

Social Spending and Fiscal Policy in India: Towards an Alternate Macro-Fiscal Framework Integrating Human Development

No. 422

01-January-2025

Sukanya Bose and Saikat Banerjee



**National Institute of Public Finance and Policy
New Delhi**

Social Spending and Fiscal Policy in India: Towards an Alternate Macro-Fiscal Framework Integrating Human Development¹

Abstract:

India's performance in accelerating human development (HD) has been less impressive than its growth performance, a structural feature considering how long it has persisted. The divergent macroeconomic and HD performance underlies an ascendancy of macroeconomic policy over social development policies. Based on the experience of the Indian economy in the last three decades, this paper explores the limitations of the present fiscal policy framework, its objectives, and targets vis-à-vis the imperatives of HD. An alternative macro-fiscal framework integrating HD is proposed.

The trends across the last thirty years indicate a stagnant HD spending to GDP in India. The normative distances, international comparisons, and lack of progress vis-a-vis past positions, all seem to indicate underperformance in social spending in India and the need for greater investments. Fiscal policy determines the scope of social policy and HD outcomes through its control over fiscal space. The misalignment of the fiscal policy framework and the necessary social spending to support social policy was experienced in a variety of ways, as this paper demonstrates. The key propositions for an alternate fiscal framework integrate the specificities and potential of HD and points in the direction of (i) considering HD expenditure as investments and not as current consumption in fiscal policy, (ii) considering the simultaneity of demand and supply effects of public investments for the macroeconomy (iii) taking cognizance of the self-sustaining nature of HD investments, and (iv) moving fiscal sustainability to a long-term horizon.

Keywords:

Social Spending, fiscal Policy, macro-fiscal framework, human development, fiscal rules, normative targets.

¹ We acknowledge support from NIPFP in conducting the research. We are grateful for several insightful comments received during the internal seminar at NIPFP.

Social Spending and Fiscal Policy in India: Towards an Alternate Macro-Fiscal Framework Integrating Human Development²

Sukanya Bose and Saikat Banerjee

I. The Context

India's performance in accelerating human development (HD) has been less impressive than its growth performance, a structural feature considering how long it has persisted. In the past decade, India's rank in HDI among 190+ countries hardly moved. Between 1990 and 2012, India's economic performance, which covered two decades of economic reforms, was impressive, averaging nearly 5% per capita income growth (UNDP, 2013). India ranked fifth in average annual per capita income growth and 46th in the reduction in HDI shortfall among 96 developing countries.³ Korea saw the maximum improvement in HDI during this period, despite having higher levels of HDI by the early 1990s, and China topped the growth chart and was ranked third in improvements in HDI. Brazil, another emerging market economy, improved its HDI considerably, ranking 11th compared to India's 46th. The contrasts draw attention to the different experiences of some other leading economies.

The divergent macroeconomic and HD performance underlies an ascendancy of macroeconomic policy over social development policies and a lack of appreciation of the connection between the two, we argue. Based on the experience of the Indian economy in the last three decades, this paper explores the limitations of the present fiscal policy framework, its objectives and targets vis-à-vis the imperatives of HD. An alternative macro-fiscal framework integrating HD is proposed.

Human Development and Economic Growth: Some Stylised Facts

Human development is a process of enlarging people's choices (UNDP, 1990:10). HD is coterminous with capabilities and capabilities are the conditions that offer people choices about how to live their lives. Access to health, education, water & sanitation, decent work, freedom of movement, and a voice in decision-making are foundational capabilities that mark HD.

Extensive empirical evidence establishes the social returns associated with improvements in health, education and other social services. Education and health generate very substantial externalities or benefits that spillover to the society at large. Externalities associated with education are elaborated by McMahon (2004) to include (i) health effects of education as it reduces infant mortality, increases longevity and improves child and public health; (ii) fertility effect as female education lowers fertility rates; (iii) net population growth rate effects; (iv) democratization and human rights as education improves civic institutions; (v) political stability aided by democratization and education; (vi) crime rate reduction and lower incarceration costs; (vii) reduction in poverty and inequality via wider distribution of education; (viii) environmental influences; (ix) education's contribution to research and development and diffusion of new technology. Externalities operating through various development goals affect GDP per capita and earnings to a limited extent in the short run but much more substantially as time passes. Many of these effects are indirect and long-delayed, such as outcomes dependent on educational investments for 10 to 20 years or more. Empirical estimates suggest that

² We acknowledge support from NIPFP in conducting the research. We are grateful for several insightful comments received during the internal seminar at NIPFP.

³ HDI shortfall is defined as the reduction in the distance from the maximum HDI score. See Chapter 3, Drivers of Development transformation (UNDP, 2013).

externalities average around 40 percent of total returns to education (or more in other studies), with higher social rates of return in poorer regions than developed countries.⁴ There is consensus on the higher returns of these investments compared to alternate investments, even though the development paybacks may be challenging to measure.⁵

Health outcomes like life expectancy are a powerful predictor of subsequent economic growth.⁶ Apart from the health programmes' own objectives, extensive benefits such as employment opportunities, local partnerships with communities, decreased inequalities and population-level impacts on socio-economic development, women empowerment, increased literacy and school completion rates, and decreased out-of-pocket expenditure are reported. The economic impacts of investing in health systems by creating high-quality jobs and purchasing goods and services from local businesses are highlighted as second-order health advantages.

There are complementarities through reciprocal positive externalities between policies and expenditures geared towards different development goals such as health and schooling or access to water and health. For instance, better access to water, sanitation, health facilities and transportation can significantly lower child mortality rates and malnutrition and promote schooling and gender equality. Such *complementarities* make a strong case for scaling up multi-sectoral public expenditure programmes, given that the payback from an integrated package focusing on several development goals (such as the MDGs and SDGs) is higher than the sum of the paybacks of its components taken separately (Roy and Heuty, 2009).

High social rates of return present a solid basis for public investment in human development. Significant externalities, prolonged gestation period, high risks (for individuals) and capital market imperfections mean market solutions will be suboptimum. Furthermore, public spending on the social sector assumes greater importance in societies and economies, characterised by substantial structural inequalities of a diverse nature. State interventions are needed to ensure the redistribution of income, opportunities, and freedoms (Sen, 1992). HD can be instrumental in reducing social and economic inequality. This consensus is embodied in the historical experience of developed countries and that of the high achievers among developing countries (Mehrotra and Jolly, 1997; Roy and Heuty, 2009).

Even though the idea of HD developed as a critique of growth-centric economic paradigms, the inter-connectedness of HD and growth is undeniable. HD is essential not only for its intrinsic value but also in terms of instrumental value as a propeller for economic growth. Ranis et al. (2000) present an analytical framework of the links between HD and growth. HD improvements raise the capacities of economic agents who make critical contributions to economic growth. The link from HD is forged not only via higher productivity of labour and technological innovations but also necessarily the institutions it helps build and the capacities to run these institutions well: schools, hospitals, legal, administrative and economic institutions. On the other hand, economic growth provides the resources to permit sustained improvements in HD. HD and growth form a mutually reinforcing cycle of causation, with success in one tending to promote success in the other (see Appendix 1).

No automatic mechanism, however, exists to translate growth into expanding human choices: *the link between economic growth and human welfare must be created consciously.*

⁴ McMahon, 2004

⁵ See Roy and Heuty (2009) for a discussion on fiduciary and development paybacks of investments.

⁶ The mechanisms are (i) productivity improvements that arise from a healthier workforce and less morbidity-related absenteeism; (ii) increased incentives for individuals and firms to invest in physical and human capital; and (iii) increase in savings rates, as working-age individuals save for their retirement years (Francis et al, 2023).

The accumulated evidence indicates that the *link from economic growth to HD is stronger, with a higher allocation of GDP to the social sectors (and social priorities within them) and a more equal income distribution*, among other things (Ranis et al., 2000). Similarly, the link from HD to economic growth would depend on the investment rate and income distribution. These factors can enhance or diminish the link between growth and HD. High economic growth may not bring about expected levels of HD if, for example, there are such weak linkages as a low social expenditure ratio.

Conversely, good HD performance may not generate high growth if there is a shortage of complementary resources because of low investment rates. Where linkages are weak, cases of lopsided development may occur – HD-lopsided or economic growth lopsided (Ranis et al., 2000). Based on the trajectory of a large sample of countries across an extended period, the authors find that while HD-lopsidedness permitted movement towards a virtuous cycle (occurring in about a third of the cases), in the case of economic growth-lopsidedness, the economies reverted to a vicious cycle. India's development trajectory is classified as growth-lopsided. A prioritisation of HD is suggested rather than a trickle-down of growth benefits.

The Present Study

The broad framework of the centrality of HD with its crucial contributions to human welfare and economic growth provides the background to explore public spending on the social sector, which is the critical variable connecting growth to HD. Specifically, this paper seeks to understand the trends in social spending in India, especially education and health, against the choices and compulsions of fiscal policy in India. Fiscal policy determines the scope of social policy and HD outcomes through its control over fiscal space. The rest of the paper is organised as follows: Section 2 presents the trends in social spending in India, highlighting the continuities and changes across the last thirty years. Section 3 relates these trends to the underlying fiscal policy framework anchored in the FRBM Act. Building on existing literature and policy experiences, it elaborates on the limitations of the present framework for advancing HD and its financing. Section 4 presents further empirical evidence on the relationship between fiscal balances and social spending, covering the period 1990-2020. Section 5 outlines key propositions for an alternate fiscal framework that integrates the specificities and potential of HD, and Section 6 concludes.

II. Trends in Social Spending in India: 1990 to 2020

As per the UNDP definition, social policy has three major arms – human capital, employment and social safety nets with social spending defined accordingly.

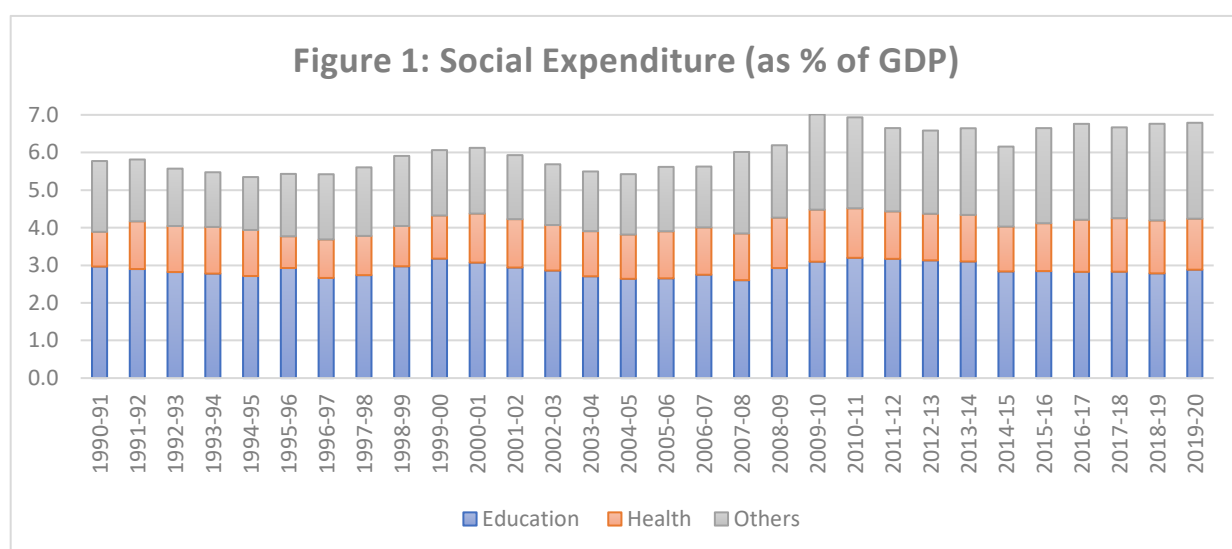
There are several official data sources reporting expenditure on social services in India. Not all of them cover the entire thirty years, or both the centre and the states' social expenditure.⁷ Aggregation across different levels of government is a challenge, with inter-governmental transfers to be adjusted to arrive at final expenditure. We use the series from the GoI's Economic Survey, where social services spending by the general government (centre and states) is classified under three broad heads: (1) education, sports, art and culture; (2) medical and public health, water supply and sanitation; (3) others: family welfare, housing, urban development, labour, social security and welfare,

⁷ Indian Public Finance Statistics (IPFS), which used to provide data for general government is not available beyond 2015-16 (actual expenditure).

nutrition, relief on account of natural calamities, etc.⁸ Apart from the broader social services, the focus will be on core HD, i.e., (1) and (2) above.

Social Spending Ratios

The structure of government expenditure indicates the government's policy priority, among other things. An increasing share in GDP of social services expenditure (SSEX) and health and education within the social services (SSEX^{HD}) would reflect priorities to these sectors. Over the thirty years, the share of social spending in GDP rose by 1 percent, from 5.8 to 6.8 percent, whereas HD expenditure in GDP hovered around 4 percent (Table 1 and Figure 1). There is no significant upward trend in SSEXP^{HD}. The cyclical upswings correspond broadly to the decadal Central Pay Commission salary hike that peter out over the years.



Source: Economic Survey, GoI and National Accounts Statistics (NAS), GoI.

International experience indicates that with rising per capita incomes HD spending to GDP increases on average across countries (Atolia et al., 2017), whereas the trend has been stagnant in India.

⁸ Rural development, which covers employment guarantee such as NREGA is not a part of this definition, an important omission.

Table 1: Composition of Social Spending (%)

		Education	Health	Others	Total
1990-91	Expenditure As % of GDP	2.97	0.92	1.88	5.77
	Share in Social Expenditure	(51.4)	(16.0)	(32.6)	(100.0)
2019-20	Expenditure As % of GDP	2.88	1.36	2.55	6.79
	Share in Social Expenditure	(42.5)	(20.0)	(37.6)	(100.0)

Source: Same as Figure 1.

Allocation of resources for HD comprises three ratios - the overall government expenditure, how much of that expenditure flows to the HD (social allocation ratio), and how it is allocated within these sectors (priority ratio) (UNDP, 1991). What constitutes a priority will inevitably vary according to a country's stage of development, rendering this third ratio more arbitrary than the other two (Ranis and Stewart, 2005). We interpret the priority ratio as spending on education and health (HD), whereas the social allocation ratio refers to the broader social services in overall government spending. $SSEXPHD$ to GDP can be written in terms of its component ratios as follows:

$$\frac{SSEXPHD}{GDP} \equiv \frac{TEXP}{GDP} \times \frac{SSEXPHD}{TEXP} \times \frac{SSEXPHD}{SSEXPHD}$$

Where $TEXP/GDP$ is overall government expenditure to GDP representing the *relative size of the government*, $SSEXPHD/TEXP$ is the *social allocation ratio* and $SSEXPHD/SSEXPHD$ is the *priority ratio*.

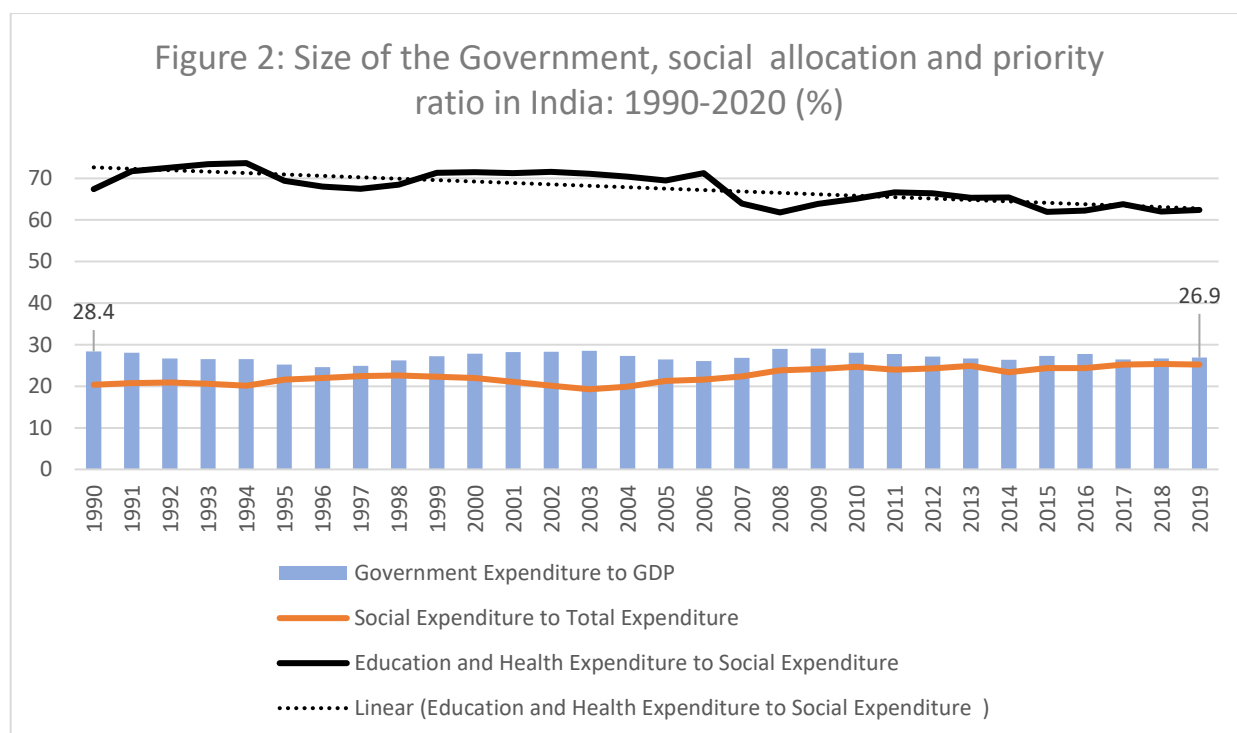
Figure 2 represents the three ratios. The size of the government in India remained roughly the same; there is no significant trend. When comparing the two endpoints, the early 1990s & 2019-20, the size of the government shrunk. Comparing across countries, the general government expenditures in OECD countries averaged 40.8% of GDP in 2019 and 26.9% in India.⁹

The slight upward trend in the social allocation ratio shows reallocation of expenditure towards the social sector. However, social priority shows a (significant) negative trend, indicating a shift in priority away from HD within the social sector. The social priority ratio declined by 10% from above 70% to a little over 60%, most of this decline coming after 2007-8.

Thus, of the three ratios, the crucial variable, *the size of the government*, which determines the size of the cake, has not increased. The social allocation ratio has improved, but that has not helped HD as extra fiscal space has been allocated to other sectors within the social sector. With the government's overall size not increasing, one sector can grow only at the cost of another.¹⁰

⁹ OECD (2021).

¹⁰ A recent example is from the COVID-19 pandemic, when health spending grew at the cost of education and other sectors (Choudhury and Datta, 2022).



Source: Same as Figure 1.

Persistent gap between Normative and Actual Expenditure

The past two decades have witnessed a series of legislations and announcements for programmatic expansions, including the enactment of the Right to Education (RTE), programmes relating to the massification of secondary and higher education, universal health, the right to work, social security and emerging areas such as urban development, natural calamities, etc. Each area demands higher allocations of resources than the present levels of spending. National policies on health and education have set expenditure targets that are consistently underachieved. The present expenditure levels are about half the normative benchmark expenditure of 8.5% of GDP for health and education as per the national policies (Table 1 and Table 2).

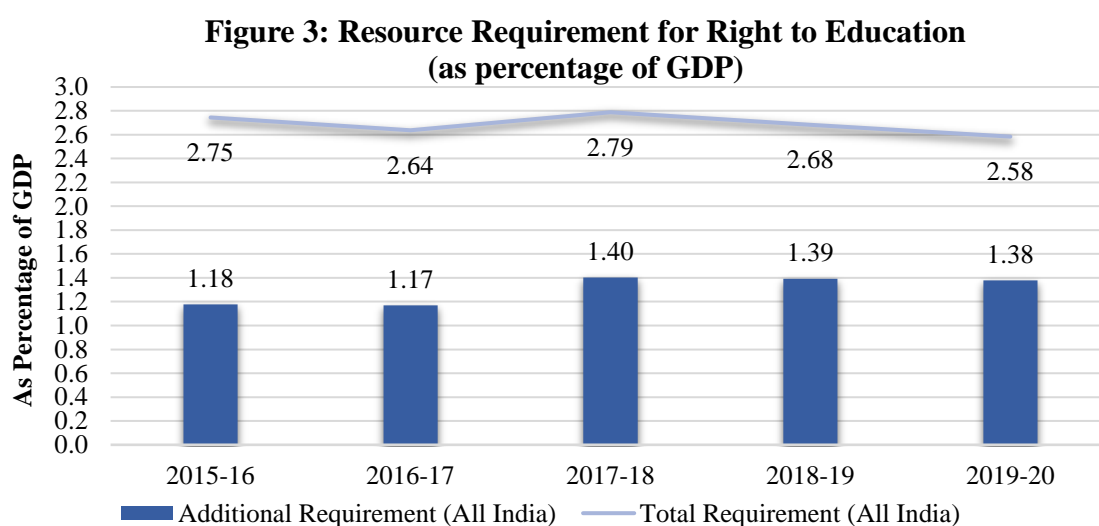
Table 2: Present policy targets on public spending on Education and Health

Human Development	Policy	Policy Target
Education	National Education Policy (2020)	6% of GDP
Health	National Health Policy (2017)	2.5% of GDP by 2025

A study on the normative resource requirements for financing RTE based on unit-level data at the school level across Indian states (Bose et al., 2020) estimates that the required public spending on elementary education is at least 80% higher than the existing levels, i.e., an additional requirement of 1.2-1.4 % of GDP to be spent every year to finance the guarantee of RTE to every child in a school that meets the necessary conditions for equal education (Figure 3). The unmet gaps are so significant that even ensuring some reasonable norms universally requires a substantial step up in investments. Not only are

the gaps in spending large, but they are also unequally distributed across states, with the highest gaps in the low-income states.¹¹

Social services in India are provided mainly by the states, with states incurring most of the expenditure.¹² There are wide variations in social spending across states (Chattopadhyay, 2018) with inequalities rising across time (Bose et al, 2022), despite the inter-governmental transfers and a progressive devolution formula meant to correct the vertical and horizontal imbalances in resources. Equalising social services of an acceptable standard remains a crucial challenge.



Source: Bose et al. (2020)

The normative distances, international comparisons, and lack of progress vis-a-vis past positions, all seem to indicate underperformance in social spending in India and the need for greater investments. The following sections focus on macro-fiscal policies with their imperatives and challenges that have been instrumental in determining the scope of social spending.¹³

Section III: Human Development and Macro-fiscal Policies in India

The experience of many developing countries shows the gradual ascendancy of macroeconomic policies over social development policies, notes Mkandawire (2001). With macroeconomic policies focused on stabilization, the emphasis on the fiscal cost of social policy was likely to overshadow whatever long-term value social policy might have for economic growth. The Indian experience is no different. Several studies have examined the impact of economic reforms on social spending in India. These studies focused attention on the period of stabilization and structural adjustment programme (SAP) during the 1990s and the consequences for social expenditure and the social sector at large (Gupta and Sarkar, 1994; Prabhu, 1994 and 2001; Panchmukhi, 2000; Dev and Mooij, 2002 and 2004; Joshi, 2006). Expansionary macro policy necessary for adjustment

¹¹ Inequalities in educational spending across states are discussed in Bose et al (2020, 2020b and 2022)

¹² Central spending reached 30% of total social spending in 2010-11, the highest in thirty years, and fell thereafter.

¹³ We acknowledge that outcomes are influenced by other socio-economic and political factors, and not macroeconomic policies alone.

with human face was rejected in favour of fiscal austerity. Social and capital expenditures were reduced affecting long-term development prospects. Despite acknowledging the central importance of reducing poverty, the poor were not protected during these adjustments as budgetary stringency led to cutbacks in social expenditure. The negative impact of policies at the centre rippled out to other levels. For instance, the employment scheme in Maharashtra and the Mid-Day Meal in Tamil Nadu were not extended as would be desirable in times of difficulty but rather were also subject to downward pressure (Prabhu, 2001).

Another characterisation of the ascendancy is the "residual" treatment. *"The social sector is treated as the residual sector in policy making. This approach seems to have become pronounced during the economic reforms, which have been emphasising a reduction in government expenditures, including expenditures on the social sector"* (Panchmukhi, 2000: 842; Dev and Mooij, 2004).

III.1 Fiscal Consolidation via Fiscal Rules

Fiscal adjustment/ restructuring was not a one-time phenomenon but a consistent feature across the thirty years. The central bank's autonomy and independence of monetary policy were important planks of economic reforms. Deficit financing through automatic monetisation was a realistic way of financing government expenditure in a developing economy with low tax revenues. Through an agreement between the RBI and the GoI, the automatic monetisation route via the issuance of ad hoc treasury bills was discontinued in 1998.¹⁴ The policy establishment, both the RBI and the GoI, considered it a bold and radical change that will strengthen fiscal discipline and provide greater autonomy to the RBI in monetary policy.¹⁵ One arm of public financing was thus forsaken.

Soon after, the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 introduced fiscal rules that have defined the period since. What it ended up doing is similar in impact to the 1990s period. The prevailing framework for fiscal policy is anchored in the FRBM Act, which is a fiscal rule. A fiscal rule is a long-lasting constraint on the fiscal policy through numerical limits on the budgetary aggregates during the budget cycle. As the preamble to the Act defines, the objective is *"to ensure intergenerational equity in fiscal management and long-term macro-economic stability by removing fiscal impediments in the effective conduct of monetary policy and prudential debt management consistent with fiscal sustainability through limits on the Central Government borrowings, debt and deficits... and conducting fiscal policy in a medium-term framework."*¹⁶ The golden rule in the FRBM requires the government to borrow only to meet capital expenditure subject to a ceiling, along with a commitment to a rapidly declining debt target.

At the core of fiscal rules is the view that fiscal deficit hurts savings, investment and growth. Since savings determine investment in this paradigm, and savings rates are assumed to be constant, an increase in fiscal deficit beyond 6% of GDP would crowd out other forms of investments and lower the growth rate (GoI, 2004). A related concern is the nervousness of markets around deficit and debt levels, which can lead to a run in the financial markets. Thus, fiscal policy should focus on restraining expenditure and/or raising revenues, and countercyclical fiscal policies have little role in affecting the full employment growth path. Essentially, fiscal rules are embedded in new consensus macroeconomics where sustainability and intertemporal equity are in focus. The

¹⁴ [Dr. Reddy assesses the new directions being embarked upon in India with respect to the national budget and the Reserve Bank of India \(Central Bank Articles and Speeches, 8 Mar 97\) \(bis.org\)](#)

¹⁵ https://www.indiabudget.gov.in/budget_archive/ub1997-98/bs/BS19.HTM

¹⁶

<https://dea.gov.in/sites/default/files/FRBM%20Act%202003%20and%20FRBM%20Rules%202004.pdf>

government's stabilization role is confined to stabilizing the debt stock through fiscal instruments (Arestis, 2009; Tscherneva, 2008).¹⁷ In this paradigm, discretionary fiscal policy is particularly problematic because it is more likely to lead to ever-increasing deficits and debts.

Counterarguments to the new consensus macroeconomics run along the following lines. In a demand-deficient economy, attempts to reduce the deficit through compression of public expenditures might result in a fall in income and aggregate savings and investments (Rakshit, 2005, 2010; Bhaduri, 1986). *The purpose of macro-stabilisation should be to keep the economy close to full employment with a tolerable inflation rate.*¹⁸ A higher fiscal deficit – financed by domestic borrowing – does not necessarily crowd out private investment; the fiscal deficit always finances itself and the investment always generates an equal amount of ex-post savings (Das, 2010). Exclusive focus on reducing revenue and fiscal deficit without regard to the demand and supply side consequences in the real economy is a major factor behind the prolonged slack, growth slowdown, and fiscal stress in the Indian economy (Rakshit, 2005).

III.2 Fiscal Consolidation and Social Expenditure

The purpose of this paper is not to analyse the fiscal rules per se but to understand the fiscal framework from the perspective of social spending. Several scholars have argued that current fiscal frameworks tend to underestimate the returns from well targeted publicly finance interventions to secure tangible development outcomes such as the MDGs despite there being considerable evidence to the contrary (Rakshit, 2005; Goldsbrough, 2007; Roy and Heuty, 2009). The overall mandate of FRBM to work within limits of deficits and debt for fiscal sustainability in the "medium term" essentially means that fiscal framework is anchored in medium-term debt/ deficit targets by design. In contrast, most social expenditure outcomes require a longer time horizon, which means there is an essential contradiction in design.

During the formulation of the 11th Five Year Plan, the Planning Commission questioned the compatibility of the targets under FRBM and the imperatives of plan expenditure (GoI, 2006).¹⁹ FRBM targets restrict resource availability, which would postpone plan expenditure required to make growth inclusive. It would also present infrastructure development problems, where long lags and delays could jeopardize growth with a corresponding effect on revenues. These objections, including the suggestion to extend FRBM deadline, were overruled. In this context, Rakshit (2010) notes with concern, "*What is worse, given the overarching requirement of non-negative revenue balance, clubbing HRD expenditures with current ones not only leaves little scope for enlarging investment in human capital but the stipulated FRBM targets might in all probability be met through a slowdown in HRD spending. This is apart from the fact that the targets are set without weighing relative returns on HRD expenditures with that on other categories of investment, public and private (p.42-43).*" (further elaborated in Section V)

The anticipated compression proved true. Empirical research at the sub-national level in India confirms the negative impact of fiscal adjustment on social spending by states. Fiscal deficit is a significant factor influencing social spending, with higher fiscal deficit in the present year impacting social spending negatively in the following year (Misra, 2003;

¹⁷ The major policy implication of the new consensus macroeconomics is that monetary policy is upgraded in the form of interest rate policy to maintain inflation. Fiscal policy by contrast should only be concerned with balancing government expenditure and taxation, effectively downgrading its importance as an active instrument of economic policy.

¹⁸ For a broad view of macroeconomic stability, see Ocampo (2005)

¹⁹ https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/apppap_11_1.pdf

Khoja and Khan, 2022). Expenditure adjustment/ revenue shortfall is passed on to social sector spending, in particular.

The period since FRBM has seen several macroeconomic shocks.²⁰ The largest and the most recent one is the COVID-19 pandemic. Each macroeconomic shock brought in its wake, misalignment of fiscal targets, necessitating long-drawn attempts at stabilization of fiscal balances. The deviation is corrected mainly through compression of expenditure, especially development expenditure as the dominant strategy. Plan expenditure gets the heaviest cut and the social sector absorbs the maximum shock as a residual sector. Through many rounds of amendments of FRBM, and redrawn fiscal targets, achieving the fiscal targets has not become easy. In the recent period, the inadequate fiscal response to the COVID-19 pandemic notwithstanding,²¹ the macroeconomic impact has pushed up government debt, for which the Fifteenth Finance Commission (FC) has recommended a fiscal consolidation roadmap (GoI, 2020) with rapid decline in targeted deficits and debt that is again likely to impose substantial costs for the social sector. It makes one question whether the current fiscal framework has adequately served the purpose for which it was framed and what it has meant for different sectors of the economy. A comprehensive review of two decades of FRBM may be warranted. Within the given fiscal framework and the fiscal limits, normative financial roadmaps for HD as discussed in Section 2, are a contradiction in terms.

There are other design issues in the fiscal framework that do not align with social policy objectives. All states, including the Special Category States, must have a non-negative revenue balance and fiscal deficits not exceeding 3% of GSDP.²² The targets are point estimates, with the levels determined as per international practices and uniform across states.²³ It means that those with more significant development needs and limited means can have limited recourse to borrowing, even though the real returns from such investments are enormous. States with lower GSDP can only draw up smaller deficit as these rules are defined vis-à-vis income. To remain within fiscal limits, the poorest states with the most significant gaps in HD have run consistent revenue surplus rather than borrowing to enhance fiscal space for social spending (Bose et al, 2020). There is no way of currently accommodating the unequal landscape of social spending within fiscal rules.

Also, the framework of fiscal federalism in India assigns macro-stabilisation responsibility primarily to the central government. The other two aspects of macroeconomic policy, redistribution and socio-economic development, fall under the states' domain largely (Rao, 2022). The Centre has an incentive to pursue deflationary policies to keep fiscal imbalances in check. With vertical imbalances in revenues vis-a-vis expenditure responsibilities between the Centre and the states, there is an inbuilt bias against development expenditure, and social expenditure, in particular.

It may be noted that the fiscal rules have been implemented in an overall situation of stagnant tax ratios, further limiting the scope for expansionary fiscal policies (refer to the stagnant trend in government expenditure in Figure 2). Fiscal space is mainly comprised of revenue mobilisation and borrowing. The overall tax revenues of the combined government stood at around 17 % of GDP in 2019-20, where it has remained broadly for nearly two decades (Figure 4). Tax-GDP in India is low compared to developed countries. But even vis-à-vis countries with similar per capita income, India's tax-GDP is lower, which accounts for the low spending on health and education (GoI, 2016). If we consider India a democracy, and democracies tax and spend more because of the redistributive

²⁰ Internationally (global financial crisis) and domestically (twin balance-sheet crisis, demonetisation, introduction of GST)

²¹ See Ghosh (2020)

²² Some relaxations were allowed in the targets by the 14th FC, under certain conditions.

²³ 60% debt to GDP target follows from the 1992 Maastricht Treaty.

pressures they face, India stands out as an outlier (Kapur, 2020). India's tax effort (measured as taxpayers to per capita income and tax-GDP) is substantially below what one might expect from democracies, undermining its ability to finance public goods. In contrast to India, tax revenue has been rising in other emerging markets and low-income countries by narrowing the untapped revenue potential or the tax gap relative to tax capacity (GoI, 2020). International experience confirms that significant increases in tax revenues (0.5 percent of GDP per year) in emerging markets are achievable over relatively short periods - about three years (ibid).

Indirect taxes comprise the major part of tax collections in India. The proportion of direct taxes in overall tax collections fell, after rising till 2007-8, leaving the burden of revenue mobilisation majorly on indirect taxes that are less progressive. Two other forms of inequities in taxation are the lower taxation powers of the states versus centre (vertical imbalance) and the higher taxes on labour income versus capital income. Higher devolution of central taxes to the states, as per the Fourteenth FC recommendations, was meant to raise the fiscal space available to them. Despite the *de jure* higher devolution of central taxes, studies show that states were denied enough additional fiscal space.²⁴ It is also argued that the states' ability for own resource mobilization, especially post-GST, diminished as the number of state taxes are limited.

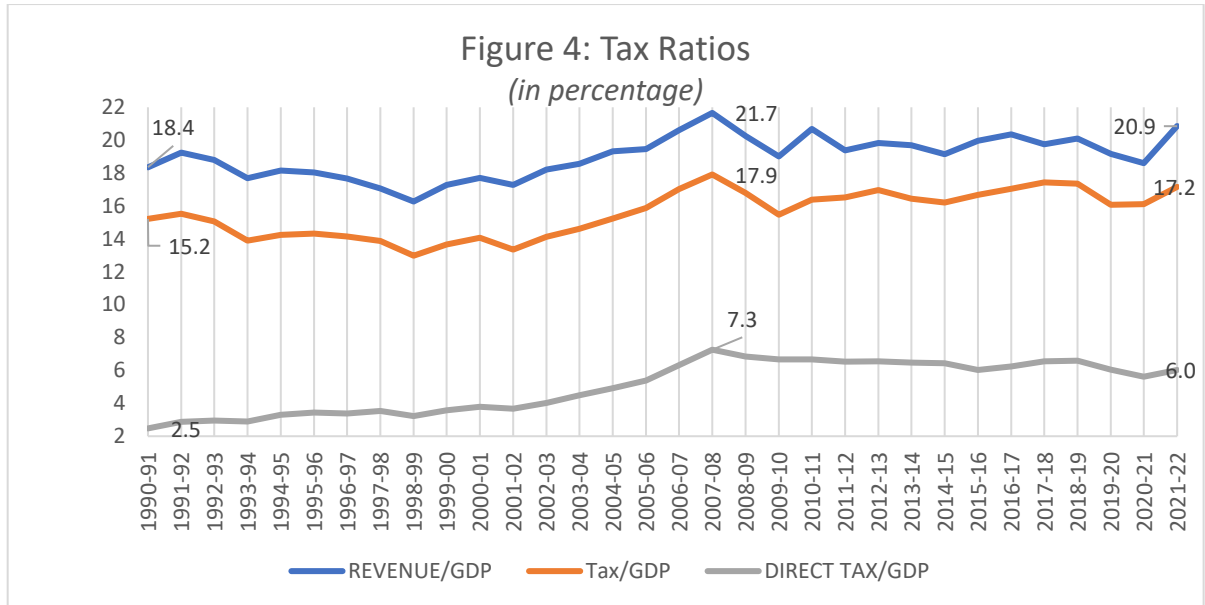
In a globalised world, taxing capital has its own set of challenges. Tax rates on corporate income have fallen worldwide, and in India as well.²⁵ Not only does it make revenue mobilisation challenging, it also compromises the redistributive dimension of taxation. Rising inequality is a big concern, adversely affecting growth and its distribution. Recent discussions on wealth tax and inheritance tax present possibilities for additional fiscal space.²⁶ According to one estimate, a "super tax" of 2% on the net wealth of the 167 wealthiest families in 2022-23 would yield 0.5% of national income in revenues and create fiscal space to facilitate investments in health, education and nutrition, besides serving as a tool to fight inequality (Bharti et al, 2022).²⁷ There is a compelling case for raising India's tax ratio from both macroeconomic and redistributive perspectives.

²⁴ Chakraborty and Gupta, 2024.

²⁵ Research shows global convergence of average effective labour and capital taxes over time, as labour taxes have increased and capital taxes fallen. <https://cepr.org/voxeu/columns/globalisation-and-effective-taxation-capital-versus-labour>

²⁶ See [Patnaik \(2024\)](#), [Chandrasekar and Ghosh \(2024\)](#), [Ramakumar \(2024\)](#), [Dreze \(2024\)](#)

²⁷ In the recent budget, 2024-25, the GoI has announced measures to overhaul the capital gains tax framework, which is a step in the right direction ([Rao, 2024](#)).



Source: RBI

Section IV: Low Revenue Growth and Fiscal Restructuring holding back Growth in Social Spending: Further Evidence

This section empirically explores the relationship between social spending and fiscal variables.

Fiscal balance is the difference between government revenues and total government expenditure, which the government meets through borrowings. If we consider expenditure to comprise social expenditure and other expenditures, fiscal balance can be written as,

$$FB = REV - TEXP$$

$$FB \equiv REV - (SSEXP + OTHEXP)$$

Rewriting the identity as a proportion of GDP and expressing it as a change, we obtain:

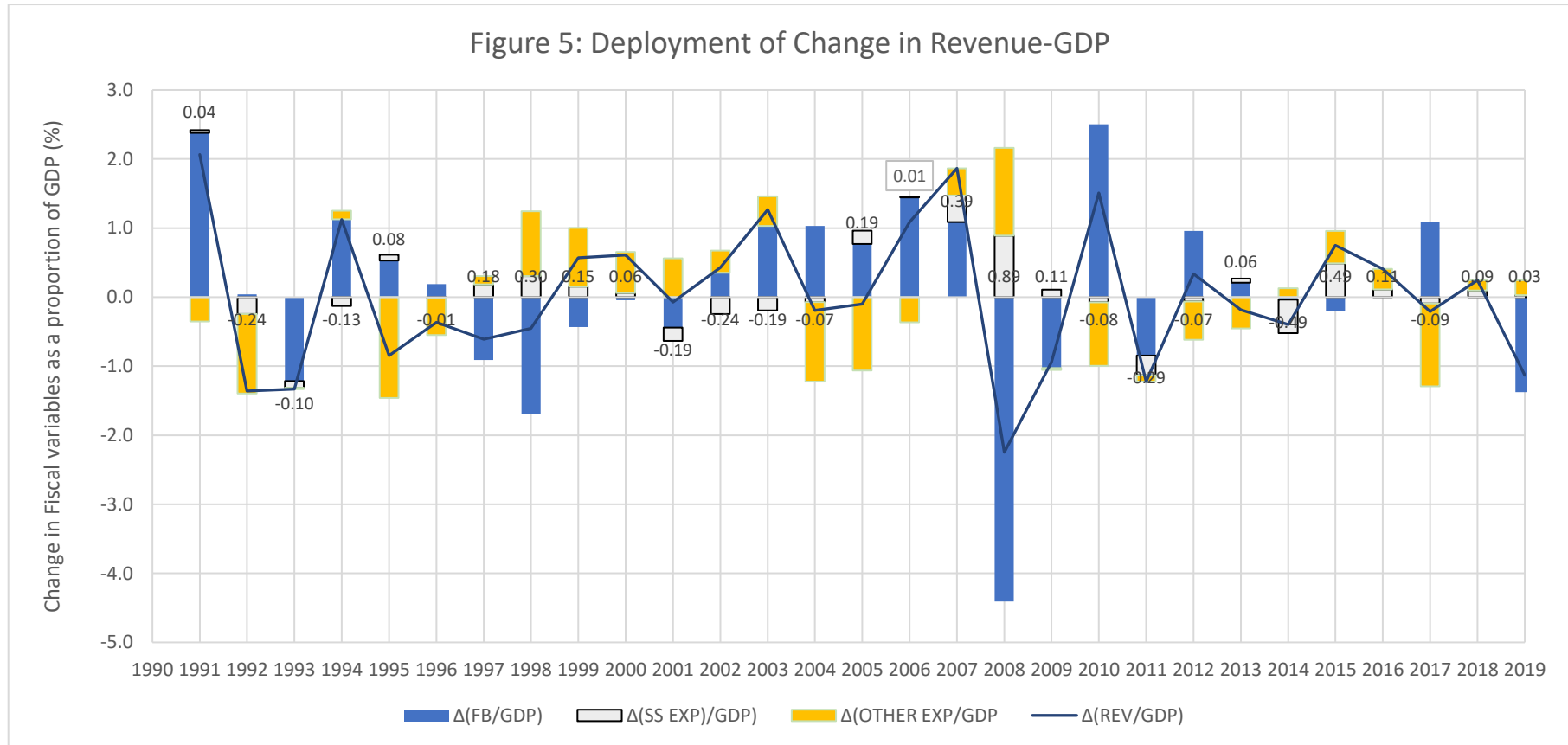
$$\Delta \frac{FB}{GDP} \equiv \Delta \frac{REV}{GDP} - \Delta \frac{SSEXP}{GDP} - \Delta \frac{OTHEXP}{GDP} \quad (1)$$

Or,

$$\Delta \frac{REV}{GDP} \equiv \Delta \frac{FB}{GDP} + \Delta \frac{SSEXP}{GDP} + \Delta \frac{OTHEXP}{GDP} \quad (2)$$

Identity (2) denotes a change in revenue (REV) to GDP, which is used to change expenditure on social services (SSEXP), spending on other heads (OTHEXP), and/ or a change in fiscal balance (FB). A positive change in revenue to GDP indicates revenue buoyancy greater than 1 and, therefore, a possibility of a larger fiscal space for public expenditure.

Figure 5 represents the changes in the fiscal variables from 1990-1 to 2019-20. Change in REV/GDP is represented in bold line, whereas RHS variables in identity (2) are shown as stacked bar. The initial period till 1996 saw significant compression of expenditure ratios, including the social spending ratio (SSE/GDP), which only began to change in the latter part of the 1990s. The period between 2001-2004 again saw compression in SSE/GDP. Thus, eight out of the first 15 years saw SSE/GDP falling. REV/GDP for the Indian economy has been recalcitrant to change but saw some consistent buoyancy in revenue during the mid-2000s, which were also the post-FRBM years incidentally. Increase in REV/GDP, however, was used to improve the fiscal balance (Figure 5). Following the FRBM Act and reinforced with incentives for debt reduction by the Finance Commission, governments brought down the deficits. One may argue that the additional fiscal space from revenue growth – rare in India's economic history- could have been channelled to SSE/GDP. There were two years of fiscal stimulus in 2008/2009 when FRBM was suspended. The fiscal stimulus coincided with the 6th Pay Commission salary hikes, which nudged SSE/GDP and acted as a stimulus for recovery. Expenditure compression as a means for restoring fiscal balance continued with renewed vigour in the 2010s, with the decline in SSE/GDP ratios in half the years during the decade leading up to the COVID-19 pandemic. Fiscal consolidation was harder with changes in REV/GDP in the negative territory for several years during the 2010s.



Source: Handbook of statistics, RBI and Economic Survey, GoI.

Note: Revenue includes tax, non-tax revenues and non-debt capital receipts. All data is for centre and states combined.

Econometric Evidence

The following exercise examines the determinants of social spending on health and education and the impact of FRBM on the same, using a multivariate regression framework. For the period under analysis, we explore the determinants of social spending of the general government and the impact of fiscal rules to ask: (1) whether fiscal deficit affected social spending negatively in the post-FRBM era; (2) what would it take to reach the normative levels of spending, using the estimated parameters from past spending behaviour. Since normative targets of health and education expenditures are clearly defined, this exercise is undertaken for the determinants of combined public spending on health and education. It is a limited exercise within a partial equilibrium static framework without considering the interactions with the rest of the economy.

From the financing perspective, social sector expenditure ($SSEXPHD/GDP$) is determined by revenues (REV/GDP), available borrowing space or fiscal deficit (FD/GDP), and the priority ratio. It is an adaptation of fiscal space diamond in Roy and Heuty (2009). Following Ranis et al (2000), a priority variable affects $SSEXPHD/GDP$. PRIORITY is defined negatively and captures the share of other expenditures (i.e. areas excluding health and education) in total spending. A dummy variable ($DUMFRBM$) is introduced to estimate the impact of FRBM on social spending, which works through its interaction with FD/GDP . REV/GDP and FD/GDP are expected to impact the dependent variable positively.

$$\frac{SSEXPHD_t}{GDP_t} = \beta_0 + \beta_1 \frac{REV_t}{GDP_t} + \beta_2 \frac{FD_t}{GDP_t} + \beta_3 PRIORITY_t + \beta_4 \frac{FD_t}{GDP_t} \times DUMFRBM + \epsilon_t \quad (1)$$

ϵ_t follows i.i.d normal process.

Table 3 presents the descriptive statistics. Stationarity of the variables is checked using Augmented Dicky-Fuller test (Table 4). All the variables considered in the model are either $I(0)$ or $I(1)$. Estimations of long-run relationship with $I(0)$ and $I(1)$ regressors are often faced with challenges. Pesaran and Shin (1999) and Pesaran, Shin and Smith (2001) develop an innovative technique to estimate long-run relationships using Autoregressive Distributed Lag Models (ARDL), which can be used regardless of regressors being $I(0)$, $I(1)$ or a mix i.e. cointegrated. There are two stages. First, a long-run relationship is established using the Bound test, which rejects the null hypothesis of no long-run relationship if calculated F-values are higher than the upper bound. Next, error correction models (ECM) is used to estimate long-run relationships. ARDL doesn't require a stationarity check; it is carried out to rule out the possibility of $I(2)$ variables. The period for estimation is 1990-2020.

Table 3: Descriptive Statistics

	Mean	Maximum	Minimum	Observations
SSEXPHD/GDP	0.04	0.05	0.04	30
REV/GDP	0.19	0.22	0.16	30
FD/GDP	0.07	0.10	0.04	30
PRIORITY	0.85	0.86	0.84	30

Table 4: Unit Root Test: ADF

Variable	Model	Lag	t-statistics	p-value	Stationarity
SSEXPHD/GDP	Constant	0	-4.32	0.00	I(1) DSP
PRIORITY	Constant	0	-2.8	0.06	I(0) TSP
FD/GDP	Constant	0	-3.04	0.04	I(0) TSP
REV/GDP	Constant	0	-6.3	0.00	I(1) DSP

Table 5: ARDL Bounds Testing Model estimates Selected Model: ARDL(1, 0, 1 1 0)

Long-run coefficients				Short-run coefficients				
Variable	Coefficients	Std. Error	t-Statistic	Variable	Coefficient	Std. Error	t-Statistic	
REV/GDP	0.13	0.01	13.80	D(REV/GDP)	0.13	0.01	11.98	
FD/GDP	0.15	0.01	15.06	D(FD/GDP)	0.11	0.01	8.36	
FD/GDP x DUMFRBM	-0.02	0.01	-2.06	D(FD/GDP x DUMFRBM)	0.01	0.01	1.33	
PRIORITY	-0.26	0.02	-17.49	D(PRIORITY)	-0.25	0.02	-14.07	
Constant	0.23	0.01	18.29	CointEq (-1)	-0.98	0.06	-17.77	
No. of Obs.	Adj R ²	F-statistic	I(0) Bound	I(1) Bound	DW	χ^2_{BPG}	χ^2_{BGLM}	CUSUM
30	0.95	109.61	5.15	6.36	1.78	0.02(0.88)	4.2(0.8)	YES

Note: Bound test values I(0) and I(1) are reported for 1% level. Breusch-Pagan-Godfrey (BPG) and Breusch-Godfrey LM (BPG LM) test Chi Square values are reported along with p values in parenthesis.

Table 6: Comparative Statistics

	col(1)	col(2)	col(3)	col(4)	col(5)
Variable	Current Value	Normative Target	Multiplier	Required Change	Final Value
SSEXPHD/GDP	0.047	0.085		0.043	
REV/GDP	0.19		0.13	0.33	0.52
FD/GDP	0.09		0.13	0.33	0.42

Table 5 shows the estimated long-run and short-run coefficients, separately. All the explanatory variables are significant with expected signs except the interactive dummy of DUMFRBM in short run. REV/GDP, FD/GDP and PRIORITY are both short-run and long-run determinants of SSEXP^{HD}/GDP. Although the impact of fiscal deficit on SSEXP^{HD}/GDP due to FRBM is not significant in the short run, it negatively impacts public spending on HD in the long run. Every unit fiscal deficit translates to 0.15 unit SSEXP^{HD}/GDP, which becomes 0.13 unit in the post-FRBM era in the long run. The cointegrating equation is

significant and implies that 98% of the shocks causing disequilibrium are adjusted in every period and the system moves toward equilibrium.

Discussion

The results confirm that the current low share combined public expenditure on health and education in GDP, which is far from its normative targeted level, has become a casualty of low revenue mobilisation, stringent fiscal consolidation in India in the long run (once the economy has adjusted to all shocks) and limited prioritisation.

The elasticity of $SSEXPHD/GDP$ with FD/GDP is 0.08. There is a dip in elasticity after FRBM to 0.074. The elasticity of $SSEXPHD/GDP$ with REV/GDP is 0.027.

The present normative target for public expenditure on HD is 8.5% of GDP (Table 2). The multipliers from the estimated equation along with the existing variable values are applied to obtain the desired REV/GDP and FD/GDP ratio to reach the normative $SSEXPHD/GDP$ (Table 6). From REV/GDP ratio of around 19%, given the estimated expenditure propensities, REV/GDP ratio needs to rise to 52% to achieve this normative $SSEXPHD/GDP$, *ceteris paribus*! That is, based on past behavioural patterns in government spending and the utilisation of revenues, a massive increase in revenue/GDP is required to double $SSEXPHD/GDP$, since the elasticities are small. If the additional resources for raising $SSEXPHD/GDP$ are to be secured through borrowing, the corresponding FD/GDP ratio is 42%!

It underlines the significant effort necessary to raise $SSEXPHD/GDP$, which most policies do not acknowledge. A combination of strategies - revenue mobilisation, greater borrowing and re-prioritisation towards health and education expenditures would be required. Looking ahead, the past cannot be a blueprint for the future. One needs a different response.

The above exercise is indicative based on a static framework, which considers investment in the social sector as an end rather than a means (or an instrument), where social and economic policies interact dynamically. The feedback effects from growth to social development and vice versa through various transmission mechanisms are missing in this static framework, as is the self-sustaining nature of social investments. The following section sketches an alternate macroeconomic framework outlining these connections.

Section V: Towards an Alternate Macro-Fiscal Policy Framework Integrating HD

What kind of macro-fiscal framework would support the expansion of public expenditure on social services in India of the required magnitude and address the problems in the present framework? The essential aspects of an alternative policy framework are presented, drawing on appropriate macroeconomic theories, policy debates and empirical literature.

V.1 Demand and Supply-side Effects of Human Development Investments

Fiscal policy has two roles. Demand management through expansionary or contractionary fiscal policy aims to bring actual output close to full employment output. In addition, fiscal policy should be designed to remove structural constraints to realise full employment levels. Among the most important supply side budgetary policies are expenditures on education, health, and research, characterized by substantial positive externalities (Rakshit, 2005). These are usually long-run responses. Mainstream macroeconomists have emphasized supply-side expenditures, most notably on education,

in growth theoretic literature. The problem with this approach is that it assumes Say's law – that supply will create its own demand. More education will automatically result in more employment and/ or wage increases, which is not true as the high levels of involuntary unemployment indicate (Seguino, 2012).

Expenditure policies have important demand side impacts. Fiscal expansion provides a free lunch with zero marginal opportunity cost of resource use at levels below full employment level. An increase in government expenditure can go hand in hand with the rise of private consumption or investment. The fiscal multiplier raises household disposable income and capacity utilisation and profit of private enterprises, crowding in private investment.

Fiscal multipliers in India are high. Expansionary fiscal consolidation (Alesinia, 2010) is not a developing country reality (There is no evidence of negative expenditure multipliers). Based on a structural macroeconomic model of the Indian economy and applied to the period 1990-2012, the estimated multiplier for capital expenditure is 2.45 and revenue expenditure is unity (Bose and Bhanumurthy, 2015).²⁸ There is no reason why India cannot pursue an expansionary fiscal policy with well-targeted investment in infrastructure and HD. Front-loaded fiscal consolidation in which expenditure cuts do not protect public investment runs the risk of high short-run output losses (Tapsoba, 2013).

Public investment thus has both demand and supply side impacts. Interactions between demand and supply side factors are essential to recognise as these will operate simultaneously. Consider infrastructure bottleneck removal. The bottlenecks are no doubt supply side factors. However, they also depress private investment and reduce aggregate demand. Similarly, HD by enhancing productivity and labour quality will enhance the productive base of the economy, which will encourage private investment and growth. Hirschman (1958) had conceptualised social overhead capital as those basic devices without which primary, secondary and tertiary sectors (directly productive activities) cannot function. Social overhead capital can act as a spur for overall investment through backward and forward linkages.

Nayyar succinctly puts it:

"Human development, which imparts capabilities to people, can both mobilize and create resources. It constitutes resource mobilization beyond financial resources, which are the usual concern of macroeconomics, in as much as it mobilizes the most abundant yet underutilized resource— people—for development. The absorption of surplus labour in employment, then, is an important source of economic growth." (Nayyar, 2012: 17) The same people who constitute resources on the supply side provide markets on the demand side.

It is important to take note of the intertwining of the major demand and supply factors operating, which makes the present fiscal restructuring programme focussed solely on bringing down deficits and debt so unsatisfactory.

²⁸ Estimates of fiscal multipliers vary across studies (Tapsoba, 2013; Jain and Kumar, 2013), but all of them report positive and reasonably high multiplier values.

V.2 Human development spending as investment and not current consumption

New growth theories demonstrate the limits of growth centered on physical capital accumulation and instead emphasize the importance of investment in human capital formation and R&D investments for sustained growth. Fiscal policy formulation, however, completely negates macro theoretic understanding when the quality of expenditure is identified narrowly with capital expenditure, with a revenue deficit considered to have adverse effects only.

"The ratio of revenue deficit to fiscal deficits indicates the 'quality' of fiscal deficit by highlighting the proportion of government borrowing that does not lead to the creation of assets, which can give returns in the future to service the borrowing." (GoI, 2004: p. 62)

Within public expenditure, increasingly a hierarchy is practiced between revenue expenditure and capital expenditure. This hierarchy coalesces with the hierarchy across physical investment and investment in HD. Capital expenditure on physical infrastructure creation is considered superior, whereas HD expenditure constituted by revenue expenditure is regarded as public consumption and, therefore, lesser. The FRBM rule and its differential revenue and capital expenditure treatment reinforce the expenditure hierarchy. The golden rule requires governments to have zero balance in the revenue account, whereas there is more room for capital expenditure financed through borrowing. HD spending being more intensive in recurrent/ revenue expenditure (Table 7), has less fiscal room, and gets discriminated against. By forcing strict revenue deficit limits and clubbing HD expenditure to revenue expenditure, fiscal rules disincentivize revenue expenditure and therefore retards social expenditure.

Table 7: Share of capital expenditure in total expenditure
(average of 2015-2020)

Education, Sports, Art and Culture	2.8%
Medical and Public Health	11.3%

Source: RBI, study of State Finances

These obvious logical flaws and contradictions have been flagged in the past. In a study for the Tenth FC, identification of infrastructure with only physical capital was considered inadequate as investment in human capital has similar features and characteristics of physical infrastructure investment. Investments in health, education, water supply, housing, etc, have all marked public good characteristics. In addition to the consideration of equity, they have strong linkages with each other and with physical productivity (Anant et al., 1995).

Again, in the wake of FRBM Act, the Approach Paper to the Eleventh Five-Year Plan suggested reclassifying education and health as capital expenditure (GoI, 2006). It was an important recommendation that might have rebalanced the hierarchy of public spending, but was ignored.

In an interesting debate on the nature of education expenditure, Rakshit (2010) challenges the idea that a large part of the education expenditure comprises teacher's salary and should, therefore be treated as current consumption. *"What is relevant is not whether the services used in some activity are "exhausted" – services cannot but be at the moment they are rendered – but what the future consequences of the activity are. If the result is an increase in the future productive capacity, the cost of the activity needs to be considered as capital, not consumption expenditure. Quite clearly, on the basis of this criterion, the*

entire expenditure on education and a major part of healthcare cost constitute investment (as do expenditures on R&D, including payments to researchers)." (Rakshit, 2010: 42)

In 2018, the GoI removed revenue deficit targets, through the amended FRBM Act (2018).²⁹ *"It has been cited that in a country like India, there is little or no evidence to say that capital expenditure should enjoy pre-eminence over revenue expenditure."* (CAG, 2018, Chapter 3: p.1). This is a significant move. However, there is negligible reflection in the fiscal roadmaps, which echoes the same old limited understanding of investments. *"The path of fiscal consolidation for the state governments is such that "the whole borrowing space under fiscal deficit is available for capital spending."* (Fifteenth FC, GoI, 2020: p.371). Led by the centre, all governments are leaning in favour of physical infrastructure creation, ignoring the potential of human capital and HD. To view social expenditure as current consumption is a fallacy.

V.3 Sustainability of Public Spending on Human Development

In the present policy discourse, the realisation of linkages from public investments to growth is all but missing when it comes to social spending. Accordingly, the sustainability of debt financing of such outlays is summarily dismissed. Fiscal costs of social policy are emphasized whereas, the ability of such public investment to generate more incomes and revenues is not acknowledged.

In the presence of output gap, increasing public investment raises income by a multiple of the amount spent, so that the government's revenue receipts also go up. Multiplier effects of government spending and "crowding in" are essential *self-sustaining mechanisms*. Under reasonable assumptions of (i) acceleration principle, (ii) complementarity between public and private investment, and (iii) Keynesian stability conditions in the goods market and associated multiplier, public debt arising on account of expansionary public investment in HD and physical capital, is sustainable in the long run (Seguino, 2012). The underlying model of the economy is a Kaleckian investment-led model, featuring income distribution, with public investment in physical and social infrastructure wholly financed through borrowing, whereas public consumption is tax-financed. The present value of the additional tax stream generated through public investment services the additional debt.³⁰

The above mechanism requires a long-time horizon of investments, which the present fiscal rules will not serve. Social and physical infrastructure (caricature of "roads or schools") within public investments have different plan horizons. A policymaker has a choice of investing in social infrastructure or physical infrastructure. Atolia et al. (2017) using a DSGE model suggests that for an average low-income country, a permanent increase in public investment in schools of 1 percent of GDP raises output by about 24 percent in the long run. In contrast, an equal investment in roads boosts production by just 5 percent. However, there is a gestation period with longer lags for social infrastructure to yield returns. For a prolonged time (13 years), the economy enjoys faster growth by investing only in roads, and it takes twice as long (almost 24 years) for the output obtained by investing in schools to overtake that delivered by investing in roads. Policymaking within a shorter timeframe or what the authors call "political myopia" will result in sub-optimal investment in "schools" and lower short-term debt levels.

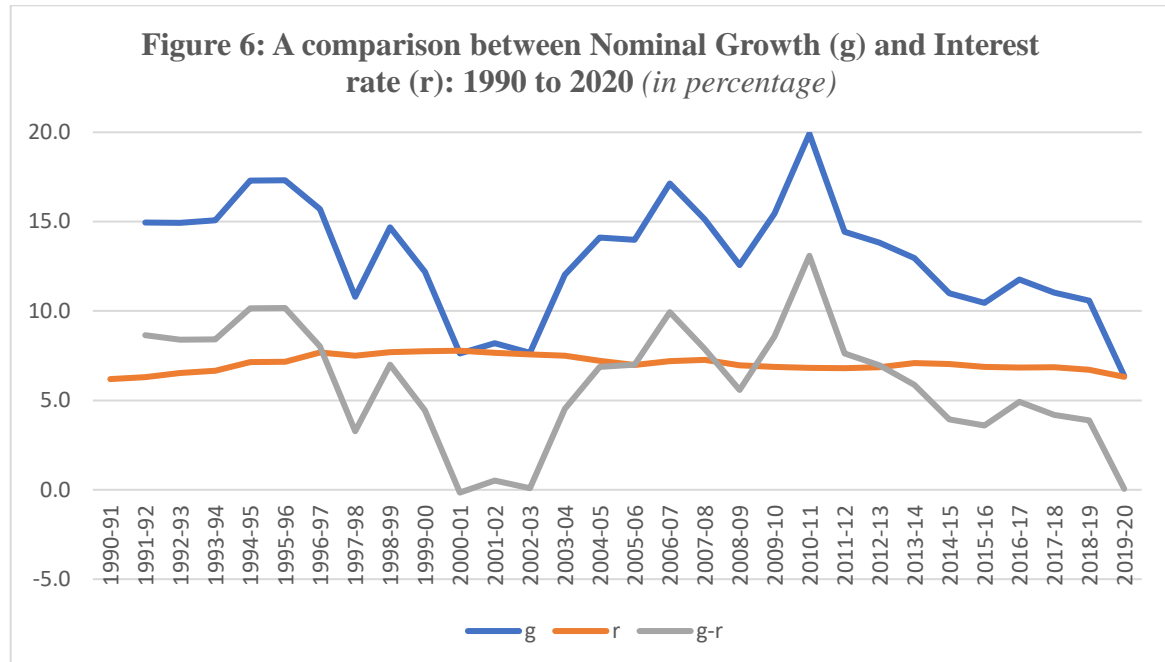
Thus, a dynamic approach to fiscal space (as opposed to a static approach) involves a better understanding of the long-term effects of fiscal expansion on economic growth and

²⁹ In an amendment to financial responsibility and budget management Act 2003 through the Finance Act, 2018 the words achieving sufficient revenue surplus shall be omitted.

https://dea.gov.in/sites/default/files/frbm_amendment_acts_2018_1.pdf

³⁰ The configuration of the future income streams and tax flows is an empirical question.

HD (Roy and Heuty, 2009). It involves moving the feasibility question to long-term sustainability.



Source: RBI and NAS

Note: r is measured as effective interest rate on total liabilities of the government.

The Domar condition is the widely used workhorse for long-term debt sustainability, though the academic literature tends to favour the idea of inter-temporal budget constraint to ensure debt sustainability.³¹ Unlike the conditions on present value of primary balance imposed by the intertemporal budget constraint, Domar’s fiscal sustainability requires a debt path that is stable or would not explode. The debt-GDP ratio is likely to be stable if the rate of growth of the economy (g) exceeds the rate of interest (r).³² During the last thirty years, this condition has been largely met, with a substantial positive gap between g and r (Figure 6). It is also widely agreed that the main risk to sustainability comes from GDP growth. There is no dearth of demand for government securities from the domestic market and the debt is held domestically (Islam, 2018).³³ Debt explosion is not a big concern. Even if there is a short-term bulging of debt due to expansionary fiscal policy for social spending, it is going to be sustainable, under

³¹ Surprisingly, the inter-temporal budget constraint is sometimes used across schools of macroeconomics (Seguino, 2012; Atolia, 2017; Roy and Heuty, 2009) though it has a different macro-theoretic basis and policy implications.

³² $b^* = p \frac{(1+g)}{(g-i)}$, for $g > i$,

Where b^* is long run equilibrium debt-GDP ratio, i is nominal interest rate, p is primary deficit and g is nominal growth rate.

³³ See ADB’s debt sustainability analysis in the context of COVID-19 <https://www.adb.org/sites/default/files/linked-documents/55082-001-dsa.pdf>; CAG reports examine debt sustainability of sub-national debt using Domar condition, https://cag.gov.in/uploads/download_audit_report/2018/5_Chapter-I-05f71ad810cf505.36321067.pdf

reasonable conditions. Blanchard (2019) in a much talked about article notes, "if the future is like the past, he argues, it is possible that debt carries no fiscal cost!"

A supportive monetary policy can help with debt sustainability and fiscal space. The practice of raising interest rates to address inflationary pressures in inflation targeting framework imposes high costs through reduced aggregate demand and slower growth. Inflation in India is strongly related to various supply-side pressures (including international oil prices, food prices, low productivity, supply bottlenecks, etc.). Public investments would improve many of these conditions and bring down inflationary pressures. In other words, inflationary tendencies might be more effectively targeted with appropriate public investment rather than contractionary monetary policy. The central banks can keep the interest rate low, making investments less costly for the government and the private sector. Public debt sustainability, a la Domar conditions, improves with lower interest rate regimes.

Macroeconomic policies in many developing economies have moved away from seigniorage financing to debt financing of deficits to allow greater autonomy to the central banks in the conduct of monetary policy. Seigniorage revenue, a topic that we have not explored here, is a potential source of revenue. Reliance on seigniorage in a calibrated manner (while ensuring that inflation remains within the tolerable range) can create additional fiscal space for social spending. It entails rethinking the fiscal policy-monetary policy links and monetary policy's role vis-à-vis the real economy.

VI. Conclusion

The broad framework of the centrality of HD with its crucial contributions to human welfare and economic growth and the various feedback mechanisms provides a background to explore public spending on the social sector, which is the critical variable connecting growth to HD. The trends across the last thirty years indicate a stagnant HD spending to GDP in India. The growth in per capita GDP is not accompanied by an increasing share of GDP devoted to HD expenditure, unlike the experience of many other countries. Among the constituent ratios, the size of the government to GDP has not increased and remains much smaller compared to advanced economies. There is a shift towards social expenditure within overall spending, but most of the increment comes from other expenditure, as the share of HD within social spending fell across the period. The normative distances, international comparisons, and lack of progress vis-a-vis past positions, all seem to indicate underperformance in social spending in India and the need for greater investments.

Fiscal policy determines the scope of social policy and HD outcomes through its control over fiscal space. The new consensus macroeconomics not only restricts the scope of fiscal policy, there is marginalisation of social policy within it. The ascendancy of macroeconomic policies over social policy, with social expenditure typically treated as residual, was experienced in a variety of ways. (1) There were pressures to cutback social expenditure as part of fiscal adjustment since 1990s, a tendency reinforced by the FRBM. (2) The scope of raising spending was restricted as the fiscal policy treated HD investments as consumption expenditure and therefore inferior to other forms of investment. (3) The medium-term fiscal framework was unsuitable to accommodate the needs of the social sector with returns stretching over a long-term horizon. (4) Fiscal rules implemented in an overall situation of stagnant tax ratios, further restricted the scope for expansionary fiscal policies. (5) Revenue shortfall and expenditure adjustment were routinely passed on to social expenditure. The periodic exogenous shocks and the ensuing macroeconomic instability implied that the social sector repeatedly absorbed the costs of fiscal adjustments. (6) The contractionary tendency built into the design of fiscal rules and the fiscal policy framework affected the behaviour of the States at the sub-national

level, as even the poorest States ran up revenue surpluses to uphold the golden rule of FRBM rather than spending. (7) Uniform fiscal rules across states and centre-state asymmetry in powers and responsibilities are some other design issues in the fiscal framework that do not align with social policy objectives.

The period 1990-2020, thus, saw compression in social expenditure-GDP in several years. Rare improvements in revenue-GDP were used to improve the fiscal balance in the 2000s. The empirical estimation confirms a damping effect of FD on HD spending in the long run for the post FRBM period. It also underlines how the normative targets would require very large increases in revenue and /or borrowing, given the small elasticities of HD spending with revenue and fiscal deficit, based on past trends.

The key propositions for an alternate fiscal framework integrates the specificities and potential of HD and points in the direction of (i) considering HD expenditure as investments and not as current consumption in fiscal policy, (ii) considering the simultaneity of demand and supply effects of public investments for the macroeconomy (iii) recognising the sub-optimality of capital stock and building an investment plan and debt-deficit path accordingly (iv) taking cognizance of the self-sustaining nature of human development investments, and (v) moving fiscal sustainability to a long-term horizon with a long-term fiscal roadmap for social investments.³⁴

³⁴ In a forthcoming paper, we locate the proposed alternative fiscal framework within a macroeconomic model of the Indian economy for further empirical exploration.

References

- Alesina, A. 2010. Fiscal Adjustments: Lessons from Recent History. *Prepared for the Ecofin meeting in Madrid*, April, 15.
- Anant, T.C.A., Krishna, K. L. and Roy Chaudhry, U. (1995) "Measuring interstate differentials in infrastructure" a study undertaken for the Xth Finance Commission. <https://fincomindia.nic.in/asset/doc/commission-reports/10th-FC/appendices/appendix-5.pdf>
- Arestis, P (2008) New Consensus Macroeconomics: A Critical Appraisal, Levy Economics Institute Working Paper No. 564. https://www.levyinstitute.org/pubs/wp_564.pdf
- Bhaduri, A. (1986) *Macroeconomics: The Dynamics of Commodity Production* (London: Macmillan, 1986),
- Bharti, N. K. & Chancel, L. & Piketty, T. & Somanchi, A. 2024. "Income and Wealth Inequality in India, 1922-2023: The Rise of the Billionaire Raj," Working Papers halshs-04563836, HAL.
- Blanchard, Olivier. 2019. "Public Debt and Low Interest Rates." *American Economic Review*, 109 (4): 1197–1229.
- Bose, S., & Bhanumurthy, N. R. (2015). Fiscal multipliers for India. *Margin: The Journal of Applied Economic Research*, 9(4), 379-401.
- Bose, S., Ghosh, P., & Sardana, A. (2020). *RTE and the Resource Requirements: The Way Forward*. NIPFP-Eklavya Foundation.
- Bose, S., Ghosh, P., & Sardana, A. (2020b). Financing the right to education: Role of fifteenth finance commission. *Economic and Political weekly*, 55(37), 44-52.
- Bose, S., Noopur, A., & Nayudu, A. S. H. (2022). Intergovernmental Fiscal transfers and Expenditure on Education in India: State level analysis, 2005 to 2020. NIPFP Working Paper, No. 377.
- CAG (2018) Report of the Comptroller and Auditor General of India on Compliance of the Fiscal Responsibility and Budget Management Act, 2003. Union Government (Civil), Department of Economic Affairs. Ministry of Finance, Report No. 20 of 2018. https://www.cag.gov.in/uploads/download_audit_report/2018/Report_No_20_of_2018_Compliance_of_the_Fiscal_Responsibility_and_Budget_Management_Act_2003_Department_of_Economic_Affairs_Minis.pdf
- Chakraborty, P. and Gupta, M. 2024. Enhanced Devolution and Fiscal Space at the State Level - A State-Wise Analysis, Conference on Issues before the 16th Finance Commission, NIPFP.
- Chattopadhyay, S. (2018). Social Sector Expenditure in India in the 2000s: Trends and Implications. *Journal of Development Policy and Practice*, 3(1), 16-40.
- Choudhury, M. and Datta, P. (2022) The "Scissors Effect" of COVID 19 Pandemic on State Finances: Emerging Evidence on Expenditures, NIPFP Working Paper No. 369, Jan, 2022.
- Das, S. (2010). On Financing the Fiscal Deficit and Availability of Loanable Funds in India. *Economic and Political Weekly*, 45(15), 67–75.
- Dev, S.M. and Mooij, J. (2002): 'Social Sector Expenditures in the 1990s: Analysis of Central and State Budgets', *Economic and Political Weekly*, 37(9), pp 853-66.
- Francis D. L, Dumka N., Kotwal A., PK D. 2023. Why should we invest in health? Evidence from the lens of second-order benefits of health. *Journal of Global Health Reports*.

- Ghosh, J. (2020). A critique of the Indian government's response to the COVID-19 pandemic. *Journal of Industrial and Business Economics*, 47(3), 519-530.
- GoI (2004) Report of the Twelfth Finance Commission (2005-2010).
- GoI (2006) Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan, June.
- https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/apppap_11_1.pdf
- GoI (2016) Economic Survey, New Delhi.
- GoI (2020) Report of the Fifteenth Finance Commission, Finance Commission in COVID times (2021-2026).
- Goldsbrough, David. 2007. "The IMF and Constraints on Spending Aid." UNDP International Poverty Center One Pager No. 34.
- Gupta, S P and A K Sarkar (1994): 'Fiscal Correction and Human Resource Development', *Economic and Political Weekly*, March 26.
- Hirschman, A. (1958) *The Strategy of Economic Development*. Yale University Press, New Haven.
- Islam, I. (2018). Fiscal consolidation, growth and employment: international evidence and implications for India. *The Indian Journal of Labour Economics*, 61(1), 105-130.
- Jain, R., and P. Kumar. 2013. Size of Government Expenditure Multipliers in India: A Structural VAR Analysis. *RBI, Department of Economic and Policy Research, Working Paper No. 7*, September.
- Joshi, S. (2006). Impact of Economic Reforms on Social Sector Expenditure in India. *Economic and Political Weekly*, 41(4), 358-365.
- Kapur, D. 2020. "Why Does the Indian State Both Fail and Succeed?" *Journal of Economic Perspectives*, 34 (1): 31-54.
- Kaur B., Misra S. (2003) Social sector expenditure and attainments: An analysis of Indian states. *Reserve Bank of India Occasional Papers*, 24(1-2), 105-143.
- Khoja, I.A. and Khan, N.A. (2022) Fiscal legislation, debt management and social spending: A state-level analysis in India, *IUP Journal of Applied Finance*, 26 (1), 53-75
- Rao, M. G. (2022) *Studies in Indian Public Finance*. Oxford University Press, 2022,
- Atolia, M., Li, B.G., Marto, R. and Melina, G. (2017) *Investing in Public Infrastructure: Roads or Schools?*, IMF Working Paper no. 105, May.
- McMahon, W.W. (2004) "The Social and External Benefits of Education," Chapters, in: Geraint Johnes & Jill Johnes (ed.), *International Handbook on the Economics of Education*, chapter 6, Edward Elgar Publishing.
- Mehrotra, S and Jolly, R. *Development with a Human Face: Experiences in Social Achievement and Economic Growth*, Oxford: Clarendon Press, 1997.
- Mkandawire, T. (2001) *Social Policy in a Development Context*, Social Policy and Development, Programme Paper Number 7, United Nations Research Institute for Social Development, June 2001.
- Mooij, J. and Dev, S M. (2004) "Social Sector Priorities: An Analysis of Budgets and Expenditures in India in the 1990s" *Development Policy Reviews*, Volume 22, Issue 1, January 2004, Pages 97-120

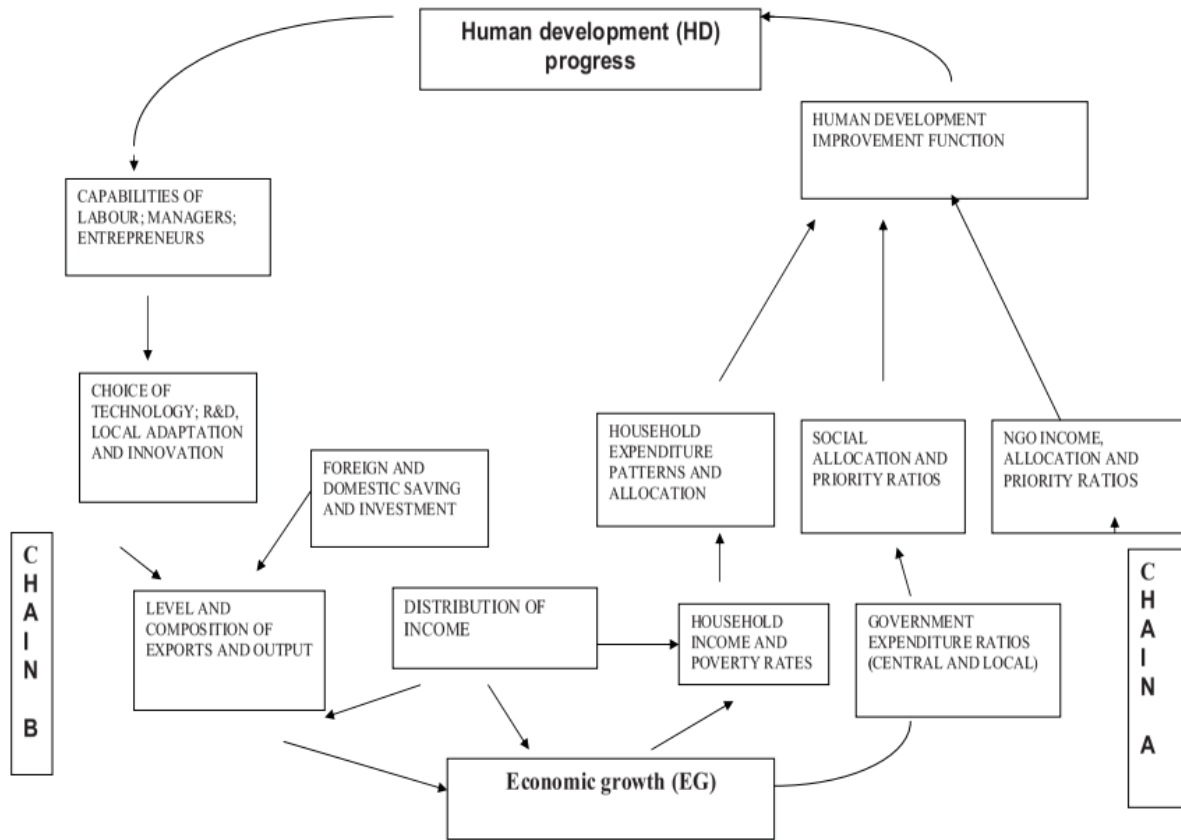
- Nayyar, D. 2012. "Macroeconomics and Human Development," *Journal of Human Development and Capabilities*, Taylor & Francis Journals, vol. 13(1), pages 7-30, February.
- Ocampo J. 2005 A broad view of macro-economic stability, UN Department of Economic and Social Affairs (DESA) Working Papers, 31 Oct 2005. <https://www.un-ilibrary.org/content/papers/25206656/1/read>
- OECD (2021), "General government expenditures", in *Government at a Glance 2021*, OECD Publishing, Paris.
- OECD (2021), "General government expenditures", in *Government at a Glance 2021*, OECD Publishing, Paris.
- Panchamukhi, P (2000): 'Social Impact of Economic Reforms in India: A Critical Appraisal', *Economic and Political Weekly*, March 4: 839.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*, 16(3), 289–326.
- Pesaran, M.H. and Shin, Y. (1999). "An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis." *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, Strom, S. (ed.) Cambridge University Press.
- Prabhu, S (1994): 'The Budget and Structural Adjustment with a Human Face', *Economic and Political Weekly*, April 16-23.
- Prabhu, S (2001): *Economic Reform and Social Sector Development*, Sage Publications, New Delhi.
- Rakshit, M. (2005). Some Analytics and Empirics of Fiscal Restructuring in India. *Economic and Political Weekly*, 40 (31), 3440–3449.
- Rakshit, M. (2006). Budgetary Rules and Plan Financing: Revisiting the Fiscal Responsibility Act. *Economic and Political Weekly*, 41(43/44), 4547–4553.
- Rakshit, M. (2010). Fiscal Consolidation and Inclusive Growth: The Finance Commission Approach. *Economic and Political Weekly*, 45(48), 38–45.
- Rakshit, M. (2011). A Comment on Rajaraman's Response. *Economic and Political Weekly*, 46(13), 140–140.
- Ranis, G., Stewart, F. and Ramirez, A. (2000) Economic Growth and Human Development. *World Development*, 28, 197-219.
- Ranis, G. and Stewart, F. (2005) Dynamic Links between the Economy and Human Development, <https://www.un.org/en/ecosoc/meetings/2005/docs/Ranis%20&%20Stewart.pdf>
- Sen, A. (1992) *Inequality Reexamined*. Oxford: Clarendon Press; 1992.
- Stephanie Seguino, 2012. "Macroeconomics, Human Development, and Distribution," *Journal of Human Development and Capabilities*, vol. 13(1), pages 59-81, February.
- Tapsoba, S. 2013. Options and Strategies for Fiscal Consolidation in India. *IMF Working Paper* No. 127.
- Tcherneva, P. R. (2008) The Return of Fiscal Policy: Can the New Developments in the New Economic Consensus Be Reconciled with the Post-Keynesian View? *Levy Economics Institute Working Paper* No. 539. https://www.levyinstitute.org/pubs/wp_539.pdf

UNDP (1990) Concept and Measurement of Human Development, Human Development Report. New York.

UNDP (1991) Financing Human Development, Human Development Report. New York.

UNDP (2013) The Rise of the South: Human Progress in a Diverse World, Human Development Report. New York.

Appendix 1



Source: Ranis and Stewart, 2007

MORE IN THE SERIES

- Patel, Urjit R., (2024). [Asphyxiation by Sanctions: Harm, Fear and Smog](#), WP No. 421 (November).
- Shrawan, Aakanksha, (2024). [Determinants of economic growth at the sub-national level in the Indian context: Role of governance](#) WP No. 420 (November).
- C. Prasanth, Lekha Chakraborty, Nehla K Shihab, (2024). [The Term Structure of Interest Rates in India: Analysing the Post-Pandemic Monetary Policy Stance](#), WP No. 419 (October).

Sukanya Bose, is Associate Professor, NIPFP
Email: sukanya.bose@nipfp.org.in

Saikat Bangerjee, is Research Fellow, NIPFP
Email: saikat.banerjee@nipfp.org.in



National Institute of Public Finance and Policy,
18/2, Satsang Vihar Marg,
Special Institutional Area (Near JNU),
New Delhi 110067
Tel. No. 26569303, 26569780, 26569784
Fax: 91-11-26852548
www.nipfp.org.in