Assessing the Fiscal Capacity of Indian Governments

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Abstract

In this paper we assess the record of different post reform governments in meeting their targets and improving both delivery and finances. A variety of indices are constructed, and consistency checks devised to measure relative performance. No government has achieved its targets, but the congress has the best record in keeping its promises, and the NDA was most effective in reducing deficits. In the last year of the UPA the deadline effect helped meet expenditure targets, but at the cost of large deficits. The negative effect of the growth dividend on government debt and deficits is established, but the failure of government finances to improve commensurate with this, suggests further improvement in expenditure management is required. Four principles on which to base these improvements are identified.

Key words: Expenditure, Deficits; Governments; Delivery

JEL Codes: H62,H63, E62, E65

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Introduction

This is a good time to assess the evolving fiscal capability of Indian governments. The UPA's term in office has been completed and can now be evaluated, by itself and relatively to other post-reform governments. Second, the past year has been a testing time for government's around the world, as fiscal policy had to respond to severe demand shocks. Early commentary had been very negative about India's prospects in the crisis because of "poor fiscal capacity". High Indian debt was thought to reduce space for fiscal stimuli, and the government's record in executing expenditure was poor. The Government, however, went ahead with a fiscal stimulus that raised the fiscal deficit by 3.5 percent of GDP. It was able to spend more and helped limit the fall in growth to 2 percent. Indian growth rates remained a respectable 7 percent. Even so, the effectiveness of this stimulus, and the sustainability of government debt need to be examined.

Third, the reform period has seen some measures to strengthen institutional capability and governance. How far has this impacted the fiscal space? A premier reform measure here was the passing of fiscal responsibility legislation in 2003. We examine if an assessment made then was fair: "Although the Fiscal Responsibility and Budget Management (FRBM) Bill does require mid-term accountability to Parliament, it may turn out to be a superficial compliance, unless deeper changes occur (Goyal 2004)". The FRBM itself may have been flawed, but many institutions of governance have been strengthened. More information is available now on the government's website as part of the movement towards increased transparency. The outcome budget, introduced since 2005-06, makes it possible to check the results of government schemes and spending. The RTI Act, valuable in itself, is slowly morphing into a more robust right to publish. The legislature has become active in simplifying and modernizing India's laws. Have these translated into some improvement in governance and fiscal capability?

In this paper we assess the record of different post reform governments in meeting their targets and improving both delivery and finances. A variety of indices are constructed to measure relative performance. A growth dividend is established for government debt and deficits, but the failure of government finances to improve commensurate with this, suggests further improvement in expenditure management is required. Four principles on which to base these improvements are identified.

Assessing Implementation

The Government gets very bad press. From R.K. Laxman to more sober commentators politicians and bureaucrats are regarded as making tall promises that are seldom kept. Table 1 shows there are still grounds for this belief. It gives an index of each post reform government's success in spending what it had promised (PM-PK, column 2), its record in increasing the growth of expenditure or promises made over the years (PMI, column 3), and its success in compressing the fiscal deficit over its term (column 4).

Table: 1				
	1	**2**	**3**	**4**
	Year	**Index of promises kept (PM-PK)**	**Increase in promised expenditure (PMI)**	**FD change in term (%)**
Congress	1991-92 to 95-96	-0.7	-0.05	-10.8
UF	1996-97 to 97-98	-8.7	1.21	5.2
NDA	1998-99 to 03-04	-1.5	-0.57	-21.3
UPA	2004-05 to 08-09	-1.1 (-1.8)	-0.13 (-0.74)	29.2 (-35.4)

Note: Bracketed terms exclude the crisis year 2008-09 for the UPA
Source: Calculated from budget papers available at http://www.indiabudget.nic.in/

The steps in calculating the PM-PK index are as follows. Calculate first, promises made as the rise in the budget estimates in any year as a percentage of revised estimates[2] in the past year for each expenditure category. Second, promises kept as rise in the revised estimates of that year over the last year's revised estimates. Third, the difference between promises kept and promises made for each category in each year. Fourth, the total, the standard deviation, and the coefficient of variation over all the expenditure categories, for each year. Finally, the average of the coefficient of variation over the years each government was in power gives the

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[2] Actual outlays are also reported after a two-year gap. But these are not available for the early nineties or for disaggregated plan expenditures so we use revised estimates as the base.

index. The expenditure categories taken are the Central Plan Outlays (CPO), its financing, and allocation over a number of sectors (see Table 2).

In a similar fashion, an index of increase in promises made is calculated. This shows the increase in promises made in one year compared to the last. As above the totals normalized by the standard deviation are averaged to get the index.

Table 2: Credibility of the UPA Government											
	2004-05		2005-06		2006-07		2007-08		2008-09		2009-10 (Interim B)	2009-10 (UPA II)
Promises	made	kept	made	kept	made	kept	made	kept	made	kept	made	made
C PO	15.5	6.4	40.1	36.1	23.7	18.9	31.0	19.7	28.4	32.8	7.1	15.42
To which **Internal and extra budgetary res. of PSEs**	10.0	-0.9	47.7	43.6	25.2	20.0	40.2	22.0	36.1	28.0	12.7	13.12
Budget support	20.6	13.3	33.8	30.0	22.4	18.0	22.5	17.5	21.0	37.3	2.1	17.49
Of which **Agriculture and allied activities**	26.5	30.7	33.9	23.1	25.0	25.1	15.8	15.6	17.9	16.7	1.7	6.62
Rural development	-30.2	-15.4		49.3	9.3	9.3	11.4	15.8	12.7	131.2	-12.5	5.90
Irrigation and flood control	66.5	32.7	43.6	14.5	40.4	10.5	9.7	-1.7	-9.5	-19.2	19.6	19.62
Energy	10.8	3.1	33.6	23.3	29.5	28.1	15.0	4.9	29.9	36.9	15.8	16.89
Industry and minerals	45.2	36.2	53.2	28.5	44.4	25.1	62.3	42.6	60.6	51.5	24.4	31.43
Transport	18.2	1.4	61.1	53.5	20.3	23.3	43.7	38.4	22.1	13.5	10.2	20.49
Communication	-8.8	-29.0	32.9	91.9	13.5	1.9	44.6	-7.0	32.2	21.9	-17.6	-17.32
Science, technology, environment	33.5	25.2	33.6	13.9	33.6	12.3	30.1	14.3	19.9	10.4	11.8	31.12
Social services	14.9	26.6	35.6	30.2	23.5	15.4	35.8	27.1	27.6	19.3	5.1	15.79
Source: Calculated from budget papers available at http://www.indiabudget.nic.in/												

Finally, the table also reports a statistic of each government's record with the fiscal deficit. It gives the change in the FD in the last year of a government's tenure compared to what it was in the first year of the tenure, as a percentage of the first year value.

PM-PK was always negative. No government was able to live upto its promises. The best performance was that of the Congress government, and the worst by the United Front. The UPA's record would be worse than the NDA's without counting the crisis year. The focused effort to spend in 2008-09 reduced the negative value of the UPA's index to -1.1 from -1.8. This is the deadline effect, suggesting it is possible to counter bureaucratic inertia and to achieve targets.

Table 2, with details of the UPA's yearly targets and achievement for the different expenditure categories, shows the best delivery was in agriculture and rural development. There were severe shortfalls in energy, irrigation, and also, surprisingly, in social services. CPOs and budgetary support for the plan were below target for every year except the last, while internal and extra budgetary support estimated for public sector enterprises (PSEs) was never achieved. The table also shows a sharp increase in the promises made by the UPA II over the rather modest promises the UPA had made in the interim budget. Since the initial fiscal stimulus relied on tax cuts, expenditure increase was modest.

Table 3 shows a steady increase in the share of the four categories of agriculture plus (agriculture, rural development and irrigation) and social services as a percentage of industry plus (industry and minerals, energy, transport, communication, science, technology and environment) across all post reform governments. But the rise has been sharpest with the UPA, especially considering the expenditure push visible in the revised estimates of the crisis year 2008-09, and is to be continued by the new UPA II government. The UPA was, however, unable to raise the share of agriculture plus until the big push in its last year. The new government plans to continue this higher allocation, so agriculture's share in plan outlays will now be near its share in GDP. The rise in social services implies an effective redistribution from earning sectors to those left out of the new opportunities available. The UPA's goal is inclusive growth. There was progress on the goal of inclusion but although they realize growth is essential to provide the revenues for redistribution, the severe shortfalls in expenditure on irrigation, on energy and in the central plan outlays implies they neglected the expenditures necessary to sustain growth.

Table 3: Relative sectoral allocations			
Governments	**Years**	**Allocations to agriculture plus and social services as a percentage of allocations to industry plus (BE)**	**Allocations to agriculture plus as a percentage of allocations to industry plus (BE)**
	1990-91	26.8	14.6
Congress end	1995-96	31.5	16.6
UF end	1997-98	37.7	16.6
NDA end	2003-04	44.5	12.6
UPA end	2008-09	54.7 (63.9)	14.4 (25.4)
UPA II	2009-10	60.9	23

Note: The bracketed value is based on revised estimates
Source: Calculated from the Economic Survey and Budget Documents, http://indiabudget.nic.in

Column 3 Table 1 shows no government was able to accelerate promised expenditure, given budgetary constraints, except the UF—which had the worst record in keeping its promises. Column 4 shows the UPA would have had the greatest success in reducing the FD in its term, were it not for the crisis year which made it the worst performing government. The best was the NDA, which achieved this without the FRBM, in a period when real interest rates were high and growth rates low, there were a number of adverse shocks, and a large payout due to the award of the Fifth Pay Commission.

In the next section we see how interest and growth rates affect the evolution of government debt and deficits.

Deficits and the evolution of Government debt

A higher real interest rate means higher interest payment on past debt. This adds to expenditures and therefore deficits. Higher growth, apart from contributing more revenues, also increases the denominator, thus reducing debt and deficit ratios.

In order to explore this formally we need to make the conceptual distinctions between different kinds of deficits. The fiscal deficit (FD), used in Table 1, gives the government's borrowing requirement in any year to finance current and capital expenditure net of tax and non-tax revenue. The revenue deficit (RD), or deficit on current account, is the amount the government needs to borrow to finance its own consumption. The primary deficit (PD) is the FD minus interest payments. Since this is net of the burden of servicing of debts due to past

borrowing it is a measure of current borrowing, and of fresh addition to government debt. This, along with interest payments, adds to government debt.

If real government purchases are G_t, nominal net tax collections are T_t, P_t is the price level, and i_t is the nominal interest rate then the nominal value of public debt, D_t, increases in any year by nominal interest payments on past debt plus the PD, $P_tG_t - T_t$:

$$D_t = (1+i_{t-1})D_{t-1} + (P_tG_t - T_t)$$ (1)

If real public debt is $B_t \equiv (1+i_t)D_t/P_t$, the real debt to output ratio is b_t, real tax collections to output ratio is $\tau \equiv T_t/P_t$, substituting for B_t in (1) and dividing by output Y_t, gives:

$$\frac{B_tP_t}{(1+i_t)Y_t} = \frac{B_{t-1}P_{t-1}}{Y_t} + \frac{P_tG_t}{Y_t} - \frac{T_t}{Y_t}$$ (2)

Transformations of (2) using $1+g_t = Y_t/Y_{t-1}$, $1+\pi_t = P_t/P_{t-1}$ for growth and inflation respectively, and the approximation $(1+i_t)(1+g_t)(1+\pi_t) \doteq 1+i_t - g_t - \pi_t$, gives the change in the real debt ratio:

$$b_t - b_{t-1} = (1 - \pi_t - g_t)b_{t-1} + \frac{G_t}{Y_t} - \tau_t$$ (3)

Equation (3) shows a high growth rate can be a strong force for reducing the debt ratio. To the extent the tax ratio rises with growth[3], the impact increases. The real debt ratio rises with a high real interest rate, $r_t = i_t - \pi_t$, and the PD ratio (*pd*). It rises with itself if the real interest rate exceeds the growth rate, and in such conditions, high debt levels can imply exploding unsustainable debt. If the real interest rate equals the rate of growth, the *pd* alone would add to the debt ratio. A growth rate that exceeds the real interest rate would reduce debt.

The equation gives another way to assess the performance of different governments, by comparing *pd* estimated from equation (3) with the reported *pd*. Government interest

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[3] The ratio of Indian tax revenue to GDP, which had long stagnated in single digits, peaked at 12.6 in 2007-08 with high growth, before falling in the next crisis year to 11.8.

payments, iD, and debt D are reported in the budget documents. From these two an estimate of the nominal interest rate paid on government debt can be obtained. Subtracting inflation calculated from the GDP deflator gives an estimate of *r*. The growth of real GDP at market prices gives *g*. Then an estimate of *pd* is obtained by subtracting the first term on the RHS of equation (3) from the change in the debt ratio. These calculated *pd* series are graphed, together with the *pd* reported in government budget documents, and horizontal lines indicating the periods different post-reform governments were in power, in Figure 1.

Figure 1: Governments and Primary Deficits
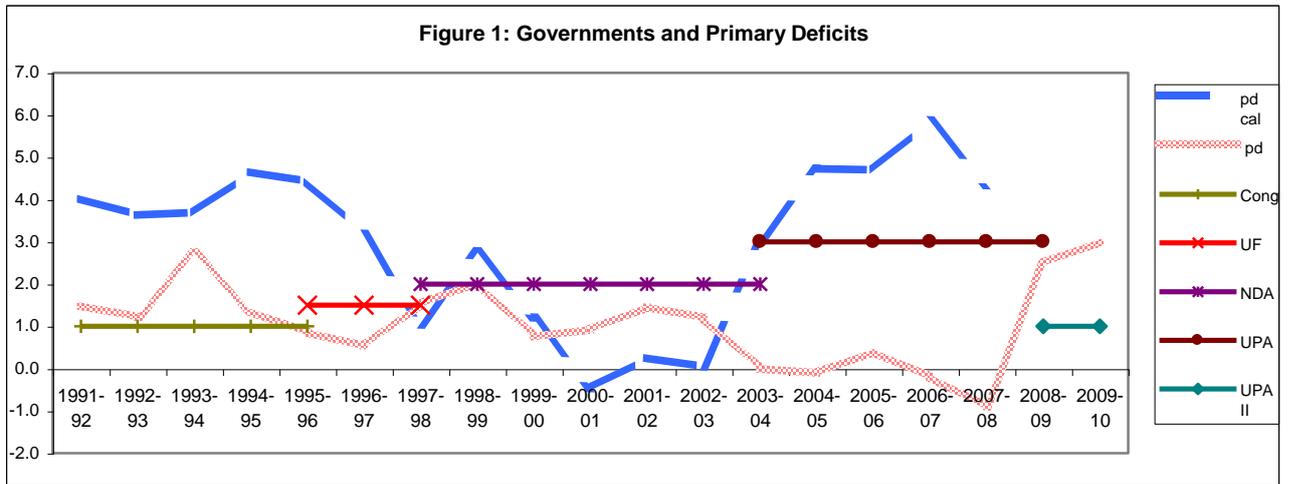
A calculated *pd* higher than the historical *pd* implies that given the reduction in debt due to high growth and low *r*, for the historical change in debt to have occurred, the *pd* must have been higher. It indicates possible misreporting of the primary deficit, or that debt ratios were not reduced as much as they could have been, given the favourable conditions of high growth and low real interest rates.

Figure 2: Macroeconomic Variables and Primary Deficits
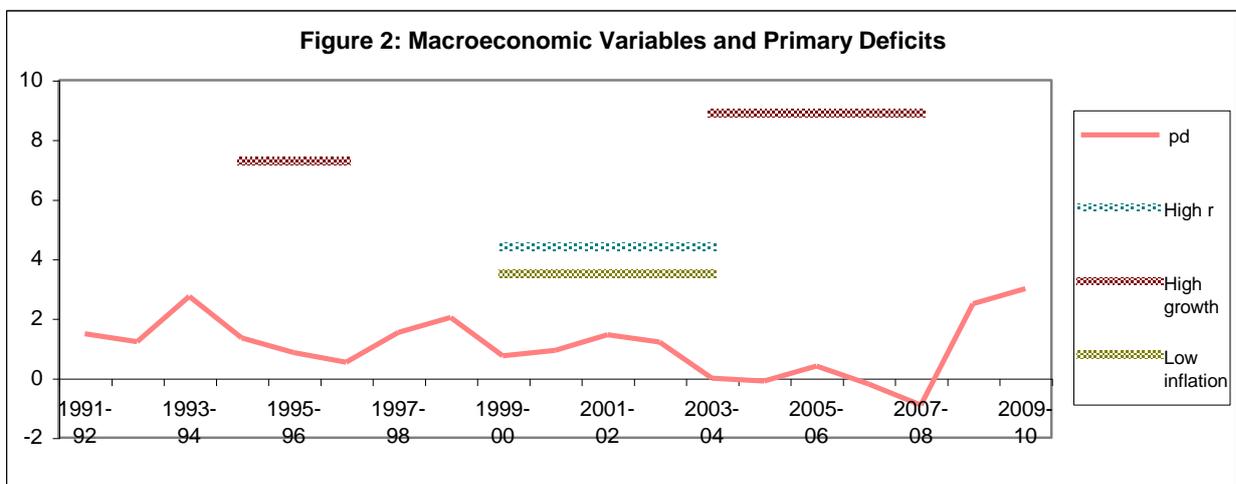
The largest gaps between the two *pd* series indeed occurred when growth was high; they were also periods when Mr. Chidambaram was the finance minister, first in the UF and then in the UPA government. Figure 2 shows the high growth periods and that historical *pd* indeed fell in those periods. It also shows the adverse effect of high *r* on government finances.

During the years of the NDA government inflation fell, but nominal interest rates continued to be high, so that high real interest rates tended to raise debt. Since growth was also low, r-g was high. The implicit *r* facing the government was negative earlier, became positive in 1996-97, peaked at 5 percent and fell below 1 percent only in 2004-05. The NDA government had to pay paying the highest real interests rate on debt in the post-reform period. But during the UPA years, nominal interest rates also fell, and inflation began to rise again, driving real interest rates very low. Growth peaked at average rates of above 8 percent, and the FRBM Act was also passed in this period. The *pd* fell along with the mandated fall in FD and RD. It turned into a surplus for the first time in 2004-05. Tax revenue was buoyant. But the fall in debt was not as much as these favourable conditions warranted, explaining the very large gap between the calculated and reported *pd*. Despite the FRBM, actual deficits were probably higher than reported deficits. The growth dividend was blown up in large expenditures. The *pd* it shot up in the year of the global financial crisis, and is estimated to be 3 percent in 2009-10. Items left uncovered helped create the explosion despite modest tax cuts in the fiscal stimulus packages.

In the steady state, when *b* and other variables are constant, equation (3) reduces to b = *pd*/g-r. For the debt ratio[4] to stay unchanged at around 0.8, at the current *pd*, the growth rate must exceed the real interest rate by 3.75 basis points. At current rates *b* will increase. With *pd* = 3, r = 4, g = 7, the steady-state value of *b* is 100 percent. Unless growth revives and the *pd* is reduced India's steady-state debt is much higher than current levels. For example, with favourable values of *pd* =0.3, r = 6, g = 8, b reduces to 15 percent. If the reverse happens debt can explode, so a steady state will not be attained without a crisis.

Even high growth together with the FRBM was insufficient to reduce India's debt enough to build robust space for countercyclical fiscal measures. The goal of inclusive growth encouraged large government expenditures, as tax revenues rose with growth. Goyal (2009)

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[4] Indian Central and State Government debt was 0.73 of GDP in March 2009.

shows in a model of optimal monetary-fiscal policy that the deviation of government debt in a populous low per capita income emerging market in response to a consumption shock rises with growth, tax response, and the level of debt. Therefore improved incentives for expenditure management are required. These changes are necessary to prevent growth from petering out and hurting the ability to finance inclusion.

Maintaining growth to make inclusion possible

Although growth does very effectively reduce government debt and deficit ratios, there is also a temptation to expand spending. This vitiates the possibility of countercyclical fiscal policy, and taken to extremes can make debt explode. If government demand is to expand in crisis times such as 2008-09 where there were severe negative shocks to export, private consumption and investment, then it must contract when private demand is booming to create the fiscal space for countercyclical intervention. Growth does tend to decrease debt ratios but not if there is a permanent rise in government expenditure greater than the increase in tax revenue.

A distinction can be made between structural and cyclical deficits. The cyclical deficit depends on the stage of the cycle. A structural deficit may arise if trend expenditure exceeds revenues. It may be defended in a transitional high growth period, since growth reduces debt ratios, but expenditure financed by such a deficit must be such as creates supply-side capacity that enables growth.

The reform period has seen successful tax reform, and tax buoyancy. The implementation of GST will take this further. The move towards uniform low rates that encourage compliance, increase the tax base, and reduce transactions cost is in the right direction. The per capita tax burden must not increase.

But despite voluminous reports from the expenditure reform commission, there has been no equivalent reform on the expenditure side. Reform based on just four principles can make a difference.

First, the share of growth enhancing expenditure must be increased, since we have seen the beneficial effects of growth on government's finances. The capital expenditure in the budget has fallen as low as 2 percent of GDP. Neglect of energy and irrigation continued in the UPA.

Even so, physical capital alone does not contribute to growth. Anything that builds human capacity does so. Thus capital should be redefined to include human, social and physical capital. For example, inclusion reduces communal and identity politics and encourages people to turn their attention to productive activities. Efforts should be made to target welfare payments to infrastructure, education, and human capital formation. Increasing capacity and assets of the poor is the sustainable way to lower poverty. Government expenditure should be reclassified as that which has a long-term impact and pure consumption expenditure, and the share of the former increased. Thus there must be a change in composition towards expenditure that improves the nation's supply response.

Second, whatever is spent should be spent well. Expenditure should be made with maximum effectiveness and impact. Expenditure reforms including better accounting and management information systems are required to reduce waste, leakages, and delays. The crisis showed what government machinery is capable of as large amounts were effectively spent in a short period, and expenditure targets exceeded for the first time. Such focused spending can be made the rule rather than the exception, through serious deadlines and better system design. Outcomes must be assessed, responsibility and rewards assigned, and expenditure reallocated to where it has maximum impact.

Third, where transfers have to be made, they must be better targeted, and implemented without creating distortions and arbitrage. This step alone will cut out the major source of leakages and corruption. Rather than distorted prices, that create a black economy and weaken the supply response, direct income transfers should be given where necessary to the aged and disabled, using new technology like the proposed unique identification numbers. Food security could also be designed as a direct income transfer to the woman of a BPL household. Research shows this makes it more probable that the money is used for food.

Fourth, any permanent rise in government consumption or transfers should be linked to a specific tax resource. This will impose the necessary discipline on the tendency to keep starting new schemes that ultimately end up increasing the deficit. It will make the cost of a scheme clear to the politician and the electorate and reduce the politician's ability to impose indirect burdens that take away with one hand what he gives with the other.

To be effective the above principles must be enshrined in systems and in legislation. The FRBM Act was an attempt to impose fiscal discipline, but the requirements were met largely through decreasing government capital expenditure. Other creative means such as off balance sheet items were found to maintain the letter of the law even while violating its spirit. And this in a period when there was tremendous growth and tax buoyancy. Even while using up all these extra resources, in the final year, Chidambaram just left items like loan waivers uncovered, explaining the sharp jump in deficits when growth faltered. The Act leaves the government the ability to legislate itself out of commitments made.

In the US similarly creative accounting defeated the 1985 Gramm-Rudman-Hollings Bill that set yearly ceilings for the deficit. The design flaws shown up by experience were corrected in the Budget Enforcement Act of 1990, and genuine improvement in government finances followed.

Among the better incentive features were expenditure caps that enforced small reductions in discretionary spending. New transfer payments to individuals could be made only if these transfers were demonstrated to have assured funding. Unlike deficit targets, expenditure caps allow automatic macro-stabilization, since deficits can increase, in a recession, as revenues fall. The temptation to increase spending in a boom is moderated. Escape clauses were provided for emergencies even in the caps. Since this flexibility reduced pressures to violate the Act, it increased its credibility. In the Indian context, detailed expenditure targets are required for individual ministries, and levels of government, as part of improved accounting, planning, and expenditure management. Even if the FRBM cannot be re-enacted the above should form part of systematic strengthening.

A more credible FRBM or better systems will allow better fiscal-monetary coordination. In post-reform India, as the RBI gained greater independence, monetary tightening sought to compensate for fiscal giveaways, harming growth. Or it could be the government itself forcing monetary tightening given the electorate's sensitivity to high inflation. Even though reducing demand is an inefficient and costly way to fight cost-push inflation. Growth was stimulated only when Indian interest rates fell after 2000, despite high government deficits, and aggressive sterilization, because international interest rates fell.

In the post-crisis circumstances, the global push for demand stimuli has made a coordinated monetary-fiscal response possible despite high government debt. Everyone doing it made it possible for us to do what the economy needed. Global markets' initial doubts about high FDs gave way before attractive growth rates, the second highest in the world. Inflows resumed, as they factored in that growth makes government debt sustainable. There are fears that high government borrowing will raise interest rates, but since much of the borrowing is being completed in the slack period when private demand is low, the RBI is committed to support the borrowing with quantitative easing through OMOs, and since a lower level of inflows means government balances sequestered for sterilization can be released, the higher borrowing can be smoothly handled. The absolute figures may high at five lakh crores, but then the size of GDP, savings and markets has all expanded.

If the composition of fiscal expenditure changes, longer-term monetary policies can also be recast to support growth, and further boost the diversified sources that sustain Indian growth. These include high domestic demand and savings, agriculture, openness, technology, the demographic profile, the infrastructure cycle, improvements in markets and institutions, stable democracy, and having crossed a critical threshold. As a net commodity importer India gains from lower global prices. Dependence on external demand is low compared to other Asian countries. So is the dependence on foreign capital. The limited inflows required to remove sectoral intermediation constraints in the domestic financial sector, have revived. India's higher growth in its transitional catch-up phase does offer valuable degrees of freedom to Indian macroeconomic policy. But it requires some discipline to safely harvest it.

The steady increase in the quality of Indian institutions essential for sustainable development has occurred. It is possible this will continue, and even lead to a steady improvement in governance. Just as the late 90s slowdown was the critical period when Indian industry restructured and transformed itself, we may look back on the global crisis as the watershed when the Indian government transformed itself and showed it also could deliver. Some systemic improvements in expenditure management are, however, a prerequisite.

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