed by 3 reviewers, including the author. The two other reviewers were provided a description of each category before they categorized the press releases.

	Iable 1: First Blind Review Process: Overview				
	Agree (Total Data Points = 45)	Agreement Rate (in %)			
Reviewer 1	42	95.45			
Reviewer 2	44	97.78			

Table 2: First Blind Review Process: Category-wise Breakdown

	Category						
	Hope	Confidence	Electoral	Deflection			
Author	13	18	8	10			
Reviewer 1	12	17	8	9			
Reviewer 2	13	17	8	10			

Table 1 and Table 2 present the results of the categorization. As seen in Table 1, there was a high degree of inter-rater agreement between the author and each of the other 2 reviewers, who also had a high mutual agreement rate (91.11%), that is, they both classified 41 data-points under identical categories. As seen in Table 2, the number of press releases categorized in each group were similar across the reviewers; the specific press releases in each group were nearly identical.

As a validation step, and to ensure that other factors such as the data of a press release or the reviewer's prior knowledge did not create an inadvertent bias, a fourth reviewer was provided the 45 press releases after removing the source and dates, sorted randomly. As with the other reviewers, this reviewer was provided an explanation of the four categories.

	Category			
	Hope	Confidence	Electoral	Deflection
Author	13	18	8	10
Reviewer 3	12	19	7	10

Table 3 illustrates the inter-rater agreement between the categorization by the author and reviewer 3. As seen in Table 3, there is a 93.33% agreement rate, with most press releases being categorized similarly by reviewer 3 even in the absence of date and source information.

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What numbers did MoHFW use to create narratives and when?

The author also coded each press release in the dataset to find patterns. About 70% (9 out of 13) press releases coded as 'Hope' narratives included the number of recoveries; of these, 67% (6 out of 9) of the press releases that listed the number of recoveries also listed the active caseload. This is noteworthy because at a time that the number of recoveries is high, the active caseload is likely to be low. In the dataset, press releases during the peak of the second wave (March to May 2021) in India did not mention the number of deaths or cases. This is different from the first wave when these numbers were reported. Numbers for both measures were higher in the second wave. Further, 80% (4 out of 5) press releases that included the number of people vaccinated matched a narrative of Hope or Confidence. (See Appendix: Table 4)



Source: Author's analysis

Early stage of the pandemic - Hope

The government initially relied on the number of cases, deaths, and case fatality rates to create a narrative of *hope*. As of March 29, 2020, the Indian Council of Medical Research (ICMR) was utilizing only 30% (Nandi 2020) of its network of testing facilities. Overall, only 113 government labs and 45 private labs had approval to test samples for Covid-19. The low numbers of reported cases in this period are possibly a function of low testing. Another difficulty with using the number of cases is the backlog (gap between sample being submitted and result being known) due to limited testing capacity. "On 1st March, the backlog was just around 15, which increased to more than 50 on 8th March, and on 17th March, it has grown to a worrying 650" (Kurian 2020).

In March 2020, India had one of the lowest testing rates in the world (Biswas 2020). This was linked to ICMR's policy to test all symptomatic people who had undertaken international travel, all contacts of laboratory-confirmed positive cases, and health care workers. However, the first two categories were to be tested only if they became symptomatic (ICMR 2020). Additionally, these tests came with the instructions that one had to isolate until they got their results. In April 2020, the test cost 4500 INR (Alluri and Pathi 2020) – not cheap. The hope narrative built primarily on low case counts should therefore be viewed in light of the parameters of extremely restricted testing, high costs,

and delays, all of which suggest that the numbers reported by the MoHFW were far lower than actual and served the narrative purpose of hope. For instance, the example press release provided for a narrative of Hope in the previous section, fails to recognize that even the 1/3 is a substantial number and the actual number of active cases will be much higher as there is always underreporting for various reasons and these numbers don't make accommodations for that.

The switch from Hope to Confidence

Early in the pandemic, a narrative of hope was pursued, with frequent reference to India's low caseload prior to May 2020. As the caseload rose, by May 2020, the ministry switched to a narrative of confidence, frequently citing the high recovery rate.

Using Recovery Rates

The hope narrative was likely seen as appropriate because Covid-19 was initially believed to be a short-term crisis. This is seen in the MoHFW declaring on March 13, 2021 that Covid-19 was not a health emergency (PTI 2021). As the months progressed with multiple lockdown extensions, a different strategy was adopted. This was important as rallying around the flag in an emergency doesn't persist forever; as the sense obscurity reduced, the MoHFW needed to regain the trust of the people.

Even as the pandemic raged on, the MoHFW shifted from releasing the number of new cases to using the number of recoveries. This corresponds to a change in the narrative from hope to confidence. India's recovery rate has been steadily rising, from 26.59% in May 2020 to 96.56% (MoHFW) by January 2021. Recovery rate, which considers the patients who are discharged (as a proportion of those who were hospitalised) is a flawed measure. It accounts only for those hospitalised and there are only two outcomes in this case: the patient passes away or they recover.

Former Union Health Secretary, Sujatha Rao, pointed out that the binary classification was insufficient and urged that recovery rates be broken down into serious, medium, and mild cases, and those with comorbidities (Devulapalli 2020). Additionally, while recovery rate was low in the beginning as Covid-19 was a new phenomenon, it was likely to rise as treatments were developed, leading to a higher proportion of recoveries.

The MoHFW reassured the people that it was working to exit the toughest part of the crisis in 2020, as preparations for vaccination began in January 2021. On December 2, 2020, the MoHFW released a statement that stated India was successful in reducing its malaria burden and was the only highly endemic country to report a decline. This seemed to send a message that if it could defeat malaria, it could defeat coronavirus too. This came in light of allegations that India's healthcare system was not equipped to handle the situation, the narrative was to recreate trust in the institutions.

Emphasizing Adequacy of Medical Supply

The MoHFW, in March 2020, released a statement where it assured the people that "manufacturers have been identified domestically and procurement has been initiated to ensure that there is no shortage of PPEs, N95 masks and other protective equipment needed by doctors to carry out their duties." In May 2020, the MoHFW said, "India has significantly ramped up its domestic production capacity of PPEs and N95 masks, and the requirements of the States/UTs are being

sufficiently met. Today, the country is producing more than 3 lakh PPEs and N95 masks per day." This promoted trust in the ministry and its ability to deliver on its promises, while no mention was made of the estimated quantities of such items that were needed. If one examines the sample press release for the narrative of confidence provided in the preceding section: the suppliers had not met the orders: the order was for a supply of 1 million units, and only 200,000 or approximately 20% has been delivered (Thacker 2020). This is despite the World Health Organization (WHO) recommending the ramping up of production with the predicted rise in the number of cases. The government failed at making accurate forecasts. The news that India was producing those numbers is a way of reinstating faith in the healthcare infrastructure and overshadowing the fact that production alone doesn't imply delivery to those in need.

Claiming Success of the Vaccination Program

After the launch of the vaccination program in January 2021, the vaccination numbers were used to promote hope. The correct measure of success for a vaccination drive is the proportion of the population that has been vaccinated, which remained low given India's high population and low daily rate of vaccination at that time. Instead of percentage covered, the MoHFW provided absolute numbers.

Shift to electoral and deflection narratives

The narrative themes of hope and confidence continued through the rest of 2020, as the reported caseload remained relatively low and recovery rates remained steady. From January 2021 till the start of the second wave, corresponding to a period when several state elections were held, the press releases carried content favourable to the ruling coalition, such as the rollout of the vaccination program, availability of medical supplies, and low active caseload, all indicative of India's apparent success in tackling the pandemic. The MoHFW stressed the fact that the health budget for 2021 had increased by 137% (MoHFW 2021) and that there were more than 20 domestic manufacturers (MoHFW 2020) for ventilators. The production had increased by so much that India was now in a position to export them, after the initial export ban that had been placed. This is again used to drum up support for the provess of

"The leadership of Prime Minister Shri Narendra Modi ji [which] fulfilled the commitment of not only providing relief in the times of COVID-19 but has also turned the crisis into an opportunity for further growth and development" (MoHFW 2021).

Blame avoidance behaviour stems from politicians' interest in 'avoiding blame for (perceived or real) losses that they either imposed or acquiesced in' (Weaver 1986, 392). With several state elections (Assam, Puducherry, Kerala, Tamil Nadu, and Bengal) scheduled for March-April 2021, the MoHFW attempted to hold *someone else* accountable for the shortcomings. If they didn't avoid the blame, they "are likely to find themselves unemployed" (Ibid 378).

Rising numbers of cases in August and September 2020 were written off as the inability of state governments to manage their citizens. The press releases by the MoHFW particularly call out

governments that are failing to control the pandemic; and they happen to be non-BJP states. This includes Maharashtra, Delhi, and Kerala.

On December 29, 2020, the MoHFW announced that

"Union Ministry of Health & Family Welfare conducted a two-day dry run for activities entailed in Covid-19 vaccination in four states Assam, Andhra Pradesh, Punjab and Gujarat on 28th and 29th December 2020."

Each of these states, except Punjab, had a State government run by the BJP or its NDA allies. States where the BJP was campaigning made promises such as free distribution of Covid-19 vaccine in Bihar (Hebbar) and West Bengal (Scroll Staff). The lauding of the PM in the MoHFW's press releases aided this mission.

Post elections switch back to Confidence and Hope, mixed with Deflection

As the election cycle drew to a close towards the end of April 2021, the narrative went back to being a mix of confidence and hope. The BJP lost the elections in WB, one of India's most populous states. It also lost the TN and Kerala elections and won Assam. The second wave of the pandemic began in late March 2021, a year from the initial claim that there was nothing to worry about.

As the focus shifted from the elections to government mishandling of the pandemic, a shift in narrative is observed towards hope and confidence again. The MoHFW announced on May 14, 2021 that "the inflow of foreign aid to combat Covid continues to be cleared." This came as a narrative of confidence, amid criticism of India exporting ventilators and vaccines, that the help India extended was being reciprocated. As further reassurance, the MoHFW announced that as of May 28, 2021, 200 million people had been vaccinated, again using absolute numbers rather than proportion of population to create an illusion of vaccinating a large enough number to effectively combat the virus. This is a substantial number, but not in comparison to India's total population.

Deflection is most clearly highlighted on the day cases peaked during India's First Wave. On September 16, 2020, India had 97,894 new cases (Dong et al. 2020) yet the press releases by the MoHFW used a majority of its release on September 16 and 17, 2020 to talk about the "highest single day recoveries" and how "recovered cases exceed active cases by more than 30 lakhs." What makes this deflection, rather than the hope narrative already in use at that time, is that the number of new cases is absent from the latter press release altogether. A similar trend was seen on May 8, 2021, when India registered 4,03,405 new cases (the highest in a single day during the second wave). The press releases for May 8 and 9, 2021, by the MoHFW only talk about India's cumulative vaccination coverage.

In the first few months of the pandemic, the MoHFW had shared the details of the low fatality rate. In August 2020, India's case fatality rate was 2.15% (MoHFW 2020) which fell to 1.1% by April 2021 (Express Web Desk 2021). However, this number was seen as unrepresentative, given widespread claims that the government was undercounting Covid-19 deaths. Near the peak of the second wave in April and May 2021, MoHFW barely reported death numbers in their press releases.

Subsequently, reports of undercounting emerged from states⁴ that make up around 80% of India's population (Banaji 2021). This was a direct result of the way deaths are being counted in India. If Covid-19 is not listed as the immediate cause (see NCDIR quoted above), the deaths weren't counted

as a part of the Covid-19 related death count. Additionally, a person must have tested positive to be included in this death count. This excluded those who did not have the means to get tested or had comorbidities.

While the MoHFW press releases reported fatalities till March 2021, it shifted its focus to primarily reporting vaccination data. This coincided with the government's decision to open up vaccination to individuals above the age of 45.

Many researchers have pointed out that India's officially reported number of Covid-19 deaths is a substantial understatement. Banaji (2021) estimates that even according to the most conservative estimate, 80% of Covid-19 deaths are 'missing.' This number is bound to be higher for the second wave, which saw the health infrastructure of the country crumble, with hospitals refusing patients as they were running full, and an acute shortage of medical oxygen that left people gasping for air.

The recording of deaths is important not only for record-keeping purposes, but also because death numbers are a lagging indicator of the true intensity of the pandemic. The New York Times estimated that in the best case, the number of deaths in India is twice the official death count, but in the worst-case scenario it is over 13 times (Gamio and Glanz 2021). Mukherjee et al. corroborate these numbers and calculate an underreporting factor of four to five, conservatively (Balakrishnan 2021). Similarly, Deshmukh et al. (2021) believe that India's death rate could be seven to eight times higher than the official numbers. The undercounting of deaths is not a recent phenomenon, as the low count hides the "abysmal health infrastructure and poorly developed health surveillance and monitoring system" (Rauny 2021).

India's crematoriums made front page news in prominent global publications. Yet the MoHFW failed to address the issue of the death count. The reason being simple: accepting or denying would mean countering its confidence narrative at the time, which was that states were to be held accountable and not the Centre. The absence of these numbers from the narratives should raise eyebrows. By May 2021, it had become clear that India had suffered greatly in the second wave of the pandemic. However, as the pace of vaccinations had picked up, the government resorted to expressing confidence by including daily vaccination numbers in the press releases.

Exceptions to the narrative pattern

While the foregoing classification is reflective of particular narratives adopted at different times, there were divergences at specific times. An important pattern relates to religious festivals and other celebrations. Festivals strengthen the idea of community and have a narrative associated with them. For instance, Diwali is the narrative of the defeat of good over evil (light over darkness) and Independence Day is a celebration of India's unity against the tyranny and oppression of the British. Festivals recount a story that has been passed on for generations.

The MoHFW press releases on or near festival days included content that reflected hope and positivity. On August 15, 2020, MoHFW reported the highest recoveries of COVID-19 in a single day. In the days leading up to Diwali (November 14, 2020), the MoHFW routinely reported that the number of recoveries outnumbered the new cases. On Christmas day in 2020, the MoHFW announced the number of healthcare professionals who had been trained for the upcoming vaccination drive.

Contrast between MoHFW and PM

There is a stark difference between how the Prime Minister and MoHFW crafted their narratives. The PM deployed the narratives of hope and confidence but also included an emotional undertone, he appealed to the shared humanity of all Indians and asked citizens to unite in the fight against the virus. This is seen in Basu (2020), which shows the PM employed the word "people" 15 times and "family" 11 times in the speech that announced the lockdown on March 23, 2021. He rarely employed numbers in his speeches. The communications harnessed the elaboration likelihood model (Petty and Cacioppo 1986) that relies on a message being repeated which leads to the receiver considering the implications of the information they are exposed to, and this can cause changes in attitude.

In the early stages of the pandemic, the PM asked people to participate in symbolic gestures from the comfort of their homes. This was an attempt to make people feel like they were an active part of the concerted efforts against the virus like the frontline workers. He deployed what Ganz (2016, 11) calls the 'story of us and now', which evokes shared experiences and action respectively.

On the other hand, the MoHFW mostly used numbers in their press releases, relying on people reading these numbers and interpreting them in a manner the ministry intended. As was noticed by the author, they were largely successful as news channels used press releases by the MoHFW as a credible and unbiased source of information on the state of the pandemic and echoed similar sentiments or narratives.

V Conclusion

Generally, numbers are viewed as the singular version of the truth; they're rarely contested unless prompted. Numbers play a crucial role in public policy -- when a problem is measured, people are more likely to address it because now it matters. Numbers become a way to shape behaviour and responses through the narratives they're used to create. These narratives, that strategically employ numbers, do so because numbers signify reality.

This paper reports several important findings regarding narrative management by the Government of India, based on analysis of press releases issued by the MoHFW during the first year of the Covid-19 pandemic. First, the MoHFW made abundant use of various numbers related to the pandemic. Second, the use of such numbers was inconsistent - different numbers were used at different times. Third, categorization of the press releases, performed by the author, reveals that the use of different numbers at different times corresponded to particular narratives.

The narratives are classified into four types — hope, confidence, electoral and deflection. Prior to May 2020 a narrative of hope was pursued, with frequent reference to India's low caseload. After this period, the ministry switched to a narrative of confidence citing frequently the high recovery rate. The narrative theme of confidence continued through the rest of 2020. From January 2021 till the start of the second wave, corresponding to a period when several state elections were held, the press releases carried content favourable to the ruling coalition, such as the rollout of the vaccination program, availability of medical supplies, and low active caseload, all indicative of India's apparent success in tackling the pandemic. As the caseload rose rapidly starting March 2021, the content of the

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press releases shifted blame to individual states that had high caseload and deflected responsibility for it towards state governments. By May 2021, it had become clear that India had suffered greatly in the second wave of the pandemic. However, as the pace of vaccinations had picked up, the government resorted to expressing confidence by including daily vaccination numbers in the press releases.

Hope and confidence, associated with positive emotions, are the most common narratives in the MoHFW press releases. These convey a sense of composure and aim to ensure that the government is not depicted as failing to implement correct and adequate measures to deal with the pandemic. Narratives created during the pandemic make one thing clear: the numbers can lie, and even if they're not lying, they can be easily misrepresented.

While the Ministry was consistent in releasing information to the public, selective use of various numbers meant that the picture represented by them was often at odds with on-ground reality. As an example, in early 2020, the low reported active caseload, which was likely a function of low testing volume, misrepresented the severity of the pandemic. It was also incongruous with the lockdown that started in late March 2020 and stretched more than two months. Another example is the persistent use of daily vaccination numbers rather than the percentage of population that had received the vaccine - while the former conveys hope through large values, the latter is a better representation of the % of population protected through vaccination, and also of progress towards herd immunity.

Given the high natural recovery rate associated with Covid-19, frequent release of such numbers possibly hid the absolute count of deaths, a true measure of the impact of the pandemic. The Ministry never seriously engaged with field reports and studies that indicated a much higher true number of deaths across the country than was officially reported.

In summary, the press releases served as a mechanism for the government to drive narratives in a manner that showed it in a favourable light, independent of the actual performance. By selecting different numbers to report at different times, the ministry made tactical use of its communications, rather than a value-neutral approach.

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Notes

¹ The MoHFW has deployed a narrative of Hope with its Polio Campaign wherein the inoculation was a drop of life. It also combined the problems of smoking and lack of menstrual hygiene through its advertisements with the actor Akshay Kumar to create a narrative with which the layman could identify.

² These tests themselves differ in their accuracy. RAT is an indirect method of testing, it checks only if the immune system has come across the virus; antibodies are present between the 9–28-day window after encountering the virus. RT-PCR extracts the ribonucleic acid, which is a part of the genetic make-up of the virus. It has been claimed that RAT produced more unreliable results, around 10% of Covid-19 infected people would test negative for the antibodies (false-negative) due to low specificity and sensitivity when compared to RT-PCR. However, the RAT is scalable and doesn't require extensive infrastructure.

³ Five of these data-points were categorized as belonging to more than one category; combinations include deflection and electoral, deflection and confidence, or confidence and electoral.

⁴ This includes West Bengal, Delhi, Tamil Nadu, Maharashtra, Madhya Pradesh, Gujarat, Telangana, Uttar Pradesh, Assam, Odisha, Kerala, Karnataka, Bihar, Haryana, and Chhattisgarh.

GST Unlocks Strong Revenue Potential of India's North Eastern States

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Abstract

The north eastern (NE) states have largely benefitted from the introduction of the goods and services tax (GST) in the country. Arunachal Pradesh witnessed the highest increase in tax collections in the country, while the performance of Manipur, Mizoram and Nagaland was well above the national average. This can be attributed to three distinct reasons. First, with the shift from origin-based levy to destination-based taxation in inter-state sales of goods and services, these states collected much more revenues as they are predominantly consuming states. Second, GST being a value added tax has an inbuilt mechanism for higher tax compliance. All the NE states have witnessed higher revenues from SGST, a component of GST representing taxes collected within the state. Third, the central and the state governments have also encouraged tax payments indirectly by disseminating information on the new tax system. With economic growth picking up in the NE states, GST is likely to register a strong revenue performance in the future and help in much-needed resource mobilisation for the development of the region.

Keywords: Goods and Services Tax, Sales Tax, Revenue, Cascading effect, Tax compliance

JEL: H25, H26, H71

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I Introduction

oods and Services Tax or GST was introduced in India on July 1, 2017, after decades of planning. It has removed many of the disadvantages associated with the earlier domestic consumption tax system. It is now levied on value addition at every stage of production and distribution of goods and services, providing more comprehensive input tax credit to remove the cascading effect. It is also a tax formed by merging several central and state taxes, including CENVAT/UED, state VAT, CST, Octroi, etc. thus reducing the multiplicity of taxes levied on goods. The tax rates applied to goods at present are also the same throughout the country, reducing tax competition prevailing in the erstwhile sales tax system.

As the tax has subsumed many of the central and state taxes, a new arrangement has been made for collecting and sharing the tax proceeds by the GST Council. The decision-making body comprises of representatives from the Centre and each of the States and Union Territories to take all decisions relating to the structure and operational details of the tax. The Union Finance Minister is the Chairperson of the Council. With central goods and services tax (CGST) and the state goods and services tax (SGST) levied at identical rates, half of the tax is credited to the central government towards CGST, and the other half is credited to the state where the final consumption occurs towards SGST. In case of inter-state sales of goods and services, IGST or integrated goods and services tax is levied whereby the proceeds are allocated equally to the centre and the concerned destination state.¹

To insure against any revenue loss to the states, the GST Council decided to compensate the states for any shortfall in revenues, estimated at 14% increase over the base year revenue from the state taxes subsumed in SGST every year. The compensation was decided upon for 5 years until the tax system stabilises. All decisions regarding the structure and operation of the tax are taken by the GST Council, and thus, individual states have agreed to forgo tax autonomy.²

Four years have passed since GST was introduced and many states had to be compensated for the loss of estimated revenue. However, the NE states have reported an upsurge in tax collections leading to an improvement in their tax-GSDP ratios. This paper attempts to analyse the reasons for the high buoyancy in the GST revenue in NE states. It focuses on the time period before the onset of the COVID-19 pandemic, after which there has been a significant decline in trade and tax revenues. The paper is divided into five sections. Section two analyses the reasons for low tax revenues in the north eastern states. The third section deals with the enhanced buoyancy of tax collections and the reasons for the same, in terms of destination-based nature of the tax and improved tax compliance. The fourth section discusses the reasons why some of the states in the region are getting GST compensation even after witnessing higher tax revenues. The last section summarises the conclusions.

II NE states and low tax collections

The NE states comprise of the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. With the exception of Assam, the remaining states have many

similar characteristics. They are basically small states sharing international boundaries; they are geographically mountainous in character; and they are relatively poor states. Because of these reasons, they have not been able to garner large tax revenues on their own and depend on central transfers to finance a large part of their expenditures. They have all been included in the list of 'special category states' which were given development funds on 90:10 grants-to-loans ratio by the erstwhile Planning Commission of India. In their non-plan revenue accounts, they used to have perennial deficits, and as a result they received the so-called gap-filling grants recommended by the Finance Commission of India. With higher devolution they are expected to get more centrally-sponsored schemes, which are often given to states on a matching basis.

The tax ratios of these states have remained low for a long time. This is seen in Figure 1 where the ratio hovered around 3% of their respective incomes for states like Manipur, Mizoram, and Nagaland, and a little higher for the remaining states in the year 2016-17. On the other hand, many big states in the country had tax ratios at around 8% of their state incomes. Low own tax ratio could be due to several factors like low per capita income, higher contribution of the agricultural sector to state income, constraints on production-distribution activities, and small population. State taxes being a state subject, the states' effort in tax collection also cannot be neglected. A brief discussion on low tax revenues in the region can also be found in Nepram (2009).





Source: Estimated using Reserve Bank of India (RBI) data on tax collections and net state domestic product (NSDP) data from Economic Survey

Another important point for the low tax collections is the implementation of prohibition. Some state governments have imposed prohibition due to strong pressure from civil society or religious organisations. Bhaumik (2009) narrated how the Church in Mizoram was very much against alcohol consumption; given its enormous influence over the electorate, no political party was willing to risk losing an election and, therefore, adopted the prohibition policy. In the brief

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three-year period that Mizoram lifted prohibition (2015-18), the state earned more than Rs. 60 crores annually (Telegraph, 2021). Arunachal Pradesh, Assam, Meghalaya, Mizoram, and Tripura earned Rs. 136.73 crores, Rs. 1399.84 crores, Rs. 226.21 crores, Rs. 65.34 crores, and Rs. 214.35 crores respectively from state excise in the year 2018-19 (Figure 2). Manipur and Nagaland which have prohibition collected just Rs. 8.18 crores and Rs. 4.65 crores respectively from the tax in the same year. Meanwhile, Punjab could collect Rs. 5072.40 crores, which was as high as 15.95 % of its own tax revenues. Tamil Nadu collected Rs. 6863.12 crores or 6.47 % of its own tax revenues from taxes on alcohol. The merits and demerits of prohibition is a highly debated topic in the region.





The second reason for low tax effort could be larger central transfers. The Finance Commission estimates the gaps in the revenue account of each state in the country for the ensuing five years, and these are filled by the 'gap-filling grants'. The basic logic is that states should not suffer from lack of funds, and all the NE states have been receiving these grants. However, this transfer creates a soft budget constraint on spending, resulting in less urgency for states to collect more taxes. There are a number of studies that support the resource constraint hypothesis. Panda (2009) observed that per capita transfers reduce per capita tax and non-tax revenues of the states. Nepram (2011) in a study on determinants of tax ratio also found that higher central transfers reduce the tax ratio of the states. Garg *et al*(2016), based on a study using data from fourteen major states in the country, also observed negative association between per capita tax revenue and central transfers. In a more detailed study, Debnath and Battacharjee (2019) found that tax ratio is inversely related to unconditional central transfers, while conditional transfers seem to have a positive effect on it. Coming to studies based on the NE states, Dutta and Dutta (2015) said Assam received liberal central transfers but own revenue mobilisation effort has not been satisfactory and needs to increase tax ratio.

Source: RBI, State Finances, A study of state budgets

Another reason for the lower tax ratio has been the high contribution of public services in the state income. Many of the NE states depend on central transfers and these funds are channelled in providing healthcare, education, administration, development of infrastructure facilities, etc. As many of the states are very small with very little production-distribution activity, in part due to proximity to international borders and poor security situation, the government is the most important source of organised employment. For example, in a relatively large state like Assam, the expenditure on public administration is 6.32% of the state income; it is over 10% for the other NE states, with Nagaland going over 18%. A large expenditure on public administration adds to the state income but does not yield much tax revenue to the state governments directly as compared to other services. Government employees do pay the tax on profession, trade, callings and employment, but it has been capped at a maximum of Rs. 2500 per person per year, while Arunachal Pradesh does not levy it. Opinions have been expressed for raising the upper limit for employees exempted from paying income tax in the region. The potential can be enormous (Sen, 2018).

State	NSVD	Public	Gross central	Professional
		administration	transfers	tax
Arunachal Pradesh	21478	2901(13.51)	14313.6	0
Assam	261984	16565 (6.32)	38925.5	186.35
Manipur	24410	3603(14.76)	9245.9	33.78
Meghalaya	30729	3697(12.03)	7423.8	3.88
Mizoram	16993	2239(13.18)	7805.2	14.49
Nagaland	23993	4439(18.50)	10265.0	35.33
Tripura	47938	6703(13.98)	9809.5	43.88

Table 1. Expenditure on public administration and collection of professional tax (2018-19)(Rs.cr.)

Source: RBI, Handbook of Statistics on Indian Economy

RBI, State Finances, A study of state budgets

Note: The figures in the brackets represent percentages of net state value added at basic prices (NSVD).

III Buoyant tax revenues from GST

Own tax collections in these states have seen sudden improvement after the implementation of GST, with Arunachal Pradesh achieving the highest growth rate in the country. Manipur, Meghalaya, and Mizoram all witnessed higher tax revenue, and GST indeed has proved to be a money machine. A review of data hints that higher tax collections in these states could be due to two reasons. The first one is transformation from the origin-based levy to the destination-based levy by abolishing the central sales tax, while the other is better tax compliance. These shall be studied in the following two sub-sections.

1 Central Sales Tax

Central sales tax on inter-state sale of goods was levied by the central government but collected and appropriated by the state of origin. In fact, it was an export of the sales tax burden levied by the state of origin on the people in the state of destination. With the levy of GST, this tax has been abolished. Rao (2003) narrated the inequity aspects of the previous central sales tax in detail. Sales tax in the country was entirely destination based initially but the origin aspect was incorporated later on because of widespread tax evasion by reporting intra-state sales as interstate sales. It was introduced in the year 1956 on inter-state sales with an objective to track the movement of goods. The tax rate was initially levied at 1% which was increased gradually to 4% and became an important source of revenue for many states. This enabled the rich producing states to export the tax burden to the residents of poor consuming states. It also added to the distortion due to the cascading effect (where prices increase due to a good being taxed more than once). In addition to the inequity aspects of it, Purohit (2001) stated that it created hindrance to the smooth movement of goods across the country, thereby, preventing creation of a nation-wide common market.

CST was to be abolished completely when state VAT was introduced in 2005, with the plan being to reduce it in stages from the prevailing 4%. The planned reduction in the tax rate stopped at 2% when many of the states simply refused to abolish it totally. In fact, CST was a very good source of revenue for many states and their hesitancy could be understood. Maharashtra and Karnataka collected Rs. 6543.05 crores and Rs. 4783.29 crores respectively as proceeds from the tax in the year 2016-17.

With the GST reform, inter-state supply of goods and services are now taxed as IGST where the tax proceeds are credited to the centre and the state where the final consumption of the supply takes place. This makes it a destination-based tax. As a result, the state of origin may lose revenue, to the gain of the states of destination. But all states are likely to get more revenue from it as every state consumes manufactured goods produced outside the state. Secondly, the GST rate could be much more in inter-state sales than just the 2 % which the producing states were getting.

The NE states with the exception of Assam, Meghalaya, and Tripura did not receive any CST revenue prior to the GST implementation, as they are largely consuming states with hardly any manufacturing activity. Public sector dominates the services sector while the secondary sector is dominated by the construction industry (which again is consumed where it is produced). Table 2 shows that Manipur was getting no revenue from CST in 2016-17 and all of a sudden received Rs. 210.92 crores as IGST in the subsequent year, which further increased to Rs. 589.75 crores in the year 2019-20. The IGST figure is very large for Assam, touching Rs. 4309.07 crores in the year 2019-20. While big states still gained more in terms of absolute amounts, NE states gained the maximum in terms of percentage increase.

Besides the NE states, the table also gives data of bigger states, namely, Bihar, Kerala, Gujarat, Maharashtra and UP, three rich income states and two relatively poor states. A big, populated state like UP which collected just Rs. 1995.08 crores in 2016-17 from CST, got Rs. 13,485.44 crores in the subsequent year from inter-state sales, CST and IGST added together, while for

Kerala the rise was from Rs. 336.85 crores to Rs. 6214.67 crores. The big producing state like Maharashtra also gained and collected Rs. 11,832.15 crores from IGST alone in the year 2017-18, which comes to Rs. 14,942.64 crores when CST revenue was added. The total gain from inter-state sales tax was Rs. 8399.59 crores over the previous year's figure. Thus, the earlier notion that consuming states will gain at the cost of producing states may not be totally true.

2 Higher tax compliance

Another important point for the increase in tax compliance may be due to the self-policing mechanism associated with the method of calculating GST. A value-added tax has two methods of collecting tax in practice, one is the subtraction method while the other is the tax credit system. In the latter, which is in practice in the country, a person has to pay tax on the full value of the good at any stage of transactions, but a refund will be given later on of any tax paid in earlier transactions (making it a tax on value added). This makes the system inherently tax-compliant, as refunds will not be available in case of tax evasion. Further, payment of taxes can be easily checked as every transaction has been done online.

From 2017-18 onwards, the Reserve Bank of India (RBI) classified SGST separately from sales tax (which includes state sales tax/VAT, CST, etc.). Column 6 in Table 3 is the addition of these two taxes, done to compare with the previous data of sales tax.³ It is seen that in the year 2016-17 the amount of sales tax collected by Arunachal Pradesh was Rs. 282.54 crores which jumped to Rs. 1440.42 crores in the subsequent year. The state witnessed an increase in revenue by over five times while Manipur, Mizoram, and Nagaland observed growth by more than two times. The lowest increase was observed in Tripura, followed by that of Assam and Meghalaya. Even after subtracting IGST data from column 6, the improvement in revenue collection is significant (column 7).

Arunachal Pradesh has been a star performer in GST collections and the effort as reported in the media included taxpayer outreach programme and market surveys (The Sentinel, 2019). The State Taxation Department of Manipur said surprise checks in markets and highways along with awareness programme had yielded results (The People's Chronicles, n.d). The awareness programmes taken up by the central and state governments while implementing the new tax indeed helps in increasing tax compliance. GST is a popular term now among the general public.

	2016-17	2017-18	2017-18	2017-18	Gain/Loss in	2018-19	2018-19	2018-19	2019-20
	CST	CST	IGST	CST+IGST	2017-18 over 2016-17	CST	IGST	IGST+CST	IGST
Arunachal Pr.	0	0	152.53	152.53	152.53	0	357.96	357.96	502.33
Assam	558.26	338.40	1977.90	2316.30	1758.04	206.44	3867.32	4073.76	4309.07
Manipur	0	0	210.92	210.92	210.92	0	457.47	457.47	589.75
Meghalaya	25.14	7.25	206.59	213.84	188.7	1.65	417.85	419.50	548.68
Mizoram	0	0	123.51	123.51	123.51	0	316.02	316.02	389.13
Nagaland	0	0	133.27	133.27	133.27	0	331.41	331.41	457.98
Tripura	4.21	1.16	281.44	282.60	278.39	0	553.82	553.82	629.18
Bihar	41.21	53.90	3831.96	3885.86	3844.65	743.06	8368.06	9111.12	9458.70
Gujarat	4783.29	3462.74	5042.45	8505.19	3721.90	2785.80	6805.21	9591.01	7449.73
Kerala	336.85	149.68	6064.99	6214.67	5877.82	29.71	10114.96	10144.67	9933.42
Maharashtra	6543.05	3110.49	11832.15	14942.64	8399.59	1216.07	19063.70	20279.77	20690.79
UP	1995.08	989.53	12495.91	13485.44	11490.36	483.09	21231.13	21714.22	24363.18
Source: Reserv	e Bank of Indi	a, State Finance	s, A study of sta	ate budgets					

Table 2: Collection of CST/ IGST by states (Rs.in cr.)

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<u>https://www.gst.gov.in/download/gststatistics</u>

States	2015-16	2016-17	2017-18			2017-18	2018-19
	Sales tax	Sales tax	Sales tax	SGST	Sales tax	Minus	Sales tax
					+SGST	IGST	+SGST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Arunachal Pr.	190.22	282.54	285.13	1155.29	1440.42	1287.89	1075.24
Assam	7493.72	8751.63	6373.00	6329.07	12702.07	10724.17	13588.48
Manipur	466.51	499.65	385.58	721.09	1106.67	895.75	1040.32
Meghalaya	811.79	931.06	766.63	812.56	1579.19	1372.6	1529.76
Mizoram	247.04	307.81	242.85	482.56	725.41	601.9	659.66
Nagaland	328.58	400.12	287.55	526.21	813.76	680.49	731.03
Tripura	1058.48	1112.89	611.88	916.27	1528.15	1246.71	1435.69

Table 3: Collection of sales tax/SGST (Rs.cr.)

Source: Reserve Bank of India, State Finances, A study of state budgets

https://www.gst.gov.in/download/gststatistics

Note: Sales tax includes sales tax/VAT and other taxes like CST. SGST includes IGST.

IV GST compensation

Despite the strong revenue performance of the NE states, some of the states have been receiving GST compensation even before the constraints on economic activities caused by the surge in corona cases in 2020-21 (Figure 3). Only the three states of Arunachal Pradesh, Mizoram, and Nagaland did not receive any GST compensation. Assam, Manipur, Meghalaya and Tripura were given compensation in the year 2017-18. In the subsequent year, lower compensation was given to Assam and Meghalaya while no compensation was given to Manipur. Only the state of Tripura received higher compensation. To understand the reasons behind giving of compensation, we need to comprehend the mechanism of how GST compensation given to states is estimated.



Figure 3: GST compensation to the north eastern states (Rs.cr.)

Source: Reserve Bank of India, State Finances, A study of state budgets

As mentioned earlier, the states were persuaded to join the GST reform by assuring them compensation for any loss of revenue if the actual revenue collections differ from the estimated revenue. To finance the compensation, the GST Act enables the levy of GST cess on certain goods like chewing tobacco, cigarettes, and automobiles. In order to estimate the loss, the revenue from the taxes subsumed in GST in 2015-16 was to be taken as the base year and projected to grow at 14% every year. The shortfall in the actual revenue from the projected revenue was to be compensated. In the year 2017-18, many states were given GST compensation, the maximum amount going to Karnataka with a sum of Rs. 6246 crores.⁴

The adoption of 14% growth rate for all the states was arrived at after considerable deliberations.⁵ The rate of growth adopted was generous, mainly to incentivise the states to join the reform programme. There are, however, two important shortcomings in the compensation scheme besides the generous compensation package. First is the adoption of uniform growth rate for estimating potential revenue although the actual revenues from the subsumed taxes varied widely across the states. Second, the growth rate adopted to estimate potential revenue was delinked from the growth of the economy. The Fifteenth Finance Commission (2021-26) also commented that many states in the pre-GST period did not witness a 14% tax growth rate and said that the guarantee of an assured revenue "has created another significant complication in federal finance" (GOI, 2020, p. 54).

Shah (2020) raises two points regarding the compensation issue. First, the compensation was paid to states like Meghalaya, Tripura, Bihar and Assam, which benefitted much more from the new destination-based tax system. It should have been confined to producing states. Second, this kind of generous package can also encourage tax complacency. A similar view on the latter point was echoed by Gupta and Rajaraman (2020). They estimated the average growth rate of the subsumed taxes by using three different methods during the period 2012-13 to 2015-16. The state annual average growth rate varied between 7.59% to 7.67% while the growth rate of the GSDP ranged between 10.89% and 11.09%. Only a few states achieved the 14% growth rate during the period, while the number of states witnessing less than 8% growth rate estimated by using trend growth rate was 9. The number rose to 16 if the rate of growth is less than 10%. They observed that such a generous guarantee to all the states may in fact reduce tax effort.

The data of subsumed tax collections were given for the period 2012-13 to 2016-17. Using this data, we estimated the trend growth rate of the NE states (with the exception of Arunachal Pradesh, for which only the data of 2015-16 was given). We find only Meghalaya and Mizoram had growth rate over 14%, while the remaining four states achieved less. In any case, in a reform involving the agreement from all the states, differentiating the compensation principle among the states may not be feasible.

	2012-13	2013-14	2014-15	2015-16	TGR (%)
Assam	4467.12	4878.21	5244.91	5985.5	9.50
Manipur	263.71	386.57	432.78	347.06	9.37
Meghalaya	379.27	309.89	448.26	636.17	19.21
Mizoram	109.098	135.563	148.898	188.91	17.41
Nagaland	195.51	178.43	215.94	256.10	10.01
Tripura	572.88	628.20	667.90	788.73	10.21

Table 4: Proceeds of taxes subsumed in GST (Rs.cr)

Source: https://www.gst.gov.in/download/gststatistics

The states can collect more revenue from GST by improving the tax compliance. The states have done it before and can do it again. Ebrill *et al* (2001) said tax revenue from VAT increases with the age of the tax and literacy rate of the country. Thus, as the economy picks up and social development indicators improve over the years, the tax compliance is likely to be better. Further, the efficiency of the administrative machinery may also improve over time. For example, the technical glitches and other problems associated with the GST system as mentioned in CAG Report may be done away with in due course of time.⁶ What we can do now is to reduce the time lag by special measures and make eligible taxpayers pay, instead of waiting for increasing compliance in a natural manner.

Mukherjee (2020) has stated that, based on his study, many states including the NE states have seen higher GST compliance gap and lower filing of GST returns. Even in Figure 1, the tax ratios of the states are seen declining in the year 2018-19 from the previous year's figure. Bringing more small traders into the tax net could increase tax revenues of the states, as many of them seem to be unaware of the tax or avoided it intentionally, suggesting room for growth. As per the data released by GSTN on 3 years of GST, Arunachal has more active taxpayers than Manipur and Nagaland, even though its population is lower than theirs. More checks and awareness programmes should be held.

VConclusion

GST has been rightly called 'One nation, One tax' not only from the point of streamlining the tax system but also from the point of revenue generation as well. The tax ratio of the NE states has increased, so much so that they are no longer low tax effort states. This transformation can be credited to three factors. The phasing out of the central sales tax resulting in the transfer of tax proceeds from the state of origin to the consuming state. Tax collections for states have also seen a phenomenal increase, with a state like Arunachal Pradesh witnessing a jump in own tax collections by over 100%. This has also been due to the tax design which results in higher tax compliance. The effort of the governments, both central and states, in disseminating information about the tax cannot be neglected. It created more awareness about the new tax.

There are factors like prohibition, low production base, large central transfers, etc. which have reduced tax ratio of the NE states. But there are possible ways of increasing tax revenues, such as greater effort on the part of the government to increase tax compliance and raising the tax limit for taxes on profession, trade, callings and employment. Ultimately, the long-term means is faster

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economic growth and reduction in the inequality of income distribution. These measures will widen the tax base and improve tax collections in the future. The NE states lack industrialisation and the governments should give special focus on infrastructural development for the purpose. The 'Look East Policy' initiated by the central government has opened a number of opportunities on this front.

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Notes

⁶ See Dhasmana (2019) on CAG report.

¹ See The Empowered Committee (2009) and Government of India (GOI) (2017) for more details on the tax.

² See Joseph and Ramalingam (2020) on why states should be compensated even after five years.

³ In 2017-18 the amount of sales tax includes state VAT levied in the months of April, May and June on all goods. It continued to be levied on certain items like petrol and alcohol.

⁴ The RBI data differs from the data published by the Ministry of Finance which puts the figure at Rs. 7535 crores (See https://pib.gov.in/PressReleasePage.aspx?PRID=1542747)

⁵ See the deliberations of GST council meeting on the theme (GOI, 2016).

Who gutted international trade? Hint: It is not Trump

A book review of "Schism: China, America and the fracturing of the global trade system" by Paul Blustein

V Anantha Nageswaran^{*}

Paul Blustein was a journalist with 'The Washington Post' and with 'Wall Street Journal'. His coverage of the Asian financial crisis of 1997-98 gave us very good insight into how the International Monetary Fund was dictating terms to the Asian sovereigns in distress. The Treasury in turn was coordinating its suggestions/recommendations/instructions with Wall Street. Blustein's book, 'The Chastening' had an apt title indeed. The Fund that emerged after the crisis was a chastened one. It instituted the Independent Evaluation Office and toned down the conditionalities attached to IMF programmes. A large portion of the credit should go to Paul Blustein.

Blustein's most recent work, 'Schism' was published nearly two years ago. That seems like a long time ago. But the last year and half have been consumed by the global pandemic and, moreover, the reality of global trade has seen the dynamics outlined in 'Schism' played out.

It is recommended reading for those animated by issues such as global trade and geopolitics. While Blustein could not fully resist the temptation to lay all the blame for the fractured global trade regime on President Trump and tensions with China, he had not fully succumbed to it either.

If anything, I would wager that if Blustein were to write the book now, his conclusions would be more forthright on China's culpability for the polarised world of trade and much else. I say so because events since the book was published in September 2019 have established beyond reasonable doubt that China would regard reasonable attitudes on the part of others as weakness and would deem aggression an invitation to respond in kind and disproportionately. The net result is the same. More confrontation and more unilateralism.

Notwithstanding the author's predilection to assign a good deal of blame on the United States, the book gives us good insight into what has shaped China's emerging attitudes towards the West. As much as it has to do with Mr. Xi Jinping's background, his belief in Mao and his determination to see that the Communist Party is not contaminated by the West, it also has a lot to do with the Western failure of capitalism.

Before we get into some of its interesting contents, some words on the book: It is well written. Easy on the reader. Paul Blustein's style is fluid and lucid. Trade is a dry topic and he makes it interesting.

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We do get a good glimpse of the processes of WTO appeals. We also understand the naivete of some of the WTO appellate members when they ruled that the Chinese government's ownership of stateowned enterprises did not mean that the government dictated their functioning. How nice and innocent!

Also, we do learn how hard America negotiated on China's admission into the WTO. It should not be a surprise if the very process itself made China determined to game the system in its favour. It can be, and it was, humiliating and condescending.

2008 heralded a geopolitical seismic shift

Early on in the book, Paul Blustein cites Charlene Barshefsky saying that China's attitude changed in 2008. She led the negotiations from the American side on China's accession agreement for membership into the WTO:

In the years since striking that agreement, Barshefsky, now back in private law practice, has outspokenly criticized the direction of China's economic policies. "The environment in China has shifted negatively for foreign businesses," she said at a 2016 event on the fifteenth anniversary of China's WTO accession. "Multinationals saw enormous gains in China...from roughly 1999 to 2007-08. But at that juncture, opening began to sputter...and in the place of reform and opening, increasingly what is seen [are] zero-sum, mercantilist policies. (p.99)

Not surprising. That is when Hank Paulson, the Treasury Secretary in the George W. Bush administration, was pleading with the Chinese to bail the American banks out. Honestly, it is difficult to expect to dominate the world and a relationship after such a plea for assistance. It is either delusional or chutzpah to think that one can beg China for a bailout and then try to put China in its place. Most would respond with snigger and derision as China did:

"He (Wang Qishan) wanted me to know that the financial crisis in the U.S. had affected the way he and others in the senior ranks of the Party saw us," recalled Paulson, who quotes Wang as saying: "You were my teacher, but now here I am in my teacher's domain, and look at your system, Hank. We aren't sure we should be learning from you anymore." (p.203)...

The depths that America plumbed — and the crisis in Europe that followed — thoroughly discredited Western-style capitalism in the eyes of many Chinese. (pp. 203-204).

In that regard, it will be interesting to speculate on whether the IMF delay in issuing its Article IV report on China, with the inclusion of a judgement that its exchange rate was 'fundamentally misaligned', prevented a big adjustment in China's exchange rate. A Board meeting was scheduled for September 22, 2008. On September 15, Lehman Brothers' collapse was announced to the world.

Everything changed after that:

Here is the crucial wording from the report's executive summary: "There are significant concerns that the exchange rate may be fundamentally misaligned and exchange rate policies could be a significant contributor to external instability...Accordingly, staff recommends that the executive

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board initiate an ad hoc consultation with China that would be expected to be concluded within about six months." The September 22 board meeting was never held. The Article IV report was buried. Indeed, the US Treasury lost interest in prodding the IMF to label China. (p. 170).

Now, even if the report was released a week before that, America's desperation and its turn to China for assistance would have sealed the fate of that report in any case:

Paulson's book, On the Brink, offers helpful insight regarding the reasons for that seismic shift. In his chapters about events immediately following the Lehman bankruptcy, the former Treasury secretary recounts numerous phone calls to Beijing in which he and other Treasury officials were essentially imploring Chinese leaders to see that it was in their own self-interest to help keep the rest of the US financial system afloat. (p. 171).

It is hard not to think of the reasons for America to turn to China, and not to the Persian Gulf countries, for infusion of capital into their financial institutions. Did America under Bush and Paulson really believe that China would throw a rope to haul them back to safety without demanding its pound of flesh, in return? Whether it is the excuse of the moment of desperation or something else, the beseeching of China on bended knees amounts to a colossal misreading of history. America might yet pay the price for it.

Nothing captures the changed geopolitical power balance more starkly than this paragraph:

Humiliating retreat for the IMF came almost exactly two years after the board's approval of the 2007 rule change, when the Fund essentially vowed to abandon the term "fundamental misalignment." Only then, in July 2009, did China allow the long-delayed completion of its Article IV report — and the report placed before directors contained much softer language on the RMB than the one that had been drafted in the fall of 2008. This was emblematic of the elevated geopolitical status with which China emerged in the wake of the crisis. (p. 173).

Obama administration tried to wrest back the initiative

Given all of that, frankly, it is creditable how much initiative the Obama administration wrested back. That the Obama administration was not squeamish about dealing with the Chinese or tackling their trade practices comes through loud and clear from the book. There is enough information to make the case that the Obama administration in fact pushed back, including through aggressive and unilateral changes to the appellate body of the World Trade Organisation. It did not convey the 'Market Economy' status on China despite China's strong insistence.

That conveys two things. Contrary to what was thought, the Obama administration was not too meek. I must add the following, however, from Blustein's book:

The main economic policy heavyweights in the Obama White House — Geithner and National Economic Council Chairman Larry Summers — "were critical of the direction the Chinese economy had taken in recent years and were disturbed by the impact of its discriminatory practices on U.S. competitiveness," so they laid out a variety of options for the president to consider "from relatively anodyne to draconian ones," according to Bader's book¹.

"But at the end of each discussion or memorandum, they consistently concluded that the impact of China's practices on the U.S. economy was in fact quite small, and that even positive corrections would have considerably less impact in the United States than most people imagined. (p. 213).

Two, equally, it also means that the Trump administration did not take a wrecking ball to the trade relations with China or to the international body WTO. It was merely continuing to tread on the path paved by the previous administration. It imparted – in fits and starts – some more momentum and teeth to those efforts.

Trump re-negotiated NAFTA and it is illuminating to note that the Obama administration too thought that NAFTA conferred unfair advantage on Canada and Mexico.

Bush administration was insufficiently alarmed

As mentioned earlier, the administration that missed more than a trick or two is the Bush administration. It was partly ideological and partly convenient. They were either naive in their belief that China would change or become a little more liberal, or they believed that they should not interfere with market forces, or that recourse to both of those positions was simply convenient.

Perhaps China would have, but for the repelling effect of the chaos of American democracy and capitalism. We should not forget how America damaged its own credibility with its war on Iraq on phoney grounds, as it turned out. So, the Bush administration, in many respects, turned out to be the one that prepared the ground for the political polarisation in America, its diminished economic clout and fiscal wherewithal too, forcing the country to rely on monetary policy snake oil.

The decision of the Clinton administration to negotiate with China for its integration into global trade via membership in the World Trade Organisation was not wrong. The Chinese government and its record up to 2000 from 1979 made the case for a punt on its economic integration, notwithstanding Tiananmen in 1989.

America's failure to foresee the turn that China would take under Xi is a lesser failure than the failure to foresee the collapse of its own capitalist model which has turned overwhelmingly predatory. America continues to be weighed down by it. American finance and technology czars are pushing the country into an abyss and are hamstringing its policy flexibility for they are putting their selfish interests ahead of the nation, as they did before 2008.

The failure of American capitalism and the failure to foresee that failure are both hubristic. Well, history tells us that empires have always collapsed thus.

Just as George Bush paved the way for the collapse of American clout, prestige, influence and geopolitical advantage over China, on China's side, the understated Hu-Wen combination facilitated the return of the public sector, state control and party control over the commanding heights of the economy and even of the society under Xi. Paul Blustein does well to document that.

One man who comes across as being very astute about Chinese intentions and methods is Tim Stratford, former Chairperson of the American Chamber of Commerce in China:

"There's an ambiguity that China's government delights in fostering — they like to have it both ways," (p.214)

Would multilateralism have worked? Perhaps

Perhaps, where Paul Blustein errs, in my view, is that he thinks that China could have been handled better or more effectively through WTO rather than through the bilateral and arbitrary mercurial methods of President Trump. He may be right about his criticism of the Trump approach which was not consistent. In fact, Robert Lighthizer was more consistent than Trump was. But for Covid, we cannot be sure of how Trump would have dealt with China. He might well have cut some deals and touted it as victory. But that does not mean that multilateralism or globalism would have succeeded.

Tim Stratford tells him that China thrives in ambiguity and in mixed messaging. They want to have the cake and eat it too and they do it very well:

Recounting his numerous interviews with managers of technology-intensive multinationals based in China, Lee Branstetter, an economics professor at Carnegie Mellon University, stated: "I have heard personal and detailed accounts of the lengths to which Chinese companies and the Chinese government have gone in their collective efforts to extract technology from foreign multinationals," and although the transactions might technically be "voluntary," they are "only voluntary in the sense that the business transactions engaged in by the fictional gangster of the Godfather series, Vito Corleone, were voluntary. China is effectively making an offer multinationals cannot refuse." (p. 296).

While many tactics of China in the international arena are not worthy of replication, either out of civility or out of a sense of fairness and mutual respect, people from many developing countries would wish their politicians and bureaucrats would negotiate as hard and devise as many ways as China does to get the best technology, knowledge and skills for their country.

To be fair to Blustein, he does not simply stop with admonishing Trump for his unpredictable and inexplicable policy zigzags. He cites two specific avenues through which the United States could have assembled a 'coalition of the willing' to take on China through WTO. Developing countries should focus on the second one at least as long as WTO is still around:

(i) But the heart of the case she (Jennifer Hillman) proposed involved Article XXIII of GATT/WTO rules, called "nullification or impairment." Obscure and seldom used though it may be, this provision might be the perfect ace in the hole for playing against China Inc. Under this provision, a WTO member can be found in violation of its obligations and subject to sanctions if its policies nullify or impair the legitimate expectations of its trading partners by violating the overall intent of the rules — even if no specific rules are being broken. (pp. 398-399).

(ii) section 15 (b) of the protocol (he is referring to the China WTO accession protocol), states that if distorted market conditions in the Chinese economy cause "special difficulties" to trading partners in estimating Chinese subsidies, the calculations can be made using prices and costs for comparable goods and inputs in other countries — which makes it much easier to conclude that subsidization is occurring and high duties are warranted. This provision doesn't expire, unlike other discriminatory rules that China accepted (for example, the special China safeguard, which had a 12-year duration, and the non-market economy status for anti-dumping cases, which was supposed to last 15 years). (p. 401).

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Paul Blustein's coverage of America's handling of Huawei and 5G, under Trump, borders on naivete. It is disappointing. His defence is that a Bloomberg article on how the rise of Huawei coincided with the decimation of Nortel (through spying and hacking) came out after his book was published².

In conclusion

China lost all respect for the United States after 2008. That is why China decided to up the ante in the race for global dominance, with its own global 'institutions' and 'initiatives' such as the BRICS Bank (New Development Bank), Asian Infrastructure Investment Bank (AIIB), Shanghai Cooperation Organisation, Regional Comprehensive Economic Partnership and the Belt and Road Initiative.

China is not interested in such a world that the West has created. It is determined to create a world on its own terms where all other countries will be its tributaries. Considering how much America has made a meal of its economics, capitalism and politics, it is hard to fault China for harbouring such ambitions, no matter how unviable its own model is. On present evidence, the former stands more discredited than the latter.

That said, I think America was wrong to withdraw from the Trans-Pacific Partnership. Trump made that call. Not because it would have mattered in economic terms. It would not have. At the very least, it would have been an irritant for China just as the Quad is, for example. That irritation would have made them commit some errors and antagonise some more countries even more spectacularly than they have done so far.

Wall Street had a big hand in bringing America to its knees in 2008, making its government beseech China for support. It continues to romance China³. Wall Street might have played a big role in bringing Didi's Initial Public Offering to America, even as it appears increasingly likely that the company was indeed warned by Chinese regulators to postpone the IPO and address their security concerns. Analysis disclosed that Bytedance heeded precisely such a warning and postponed its public offering in America⁴. It may be a coincidence (or not) that Jean Liu, the president of Didi Chuxing, was previously a Managing Director in Goldman Sachs. Simply put, it appears that Wall Street has encouraged a Chinese company to raise money from Americans by withholding critical information from them. Just think about it.

In the end, too much of finance is behind America's decline which, in turn, is behind the story of the schism that Blustein tells. Too much finance continues to stalk America.

Schism: China, America, and the Fracturing of the Global Trading System by Paul Blustein, CIGI, September 2019, 409 pages.

Notes and References:

¹ The book he is referring to is 'Obama and China's Rise: An Insider's Account of America's Asia Strategy' by Jeffrey A Bader, 2013, Brookings Institution Press.

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