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Fiscal Developments and Outlook in India

ABSTRACT: The paper identifies those elements in the configuration of fiscal parameters confronting the country that give cause for concern, and examines whether the fiscal reform measures taken address these adequately. The primary fiscal indicators consolidated across Central and state governments over the last fifty years, normalised by GDP and taken in first differences, are examined for evidence of countercyclical fiscal policy, and election-year profligacy. The underlying structural cause of fiscal stress since the start of reform in FY92 is then identified, as the uncompensated loss of trade tax revenues. This has led to a fall in the tax/GDP ratio, amounting by FY02 to two percent of GDP relative to the all-time peak of 16 percent achieved in FY90 (there is provisional evidence however of an upturn in FY03 by one percent). Finally, the two major fiscal reforms initiated in FY00 are examined. One is the accounting change whereby 'small savings', a supply-driven automatic borrowing channel, were re-routed into a newly created National Small Savings Fund, independently of the budget. Although just an accounting change, it had a profound effect in terms of signalling the need for financial viability in the small savings scheme, and thus eroding embedded political economy pressures in the system that served to keep up interest rates. The second major reform is the fiscal responsibility legislation that has been enacted by the Centre, and four state governments so far. Simulated outcomes show that without an improvement in revenue effort, the required fiscal compression of non-interest revenue expenditure is so extreme that it could well result in political turbulence. That could then feed back through the election-year compulsions revealed in the regression analysis to worsening fiscal discipline again. The paper concludes that improved revenue effort is key to fiscal reform in India.

JEL Numbers: D72, E62, H62
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FISCAL DEVELOPMENTS AND OUTLOOK IN INDIA

I. INTRODUCTION

The consolidated fiscal deficit in India aggregating across all tiers of government has in the last five years stayed in the range 9-10 percent of GDP.[1] The very large literature on the harmful growth impact of fiscal deficits of this magnitude is not reviewed in this paper.[2] The focus instead is on identifying which particular features of the configuration of fiscal parameters confronting the country today are, or should be, cause for concern, and whether the fiscal reform measures taken address these adequately.

Worries about the sustainability of the public debt path in India have receded somewhat in the face of the favourable growth prospects in the current year, expected to extend into the medium-term,[3] and the decline in nominal interest rates since FY00. The interest rate decline indeed, quite independently of its direct impact on debt sustainability, has been a critical factor in the current growth buoyancy of the economy, and is in turn an outcome of a major fiscal reform measure initiated in FY00. Shepherding the decline through the political economy pressures keeping up interest rates required cautious and phased progress, and is undoubtedly one of the major successes of the fiscal reform effort.

Notwithstanding the rate decline, the interest bill on the consolidated debt stock in FY02 and FY03 was above 6 percent of GDP, as against tax collections of 14 percent in FY02, possibly 15 percent in FY03 (going by budget estimates).[4] These figures, even with the tax upturn in FY03, are unsustainable in themselves.

Clearly any understanding of the fiscal situation in India requires identification of the drivers of fiscal imbalances in the system. Sections II and III of the paper address this.

Section II generates a fifty-year time series for the principal fiscal indicators aggregating across Central and subnational state governments, since it is this rather than the Central imbalance alone which matters macroeconomically. The data are then tested for evidence of countercyclical fiscal policy, and opportunistic election-year profligacy of the kind that has been empirically demonstrated elsewhere.[5] Received empirics focus on the Centre alone, perhaps because the fiscal deficit as internationally defined was not officially reported until FY89. Only the monetised deficit was reported, as the uncovered residual after subtraction from total expenditure of debt receipts along with non-debt receipts. The fiscal deficit for years prior to FY89 had to be generated here therefore.

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[1] Audited actuals for FY99, FY00 and FY01 were at 9.0, 9.5 and 9.1 percent respectively, and the most updated approximations for FY02 and FY03 stand at 9.9 and 9.3 percent respectively.

[2] Recent statements are in Srinivasan, 2002 and Reynolds, 2001. For a summary of the literature critical of excessive focus on fiscal imbalances, see Reddy, 2003.

[3] See Goldman Sachs, 2003, for an especially optimistic projection.

[4] The Central components of these estimates are either actuals (FY02) or revised budget estimates (FY03); the state components are the most updated budget estimates possible for both years.

[5] Alesina et al, 1997 carries an excellent summary of both opportunistic (uniform regardless of party in power) and partisan (influenced by the ideology of the party in power) models, both before and after the rational expectations revolution. The same source summarises the empirical evidence for the OECD countries.

In India, as in all developing countries, a distinction is made between the overall fiscal deficit, and the excess of current expenditures over revenue receipts (termed the 'revenue deficit'). A high fiscal deficit in conjunction with a low revenue deficit (or surplus), is not necessarily a bad thing *prima facie*. When net new borrowing goes towards funding capital expenditure there is, potentially at any rate, a basis for both higher growth and higher revenues in future years. A high revenue deficit on the other hand carries fewer possibilities of recovery (although a contrary empirical finding in Devarajan, et. al., 1999 shows that growth in the developing world has a positive functional dependence on non-interest current expenditure rather than capital expenditure).

Within fiscal and revenue deficits, in turn, the imbalance of relevance for an understanding of year-to-year variations in fiscal policy is the corresponding primary deficit, the discretionary residual imbalance after subtraction of interest payments from total expenditure. Primary deficits, revenue and fiscal, are the variables subjected to the regression analysis of Section II.

There has been a clearly visible worsening in these primary indicators starting with FY98. This is popularly attributed to the real wage hike granted to civil servants on the recommendation of the Fifth Pay Commission. The wage hike is only the immediate precipitating factor however, and cannot be treated as an exogenous event. Section II examines whether that, in turn, was an endogenous outcome of the underlying political economy drivers of the system.

Section III looks at the steady worsening in the tax/GDP ratio over the nineties. The all-time tax revenue peak of 16 percent of GDP achieved in FY90 has been steadily eroded over the nineties, a result of the uncompensated loss of trade tax revenues. Trade tax cuts have undeniably given a long-overdue competitive edge and buoyancy to the economy. However, in a country where trade taxes accounted pre-reform for 3.7 percent of GDP, and 35 percent of total tax revenues at the Centre, the issue of fiscal compensation for lost revenues was grossly neglected. There was a vacuum in the theoretical literature on the optimal source of replacement revenue for reduced trade taxes, with no robust results on non-infinitesimal changes until a recent contribution by Keen and Ligthart, 2001. The price-neutral VAT suggested there as a welfare-enhancing source of compensation, however carries a political feasibility problem. An IMF empirical cross-country study does not encourage confidence in its revenue-enhancing properties in the developing world.

Thus, the fiscal stress in India today, as in all developing countries undergoing a process of trade tax reform, is a result of both theoretical and practical neglect of the revenue loss from falling trade taxes. Lost trade tariff revenues in India have resulted in an uncompensated loss in aggregate tax revenue, which had amounted to two percentage points of GDP by FY02.[6] This is a disastrous decline in a developing country critically in need of growth-promoting public goods.

Sections IV and V examine two major official moves towards reform of the fiscal situation, against the background of the analysis of the earlier sections. Section IV examines the fiscal responsibility legislation initiated in FY00 and recently enacted by the Central government, and four state governments. The simulations of the fiscal correction projected in the legislation in Section IV show compression of non-interest current expenditure to a fairly extreme degree, which can be relieved only if there is a substantial improvement in revenue performance, over historically achieved rates of increase.

[6] Combining actuals for the Centre with pre-actual revised estimates for States.

Section V examines the engineered reduction in nominal interest rates already referred to, starting with the accounting change in FY00 whereby 'small savings' were nested in a newly created National Small Savings Fund, independently of the budget. Although just an accounting change, it had a profound effect in terms of eroding embedded political economy pressures keeping up interest rates.

Section VI concludes.

II. DIAGNOSTICS: FISCAL INDICATORS 1951-2001

The principal fiscal indicators for the fifty years 1951-2001, consolidated across national (Central) and subnational (state) governments, are examined in this section for evidence of countercyclical properties, and opportunistic behaviour by governments confronting elections.

Official reporting in India of the fiscal deficit as internationally defined started only in FY89. Perhaps for this reason, there are only two formal econometric studies of fiscal deficits in India going back beyond the nineties, both confined to the Centre (Sen and Vaidya, 1996 and Cashin, et. al., 2001).[7]

The data series for years prior to FY89 has been generated here therefore, and was terminated by data availability at FY01.[8] The accounting discontinuity starting FY00 with the re-routing of small savings makes the Central fiscal deficit non-comparable across that year,[9] but does not affect the consolidated fiscal deficit.

Chart 1 shows the fifty-year series for the primary revenue deficit and primary overall fiscal deficit, both as percentages of GDP, which define the discretionary component of the deficit after deducting interest on the public debt accumulated from past fiscal deficits. The difference between the two, in the absence of disinvestment receipts on the capital account (which by official figures only began in FY92)[10] yields the percentage of publicly-funded capital expenditure to GDP.

[Insert chart 1 about here]

[7] Lahiri, 2004, goes back to the eighties, and Reynolds, 2001 to the sixties, but neither has any formal empirics.

[8] Pre-actuals subject to revision are available for states for FY02, but the consolidated figure is reported only after availability of actuals at both levels of government. The series obtained here corrects some errors in an earlier such series (Rangamannar, 2002), which were the figures used in Lahiri, 2004. Care has been taken to check that capital expenditures net out loan recoveries, and loan repayments. The fiscal deficit as estimated here is larger than that officially reported for the period after FY89. The official figures have been used here even so, but raise troubling doubts about the accuracy of official reporting of the consolidated fiscal deficit. Issues concerning all aspects of fiscal transparency in India are examined in Rajaraman, 2001.

[9] The reduction in fiscal deficits at the Centre starting FY00, is a pure outcome of the accounting change. This is the reason for the apparent improvement in Central fiscal deficits in the derived series in Rangarajan and Srivastava, 2003.

[10] For the Centre; there is no readily available figure for consolidated receipts from disinvestment by states.

The figures exclude the third tier, local government. Local government is not empowered to run budgetary deficits, but urban corporations can borrow on a project-specific basis.[11] Starting 1998, there are municipal bond flotations by urban corporations, aggregating to the comparatively trivial sum of 600 crore (Mathur, 2003). These are not added on here, because they are akin to borrowing by other parastatals. Parastatal debt does not add to the explicit budgetary deficit but often carries a Central or state government guarantee. The issue of guarantees will be addressed in section IV of the paper.

The following stylisations of the Indian fiscal stance over the fifty-year period emerge quite clearly from chart I:

- The primary revenue balance was in surplus until FY98. It is only starting FY99 that there has actually been a primary revenue deficit, never exceeding 1 percent of GDP.
- The primary fiscal balance has been consistently in deficit all through, but in conjunction with the primary revenue surplus, has clearly gone towards funding of capital expenditure, and thus towards the accumulation of public assets. The efficiency or revenue-yielding properties of that capital expenditure are another matter altogether.
- The primary fiscal deficit (PFD) reached an all-time peak of 7 percent of GDP in FY87. The downward adjustment of the PFD by 6 percentage points of GDP over the ten years 1987-97 against a roughly constant primary revenue surplus (negative PRD) of around 1 percent of GDP implies a corresponding reduction in public capital expenditure. Independently of the quality of the capital expenditure in previous years, fiscal correction through reduction of capital expenditure robs it of growth-promoting properties. After 1997, the PFD has risen again to its present level of around 3.5 percent of GDP.
- Starting FY98, both fiscal and revenue balances have worsened in tandem.

[Insert chart 2 about here]

Chart 2 shows the fiscal and revenue deficits, along with the nominal interest rate (the average paid on the closing stock of the previous financial year of public debt, external plus internal, including monetised liabilities held by the RBI). This average rate, which is a lagged indicator of the marginal rate on fresh liabilities, shows a steady rise from the eighties after a long period of stagnation at 4 percent, finally peaking in FY00. Clearly, it is the interest bill that drove the emergence of a consolidated revenue deficit in 1983, and its steady rise thereafter, at a time when the primary revenue balance was still in surplus.

There are thus two basic components to the fiscal deficit story. There is the interest rate increase, its steady rise until FY00, and the institutional underpinnings of this increase. The immediate prospects are that the average rate on public debt will decline further, although with a pick-up in private investment further down the road, the future interest rate path is difficult to predict with any certainty.

The second component of the fiscal story are the worsening starting FY98 of the primary indicators, both revenue and overall. The expenditure side provocation for this was the

[11] Under the 1934 RBI Act, against the collateral of project assets, and subject to a cap specified at some percentage of the annual rateable value of property (the principal tax base of local authorities). Until 1998, these borrowings were for the most part from either the State government (which would enter into the consolidated fiscal deficit at Central and State levels).

implementation of the real wage increase recommended by the Fifth Pay Commission for Central government employees and pensioners starting FY98. The staff downsizing which was a part of the recommended package, was not formally accepted. The wage hike was subsequently implemented by all state governments on parity considerations. Some states like Punjab enthusiastically implemented real wage increases exceeding those at the Centre. Chart 3 shows the impact of this. The consolidated wage-salary-pension bill as a percent of GDP rose from around 5.5 percent of GDP, to 7 percent by FY00.

[Insert chart 3 about here]

The Pay Commission real wage hike was clearly endogenous to the political economy forces at work in the system. Before going to the regression exercises that investigate those forces, it has to be noted that India does not have an exceptionally large civil service by international standards. A widely quoted comparative study shows the number of civil servants per 100 population to be 1.2 in India, well below 2.8 in China (an equivalently large country), and clearly much lower than smaller countries because of an understandable scale effect (Schiavo-Campo, 1998). The problem in India lies not so much in the overall size of the civil service, as in the composition of government staff, with the top two (Groups A, B) of a four-group system accounting for 5 percent of the total number, and Group C for 70 percent (Beschel, 2003). Sub-clerical staff (Group D) whose principal purpose is to serve the other government staff account for 25 percent of the total, and are the source of the visible idleness at government offices. Group D jobs with no particular skill requirement enable political patronage, and the high wage relative to per capita GDP keeps up the value of that patronage.

Detailed manuals on how to downsize government are provided by Sundaram and Beschel, 2003, and Saxena, 2003, for (presumably) unchanged delivery levels. However, casual evidence from such downsizing as has occurred in banks and other public sector undertakings suggests that service delivery declines as a result. The staff who leave tend to be skilled personnel with market value. None of these studies quantifies the expenditure reduction possible from any one, or the totality, of the downsizing measures suggested. Without that, it is not possible to quantify the potential contribution to fiscal correction from government staff restructuring.

The only econometric studies for India investigating fiscal imbalances over the long haul are confined to the Central government, but are invaluable nevertheless. Cashin et al, 2001, establish the presence of tax-smoothing through a VAR approach for the period 1951-97. Tax smoothing, as the term suggests, will leave the tax burden unadjusted to temporary shocks in expenditure, though not to permanent increases. This result is plausible and very useful as far as it goes, but the underlying model treats government expenditure (net of interest) as exogenously given.[12] Clearly, there is a need to build on this further so as to understand what drives temporary expenditure shocks. Further, by investigating fiscal behaviour in terms of imbalances rather than expenditure, the tax response gets factored in, and informs policy reform more comprehensively.

The precursor to the test conducted here for pre-election fiscal behaviour, in the tradition of the literature on political business cycles (summarised in Alesina et al, 1997), is the study by Sen and Vaidya, 1996. Building on an earlier study confined to government expenditure by Karnik, 1990, Sen and Vaidya examine Central government imbalances (the revenue deficit, inclusive of interest payments) and find a statistically significant increase in pre-election years

[12] Tax-smoothing (Barro, 1979) is not so much the analogue as the mirror-image for public consumption of the consumption-smoothing model for private consumption; what is smoothed here is revenue (income) rather than expenditure (consumption).

over the period 1951-89. Interestingly, they find no electoral response in either expenditure or revenue taken independently, thus suggesting the use of both in conjunction and contradicting therefore the tax smoothing result of Cashin et al., 2001.

The exercise performed here was deliberately confined to fiscal outcomes consolidated across all levels of government over the fifty-year period 1951-2001, since it is the aggregate fiscal deficit rather than the Central deficit alone which matters macroeconomically. State-level borrowing requires Central permission,[13] except for the automatic entitlement to small savings collections within the jurisdiction of each state (see section V for details). The interest rate levers determining the total quantum of small saving inflows in aggregate, were entirely administratively set by the Central government until FY99. Starting FY00, rates on small savings were benchmarked to an assortment of instrument-specific rates, but in the absence of any public commitment to the margin in terms of either magnitude or sign, the final rates remained administered rather than market-driven. A more formal commitment was made starting FY03 to both the instrument-specific benchmark/s, and the cap on margins of +50 basis points, as recommended by an official committee. Within that cap, the margin is still under Central control, and the Centre continues to offer tax incentives for these instruments. Thus, the Centre still carries downside flexibility with respect to rates on small savings to a considerable degree.

For the period studied here, the consolidated deficit can be said to have remained entirely subject to Central control. This explains the finding in Khemani, 2004, for elections at state government level in India, that state election years see no rise in borrowing, but do see a re-allocation of taxes and expenditures in favour of special interest groups. There was state government pressure on the Centre to keep up interest rates on small savings, but the decision as to whether to accede to these pressures or not rested ultimately with the Centre.[14] The consolidated revenue deficit also remained under Central control, through Central determination of aggregate grants for current expenditures under Plan schemes. These grants may be formulaic in terms of their distribution between states (Rajaraman, 2003c), but the aggregate is Centrally specified.

The dependent variable of all the regressions reported in table 1 is the primary consolidated deficit, both revenue and overall fiscal, normalised by GDP, and taken in first differences. The dependent variable is so specified that if the buoyancies of revenue, and expenditure net of interest, with respect to GDP are both one, it will have a value of zero. The specifications test for whether consolidated fiscal outcomes carried a countercyclical stabilisation component, with intercept dummies for election years.

[Insert table 1 about here]

The election year dummy is for general elections, when voting takes place to the national Parliament. Concurrence with state elections broke down after about 1971. The purpose is to test for whether opportunistic behaviour prior to a general election is a statistically significant driver of the consolidated fiscal imbalance. The specification posits an election year dummy invariant with respect to the party in power. Dummy 1 is confined to elections after 1971, prior to which there was no effective national opposition capable of voting out the party in power, and therefore no incentive for fiscal profligacy in an election year. Dummy 2 is for all elections over the fifty

[13] Under Article 293 of the Constitution, this is required only for states indebted to the Centre, which in practice is the case for all states; see Hemming et al, 1997.

[14] Typically, these pressures were handled not by increasing the interest rate on a pre-existing scheme, but by issuing a new instrument with a different configuration of rates and tax incentives.

years barring the first in 1951. The election dummies were assigned a value of one for the fiscal year immediately preceding an election, anticipated either because the government had reached the last year of its five-year term (recent examples are FY90 and FY96), or because the government expected to be voted out of power in the course of the year (as for example FY80, FY91, FY98; see notes to table 1 for details).[15]

GDP growth rates are taken both concurrently and lagged one year, both overall, and confined to agriculture. The sectoral focus on agriculture is because of the exogenous rainfall factor, which in failed years calls forth a fiscal relief response in the form of rural employment and other welfare schemes. The two special cases were the elections in October 1984 and September 1999. The corresponding dummy value of one was assigned to FY85 (even though the precipitating event was unforeseen, it was the last year of a five-year term); and to FY99 (since the government was voted out at the conclusion of that fiscal year, with caretaker status until the mid-year election in FY00).

The intercept coefficients for election years are positive and highly significant statistically in all the specifications. Dummy 1 is the more significant for each pair of alternatives, confined to elections after 1971 when the electoral outcome became more uncertain for the government in power. These run contrary to the findings in Alesina, et al, 1997, where the election-year cycle in the OECD world is revealed to be driven more by partisan party ideology than by pure opportunism,

The coefficients for the concurrent growth rate are not significant for any specification. These capture the composite effect of the structural properties of the fiscal system, which in India carry a peculiar feature that could impart an upward bias to the concurrent growth coefficient. Small savings collections, which are supply-driven, would carry buoyancy with respect to the growth rate, but are of course only one component of government borrowing. Unless government borrowing through other instruments is adjusted in response to the small savings inflows in the course of the year, there could be a positive concurrent growth impact on net government borrowing. This could counter the policy response, if any, and yield a statistically insignificant coefficient.

The coefficients for growth lagged one year do however carry the policy response, and these are indeed negative and statistically significant coefficients (with the exception of PFD/ GDP with dummy 2). In general, the coefficients for agriculture carry greater significance than for overall growth, and in absolute value are higher.

Thus, the year-to-year variations in the fiscal stance over the period 1951-01 are systematically underpinned by two factors. There is the election year response, which has become more marked in the last thirty years, with an upward spike measured in first differences of 0.7 percent of GDP in the primary revenue deficit, and 0.8 - 0.9 percent of GDP in the primary fiscal deficit. There is also a countercyclical policy response, of the order of (-)0.04 percent of GDP for every 1 percent of agricultural growth lagged by one year, and of (-)0.06 - (-)0.08 percent for every 1 percent in overall growth, also lagged by one year. There is no response to variations in the concurrent growth rate, either overall, or agricultural.

[15] General elections to the national Parliament, if held before the fifth year of the full term, have always been precipitated by the opposition rather than by the government in power voluntarily choosing to shorten its term. Thus, general elections held after the lapse of less than five years remain exogenously imposed, and are not jointly determined with the growth variables. This does not hold at state government level (Khemani, 2004).

Against the background of these results, the enactment of fiscal responsibility legislation by the Central government and four states so far, have to be examined for their effectiveness in providing a bulwark against election year profligacy. Simulations of outcomes under these new enactments are performed in section IV.

Prior to that, there is a need to look at the revenue underpinnings of the fiscal stress in the post-reform period. This is done in Section III of the paper. The interest rate issue will be explored in Section V.

III. PRESCRIPTION FAILURE: FISCAL COMPENSATION FOR LOST TRADE TAX REVENUE

The trade tariff reform initiated in India in 1991 was overdue and has had a clear impact on efficiency and competition. But it has resulted in an uncompensated loss in aggregate tax revenue of two percentage points of GDP by latest actuals for FY02.[16] Clearly, trade liberalisation need not necessarily reduce revenues, especially if the starting point is highly protective, as indeed the Indian case was, as a result of tariffication of non-tariff barriers in the eighties.[17] The point at issue here is that for any developing country undergoing trade reform, there is a need to examine the revenue implications *ex ante.*

Since trade taxes are levied exclusively at national level, there has been a corresponding decline in the share of tax collections at the Centre relative to the states. The issue of whether this matters for the balance of power between Centre and states in the Indian fiscal federation is explored in Rajaraman, 2003c.

Formal theoretical investigations of the joint welfare outcome of tariff reductions with revenue compensation have been sparse, either because of the assumed availability of the lumpsum tax alternative, or because an equivalently welfare-neutral alternative was seen in a destination-based tax on consumption (Dixit, 1985). The first result showing welfare improvement from a radial reduction of tariffs with a radial expansion of consumption taxes was confined to the infinitesimal case (Hatzipanayotou, Michael and Miller, 1994). A later study for the non-infinitesimal case by Anderson, 1999 found the joint outcome not unambiguously welfare-improving.

A robust result for the non-infinitesimal case is fairly recent (Keen and Ligthart, 2001). This establishes that any tariff cut, radial or otherwise, with a simultaneous price-neutral non-cascading consumption tax (a VAT) will enhance both welfare and net revenue. Unlike earlier studies, this finding relates to cuts rather than total elimination of tariffs. Thus the Keen-Ligthart finding establishes, for the first time, the theoretical underpinning for a trade-fiscal policy package that compensates tariff cuts with a price-neutral domestic destination-based VAT on consumption.

There are three problems with the Keen-Ligthart prescription. The first is that VATs compensating for trade tariff reform do not in general target price neutrality. The second is that international evidence does not show revenue enhancement from introduction of a VAT in low-

[16] The states component in the aggregate is the pre-actual figure (the revised budget estimate).

[17] Ebrill et al, 1999 estimate that the cut-off tariff rate below which revenue will fall with further liberalisation is 20 percent; Khattry and Rao, 2002, estimate it at 40 percent. The former constructs an arithmetic example to illustrate the ease of finding compensating revenue, which carries improbable macroeconomic parameters.

income countries (Ebrill et al, 2001). The third is that in most federal countries, national governments collect far lower shares in domestic indirect taxes than in income taxes, to which they enjoy dominant or exclusive rights. Even if revenue replacement is possible through a VAT, the additional revenue would in a federal country like India accrue at the level of states. This will further reduce the Central share in aggregate tax collections. Even a dual VAT will not restore the pre-reform Central share. This might actually be protested not so much at Central level as at subnational level, if taxes shared by the national government are redistributive in character, which is indeed the case in India (Rajaraman, 2003c).

Table 2 sets out tax/GDP ratios at national and subnational levels of government in India since the all-time peak of 15.98 percent achieved in FY90. Overall, there was a fall in the tax/GDP ratio from 15.98 percent in FY90 to 13.81 percent in FY02, by 2.17 percentage points (the figures for FY02 include pre-actuals for states, subject to revision). This is a little more than the loss in customs revenue, which therefore remains uncompensated. The table also shows the revenue loss and compensation figures for all years after FY90, relative to the base year.[18]

[Insert table 2 about here]

The table also shows what the overall fiscal, primary fiscal and primary revenue deficits would have been had the fall in total revenue been fully compensated. The compensated primary revenue balance is in surplus all through with a higher surplus in FY02 relative to FY90, the compensated primary fiscal deficit is well under 0.5 percent in four years of the period, and the compensated overall fiscal deficit is one percentage point lower in FY02 than in FY90.

Customs revenue was a prominent contributor to revenues, at 3.7 percent of GDP prior to trade tariff reform, 35 percent of total tax revenues at the Centre. No one can argue that the infamously high tariff rates of that time should have been retained for revenue purposes. But neglect the need for compensating revenues led to avoidable fiscal stress, and was a serious failing of the reform programme.

The theoretically prescribed source of compensating revenue is a price-neutral VAT. The VAT is shown in an IMF estimate of revenue outcomes for 183 countries, of which 99 had a VAT (Ebrill et.al., 2001), to have a positive impact on overall (including non-tax) government revenue as a percent of GDP only interactively with per capita income.[19] There is a significant negative coefficient to an interactive VAT dummy with the importance of trade, showing a revenue loss with a VAT that varies directly with the importance of international trade. The latter is an empirical finding of particular relevance in light of the recommendation in the fiscal compensation literature that trade tariff revenues can be fully or more than fully compensated by a VAT.

[18] In some years, the fall in tax revenue exceeded the fall in customs revenue, because there was a related decline in Central excise on domestic manufacturing. A process of trade tariff reductions requires corresponding reductions in excise levy rates on domestic production (notwithstanding the countervailing excise duty that is levied on imports after levy of the basic import tariff).

[19] Even if revenue was not the immediate motivation for its introduction, a VAT should still be expected to raise tax/GDP through the static efficiency gain from non-cascading taxation, assuming public expenditure is a normal good with income elasticity greater than one. The static efficiency gain has been estimated to exist through computable general equilibrium models calibrated to particular economies. There is also a possible dynamic growth gain from the reduced cost of capital resulting from set-offs on taxes on capital goods, where the VAT is so structured; these remain unestimated. Other reinforcing considerations are the possible information externalities from the VAT, in terms of compliance-enhancing effects on other taxes, which could lead to higher tax/GDP ratios overall.

When the cross-sectional exercise is performed with tax revenue alone, instead of overall including non-tax revenue, the VAT intercept is negative, and almost significant at 10 percent. The coefficient of the interaction term for VAT with per capita income continues to be positive and significant, thus implying that the impact of VAT is negative only for poorer countries. Finally, when the dependent variable is tax revenue of national-level government alone, there is no evidence of any impact, positive or negative, of introduction of a VAT. This is further empirical validation of the impact of fiscal compensation through a VAT on the balance of power in a fiscal federation.

A recent exercise for India (Rao, 2003) estimates the revenue impact of a 12.5 percent destination-based state-level VAT on manufactured goods, with 4 percent on inputs. A revenue increase between 5 to 10 percent is estimated to be possible only if the value addition margin beyond manufacturing is 20 percent of manufacturing value (a reasonable assumption). A critical and less reasonable assumption is zero loss from evasion and fraud. However, some states lose revenue from elimination of the Central Sales Tax (CST) levied at the state of origin on inter-state sales, akin to an export tax between countries.[20] Revenue-losing states look to the Centre for compensation, thus increasing further the burden on the Centre on account of the very levy that is supposed to compensate for lost trade taxes.

But the final issue does not hinge on the revenue outcomes of VATs in practice. The issue is that, given the criticality of public goods from the very perspectives of efficiency and growth that drive trade tariff reductions, the need for fiscal compensation has been astonishingly neglected. The theoretical recommendation of welfare-improving compensation through a price-neutral domestic VAT is infeasible in practice, aside from unchanged consumer prices negating a large part of the gains from trade liberalisation, and negating also the domestic political support for trade reform.

The present state of play in respect of the state-level VAT is that one state has actually introduced it, and several others are at varying stages of readiness. Even if the state-level VAT proves to be revenue-enhancing in aggregate, it will not replace revenue at the level of government where revenues have been lost. This has important implications for the balance of power between the two levels of government, and between regions in the country. The pressures generated will be a function of whether fiscal transfers from the Centre to states are formulaic or discretionary, and of the redistributive component of the formulae used for Centre-state transfers (explored in Rajaraman, 2003c). Possible political turbulence as a result of these pressures and frequent elections could lead to further fiscal strain, as the regression results of the last section suggest.

There are two sources of structural difficulty in finding compensating revenue in India. One is the large sectoral share in GDP of the two classically hard-to-tax sectors, services (except for the public and formal private establishments) and agriculture (except for plantations). Agriculture accounts for a quarter of GDP. Services account for half of GDP, and have over the past decade recorded the highest and most stable rates of growth. The hard-to-tax segments of services are those where there is a prevalence of cash transactions, like construction, road

[20] See also Mukhopadhyay 2003, who recommends a combination of a Central VAT starting with excise at the production stage, in combination with a retail sales tax with uniform rates in all states, along with removal of the CST on inter-state transactions.

transportation and trade. These add up to 30 percent of GDP.[21] Some of the newer services in the new economy (event management, fashion design) are not effectively taxed, although some others like call centres should prove to be more tractable.

Indirect taxation of services faces a well-known assignment vacuum in the Constitution. The Centre stepped into this vacuum by enacting a Service Tax Act in 1994, under which it collects indirect taxes on a list of services that has now grown to 58 in number, using residuary powers under the Constitution. There now exists provision for withholding (provisional, not final) of these at source. Upto FY02, the service tax compensated by 0.14 percent of GDP for the loss in revenue from trade tariffs, an additionality that has accrued at Central level.

The issue is whether services should continue to be taxed at the Centre, so as to stem the decline in the Centre's share in total revenues, or whether some or all of these services should be transferred to states as part of a full-blown destination-based VAT. The efficiency argument favours such a transfer, but because of the redistributive properties of Central transfers to states, resistance to the transfer might paradoxically emanate at state-level. Two government reports (GOI, 2001a and 2002b) examine the issue of how the Central tax on services can be integrated with the Central CENVAT on manufacturing, which presently extends input credits only on goods, and the very difficult issue of whether service taxation should be split between, or concurrently shared by, Centre and states. There is now a ninety-fifth Constitutional amendment, whereby services falling in the Central domain can be assigned for revenue collection and retention by state of origin. This muddies the waters further, as such levies, being Central levies, may not be rebatable against the state-level VAT (Bagchi, 2003), nor possibly against the CENVAT.

Agriculture is the other undertaxed sector, which is presently outside the domain of the Central income tax, and assigned to the fiscal domain of the states. The argument against unifying the income tax and making it a global rather than a schedular tax, is that the reasons for the revenue-insignificance of agricultural taxation at state-level will only gain force at Central level. It has been argued at length elsewhere (Rajaraman, 2003b), that only rural local government will be able to tax agriculture effectively. A land-based crop-specific levy at the local level is feasible, is in accordance with widely-accepted principles of assignment of taxes by domain, and will lead to revenue additionality in the system taken as a whole. These revenues will accrue jurisdictionally at the local level, and provide much needed resources for critically under-provided local public goods like sanitation and local road connectivity. The redistribution objective between local governments can always be attained through independent and transparent state government grants, so structured as not to rob the local level of incentives to collect the tax. The formula itself can be left to the discretion of state governments.

The burden of taxation is disproportionately borne therefore by the taxable sub-sector of services, and manufacturing, the residual quarter of GDP. Tax reform in India calls very urgently for the restoration of cross-sectoral parity to the tax structure. The second structural difficulty is the need for a good information base shared across levels of government, which is essential in a large fiscal federation.

Official reports (Government of India, 2002b), make a number of suggestions for widening the revenue base, and reducing evasion. There is a detailed book-length treatments of

[21] Because these sectors are underestimated even in the national accounts, the percentage of true GDP lost would be even greater. There is also a hard-to-tax component of manufacturing accounting for 5.5 percent of GDP.

the administrative improvements that can be brought about in the income-tax department (Das-Gupta and Mookherjee, 1998). Possibly the failure to institute revenue-productive reforms in tax administration has more to do with political economy factors of the kind probed in Karnik, 1999. Or perhaps the fiscal stress in India today would not have resulted had revenue compensation for losses from reduced trade taxes been added as conditionalities to trade reform.

IV. FISCAL RESPONSIBILITY LEGISLATION

Table 3 shows the principal features of fiscal responsibility legislation enacted by the Governments of Karnataka, Kerala, Punjab and Tamil Nadu. India has not followed the coordinated approach of subordinating all subnational governments to uniform rules, as recommended by Kopits, 2001.[22] There is also a Central Act, the design of which is shown separately in box 1. Unlike the State Acts, the Central Act carries only one quantified target for the revenue deficit. Other targets and paths are left to the Rules that will accompany the legislation, and which can thereby be altered without amending the Act. No simulations are performed for the Central Act therefore.

[Insert table 3 about here]

In what follows the design of enacted legislation (not extending to Bills under consideration, as in Maharashtra) will be examined against the background of the underpinnings of the fiscal problem as revealed in sections II and III. Finally, the fiscal compression implicit in the targets, is obtained through simulation.

There are five design features to these Acts.

First, the quantified limits to revenue and overall fiscal imbalances are in general specified for a stated target year, either FY06 or FY07. Punjab has annual path limits, but these have to be exceeded if the debt target is to be met (see table 4). An amendment to the Tamil Nadu act has introduced annual path limits to the revenue deficit.

Second, there are no stated penalties for failure. Where there are no annual path limits, a government facing elections midway to the target destination has no incentive whatever to move towards the target. There are the documentary obligations on fiscal intentions, with a typically 3–4 year horizon, but these carry no commitments independent of legislated limits. For a government with a comfortable majority, deviation from the tabled Medium Term Fiscal Programme will not mean a vote out of power. For a wobbly government, even adherence to the programme could bring political challenge in terms of the manner in which fiscal correction is achieved. Only one (Karnataka) carries explicit protection for social sector expenditure against compression.

Third, the correction of the revenue deficit is sharper than correction of the fiscal deficit, which permits high rates of increase in capital expenditure, as the simulations will show, but requires a sharp reduction in (non-interest) revenue expenditure.

[22] Support for fiscal legislation of this kind is not universal; (see Stiglitz, 2002: 106).

Box 1: Design Features of the Fiscal Responsibility and Budget Management Act of the Central Government

Notified	26 August 2003 No. 39	Guarantees	Rules*
Documentary Obligations	Macro Framework statement MTFP – 3 year FPSS – 1 year	Total debt	Rules*
Targets	RD : 0% GDP Year: FY08 Path: Rules* FD: Rules* Year: FY08 Path: Rules*	RBI	No primary securities subscriptions beginning (2006-07)

Source: The Gazette of India, Tuesday, 26 August 2003.
Notes: Rules*: To be specified

Fourth, the single most effective feature is the inflexible limit[23] on government guarantees to parastatal debt (all except Kerala). The stock of unweighted guaranteed debt aggregated across states is 27 percent of the aggregate explicit debt stock (RBI, 2003). At end-March 2000, the figures for individual states (Thorat and Roy, 2004), were 43.5 percent in Karnataka, 32 percent in Punjab, and 25.6 percent in Tamil Nadu (Kerala was relatively low at 20 percent). The specification of limits on guarantees with reference to revenue receipts is also a good design feature. As can be seen in box 1, the Central Act assigns even this limit to Rules, which can be changed without amending legislation.

Fifth and finally, none carries any revenue performance targets. As the simulation results will show, the failure to specify these is an important deficiency. At state level, there is the added need to distinguish between own revenue effort, and revenues received as tax shares from the Centre.

[Insert table 4 about here]

Table 4 shows the simulation results for the fiscal compression implicit in the legislation at state-level. Because the fiscal Rules underlying the Central Act are yet to be specified, no simulations were performed for the Central government. The correction process is started in FY03,[24] and is terminated in the stated target year for Karnataka, Kerala and Tamil Nadu.

There are two sets of simulations, one with projections for total revenue (own plus received from Centre) at the achieved buoyancies in the five-year period 1997-02, all well below

[23] Imposed, or as in the Central Act, provided for.
[24] Whether this is explicitly stated in the legislation (as for Tamil Nadu) or not. The Kerala correction officially begins in FY04, but in the absence of data for the base year FY03, it was treated on par with the other states.

one, and one with projected buoyancies set at one.[25] Two values for the average nominal interest rate on state debt are used: 11.5 (except for Kerala) and 10.5 percent (the latter in view of falling nominal interest rates and Central efforts to reduce the interest bill of states by introducing debt swaps; see also section V). Nominal GSDP growth at the same rate as in 1997-02 underlies all the simulations. In Punjab, the constraint on the permissible growth in the debt stock was used to simulate limits on the fiscal imbalance, with the revenue deficit simulated at the path limits.

The two outcome indicators are the permissible annual rates of increase in capital expenditure, which falls out of the difference between the revenue and fiscal imbalance targets, and non-interest revenue expenditure. In all four states capital expenditure shows impressively high annual rates of increase. However, the curtailment of non-interest revenue expenditure, with revenue growing at historical buoyancies can be seen to be very sharp – down to annual rates of increase between 0-5 percent. Quite aside from the feasibility of such sharp cuts, there is the issue of how these will be achieved. If staff prove to be more resistant to cuts than maintenance and other expenditure, there could be a very steep decline in the quality of government service, and infrastructure. Some infrastructure might simply become inoperable without adequate maintenance.

Non-interest revenue expenditure goes up by under one percent for a one percent drop in the average interest rate. But it rises by well over one percent in response to an increase in buoyancy of total (own plus received) revenue to one, from achieved buoyancies in the five years immediately preceding ranging between 0.7 to 0.9.

In summary, the simulations show that without added revenue effort, the fiscal compression imposed by the fiscal responsibility legislation will be crippling. The table also shows the dependence of the four states on own revenues. In all cases, own revenues constitute the dominant component of total revenues, and this percentage has remained stable over time (improving slightly over the last twenty years). Thus, all four states have the wherewithal to make the legislation work, without undue damage to the quality of public service delivery. But that outcome critically depends on own revenue effort. Without that, there could be a downward spiral into political turbulence, and further fiscal stress following from short-lived governments and frequent elections.

The absence of path limits is a serious deficiency. The only possibly positive aspect of this is that this leaves room for accommodation to countercyclical fiscal policy, a needed feature in light of the regression results of section II. But this flexibility could easily have been built in with either margins to path limits, or cumulation of path limits across a possible maximum of three consecutive years. As the legislation presently stands, it does not protect against election-year opportunism. Only the Punjab Act carries a specific ban on fiscal sops six months before elections.

V. INTEREST RATES ON PUBLIC DEBT

This is the final piece of the fiscal story in India, supplementing the analysis in Section II of primary deficits. State government borrowings are subject to Central government approval as

[25] Tax elasticity estimates in India are beset by a number of data and methodological problems, although a new methodology proposed in Sen, 2002, may yield more reliable estimates in the future.

in all federations, for reasons of macroeconomic discipline,[26] with the exception of the automatic entitlement upto a fixed percentage, now 100 percent, of small savings collected from the public within the jurisdiction of each state against instruments like Post Office Savings Certificates.[27] Until FY00, these were routed through the Central Budget, where all deposits were collected and on-lent to states against jurisdictional collections. This provided an immediate incentive to state governments to work towards raising small savings collections within their states. But it also generated pressure by state governments on the Central government, which administered the deposit rates on these schemes, to widen the gap in post-tax returns between small savings and other instruments.

Rates on loans charged by the Centre also rose correspondingly. This is what basically drove the rise in interest rates on consolidated public debt shown in chart 2, and exerted upward pressure on the interest rate structure in the country after an earlier period of financial suppression. State governments continue to carry the burden of interest rates on loans taken when rates were as high as 14.5 percent.[28] In FY02, interest payments by states in aggregate stood at 42 percent of their own revenue collections.[29]

A first move towards unraveling this clearly untenable situation was begun in FY00. All accounting flows in respect of small savings after 1 April 1999 were moved to a National Small Savings Fund in the Public Account.[30] For the very first time, this enabled a clear picture of the financial viability of the scheme, which was rendered utterly opaque by the accounting separations previously in place.

With the exposure of the necessary link between the lending and deposit rates of the scheme, the political economy pressure to keep up deposit rates on small savings subsided. Subsequent to this accounting reform in FY00, it became possible to bring down deposit and lending rates in several stages. This accounting reform was a major fiscal achievement of the last five years, removing as it did, the endogenous upward pressures on interest rates and fiscal deficits, with cripplingly adverse growth consequences.

Deposit rates on small savings are still administered, but the rates are now benchmarked to the Bank Rate, with the margin capped at +50 basis points. Because these are zero-risk instruments, many still carrying tax incentives, these rates continue to function as a floor to the interest rate structure in the economy. With its control over the margin, and the tax incentives given, the Central government is in control of the aggregate flows into the scheme. But the unevenness of the accretion across states acts as an enabler of fiscal indiscipline at state level.

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[26] Under Article 293 to the Constitution. A particular twist in India however is that such control is only applicable to state governments with outstanding debt to the Centre. See Hemming et. al., 1997 for an excellent summary of the federal arrangements in India, and Ter-Minassian, 1997 for comparative information on other federations.

[27] The original intent of the Postal Savings Account introduced in 1882 was to enable collection of savings from the population beyond the reach of banks into a nationally-available financial pool.

[28] They were at this level until 1 January 1999.

[29] There is also other evidence that state government borrowing within the Article 293 limits, were undertaken from other non-concessional institutional windows, like the Rural Infrastructure Development Fund, perhaps because of the greater procedural ease of these channels; see Rajaraman, 2003a.

[30] In addition to deposits and redemptions (always shown in the Public Account), all investments with deposits, all recoveries against those investments, all interest receipts and payments, and all agency charges are now shown in the Public Account.

If the primary revenue deficit is taken as the core indicator of inability to match current revenues to current expenditures, and as the floor (barring exceptional non-debt receipts on the capital account) to the primary fiscal deficit, there were as many as seven states carrying a primary revenue deficit in FY02. Three of these have consistently run primary revenue deficits in the four years since FY99: West Bengal, Gujarat and Kerala (box 2). Debt to the NSSF, which came into existence only in 1999, has risen in just two years (the debt composition data stop at FY01) to as much as 19 - 21 percent of the total debt stock in West Bengal and Gujarat.[31] Thus, it is the automaticity of loans against small savings collections that has been the principal enabler of fiscal profligacy in these states. Kerala is a somewhat different case, where the state has collected large sums in special contractual savings provident fund schemes, with high interest rates, in what is a within-state version of small savings.

Given the history of loans against small saving collections, freely available to states outside national government control under Article 293, limited only by jurisdictional collection, it may not immediately be possible to alter the jurisdictional nature of entitlements. What can be done however, is to mandate that a certain portion, half or more, be loaned to states but earmarked for retention in two funds recently established, details on which are given below. This will simultaneously provide a bulwark against default while at the same time not enabling current primary deficits.

Box 2: Fiscal Indicators for West Bengal, Gujarat and Kerala

States	Primary Revenue Deficit/Surplus(-) (Rs crore)				Share Debt to NSSF in Total Debt (%)
	FY99	FY00	FY01	FY02	FY01
West Bengal	1906	5118	2332	1238	19
Gujarat	601	809	3171	2525	21
Kerala	584	1672	889	117	4
All states	7769	8625	1866	(-)5246	12

Source: Reserve Bank of India.
Notes: Debt stock as at end-FY01. Actuals for later years were not available.

There remains the problem of the inherited debt stock and interest bill from the high interest rate days. Under a new debt swap mutually agreed to between the Central and state Governments, all state loans from the Centre bearing coupons in excess of 13 percent would be swapped with market borrowings and small savings loans at present interest rates over a period of three years ending in FY05. In FY03, 25 states (excluding Maharashtra, Sikkim and West Bengal) prepaid high cost debt from Centre, partly out of small savings collections and partly through fresh market borrowings. The scheme has been continued in FY04.

Another reform initiative is the setting up of two contingency funds in FY99, outside the general revenues of state governments. The Consolidated Sinking Fund (CSF) is for redemption liabilities on account of market borrowings. State Governments contribute a minimum of 1 to 3 percent of the outstanding market loans each year to the Fund, with no ceiling. The Guarantee Redemption Fund (GRF) as the name suggests is a contingency fund against default on loans guaranteed by state governments, funded from earmarked guarantee fees. The accretions to the

[31] Prior to the NSSF, debt against small savings collections was merged with debt owed to the Central government.

Fund are invested in securities of the Central Government. So far 11 states have set up a CSF and three have set up a GRF.

VI. CONCLUSION

Buoyant growth in India is essential for fiscal reform to be possible, and in turn requires that the kinds of physical and social infrastructure that can only be publicly funded should go up in both quantity and quality. Growth prospects in FY04 are good, on the back of a good agricultural year, but future prospects hinge critically on fiscal room for growth-promoting capital and current expenditure.

Compression of the fiscal deficit in the first half of the nineties was pushed through in the face of a decline in revenue from trade taxes which remains uncompensated. The tax/GDP ratio had fallen by two percentage points by FY02 relative to the pre-reform peak of 16 percent of GDP. The trade tax reform itself was growth-enhancing. The decline in public expenditure, which was achieved through compression of capital expenditure, by as much as 4 percent of GDP over 1991-97, was not. The joint welfare and growth outcomes of such reform processes remain unexplored in the theoretical literature.

There are two strands to the fiscal imbalance path in India. Interest rates on public debt started rising sharply in the eighties to a peak average of 10.68 percent in FY00, after many decades of financial suppression. The paper details the political economy pressures that fueled this rise. Although interest rates have started declining after the re-routing of small savings that began in FY00, the interest bill is still over 6 percent of GDP. At state government level, where the interest bill pre-empts around 40 percent of own revenue collections, a debt swap provision begun in FY03 will provide some relief.

The other strand is the path of interest-excluded primary fiscal indicators. These worsened sharply in FY98, with the real wage hike introduced that year for government employees and pensioners which raised the consolidated salary bill by 1.5 percent of GDP. The paper investigates whether this event was endogenous to the political economy forces at work in the system.

The econometric exercise is performed for the consolidated imbalance across all levels of government over the fifty-year period 1951-2001. The regression equations show an election year response, which has become more marked in the last thirty years, with an upward spike measured in first differences of 0.7 percent of GDP in the primary revenue deficit, and 0.8 - 0.9 percent of GDP in the primary fiscal deficit. There is also a countercyclical policy response, of (-)0.04 percent of GDP for every 1 percent of agricultural growth lagged by one year, and between (-)0.06 and (-)0.09 percent for every 1 percent in overall growth, also lagged by one year. There is no response to variations in the concurrent growth rate, either overall, or agricultural, an expected result.

Two major fiscal reforms were initiated in FY00. One was the accounting change with respect to small savings already alluded to. This was a major fiscal achievement, carrying as it did both a fiscal dividend and a growth dividend. But it remains incomplete.

Deposit rates on small savings are now benchmarked to an assortment of instrument-specific benchmarks, with margins capped at +50 basis points. Because these are zero-risk instruments, many still carrying tax incentives, small savings rates constitute a floor to the interest

rate structure in the economy, and flows into small savings continue to remain very buoyant at the positive margins currently prevalent. The automaticity of this channel, beyond the reach of Central control, unfortunately continues to remain an enabler of fiscal indiscipline at state level.

Given the history of small saving collections, freely available to states outside national government control over state borrowing under Article 293, it may not immediately be possible to alter the jurisdictional nature of entitlements. What can be done however, is to mandate that a certain portion, half or more, be loaned to states but earmarked for retention in the newly-created Consolidated Sinking Fund (CSF) or the Guarantee Redemption Fund (GRF). This will simultaneously provide a bulwark against default while at the same time not enabling current primary deficits.

The second fiscal reform initiated in FY00 is fiscal responsibility legislation. This has been recently enacted by the Centre and four states. The single most effective feature in the fiscal legislation is the inflexible annual limit on government guarantees to parastatal debt. No simulations were possible for the Central Act, whose targets have been delegated to Rules which are yet to be made public. The simulated outcomes for the state Acts with revenue growing at historical rates of increase show permissible annual rates of increase in non-interest revenue expenditure at between 0-5 percent. Quite aside from the feasibility of such sharp cuts, there is the issue of how they will be achieved. If staff prove to be more resistant to cuts than maintenance and other expenditure, there could be a very steep decline in the quality of government service, and infrastructure. Some infrastructure might simply become inoperable without adequate maintenance. In conjunction with the absence of path limits in the design of the Acts (with a few exceptions), and the absence of any stated penalties for not systematically moving towards the stipulated targets, the legislation is in danger of becoming ineffective because the compression it calls for is so extreme.

There is some sensitivity of non-interest revenue expenditure to the average interest rate on government debt, typically well under one percent for a one percent drop in the rate. Further prospects for expenditure reform beyond the interest rate reform already achieved are limited. The government work force is not high by international standards, but is heavily skewed towards lower skill levels in composition. The kind of selective downsizing this calls for is unlikely to be politically feasible.

But the sensitivity to an improvement in revenue parameters is far greater. An increase in the buoyancy of total revenue (own plus receipts from the Centre) to one yields an increase in the annual permissible rate of increase in non-interest revenue expenditure of well over one percent. This reiterates once again that growth-facilitating fiscal reform in India simply cannot take place without urgent attention to raising tax revenues at all levels of government.

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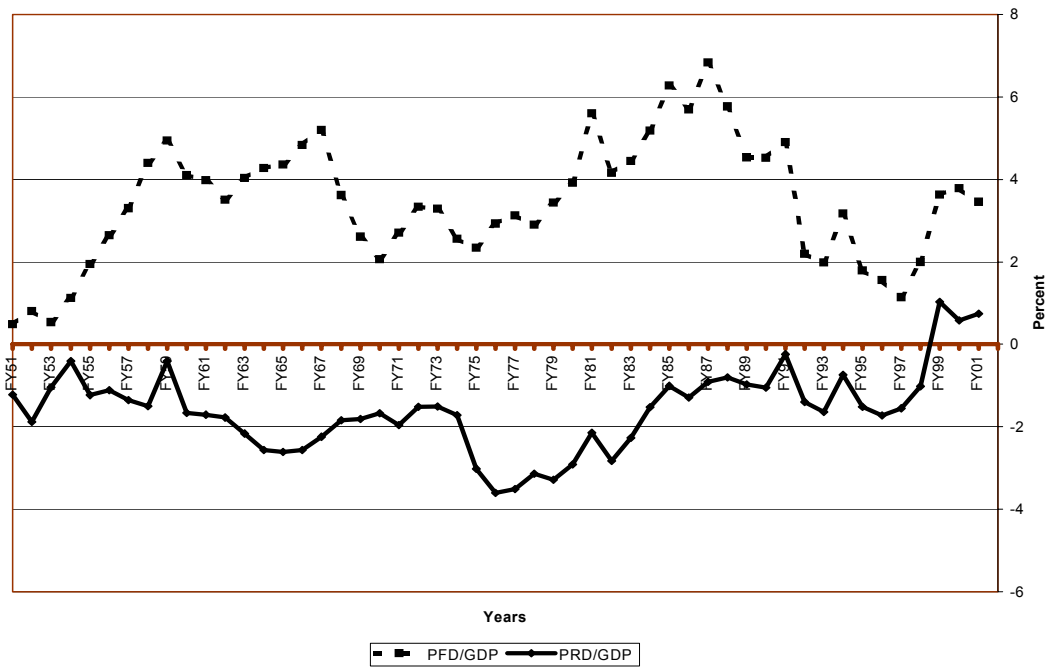
Chart 1: Primary Fiscal and Revenue Deficits

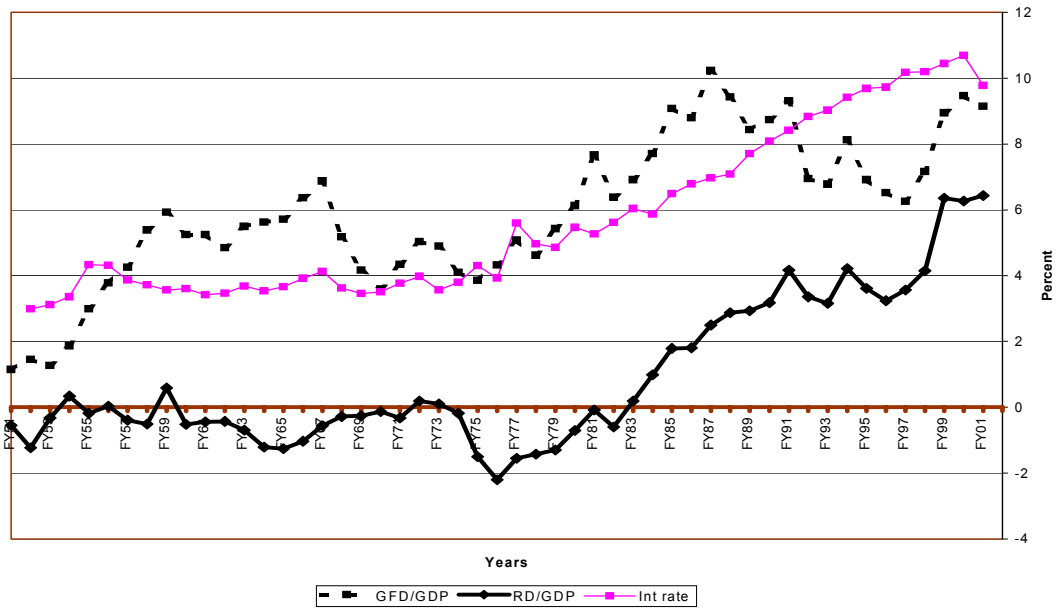


Source: The fiscal deficit (FD) starting FY89 is the reported figure in Government of India, 2003b, assorted issues. For earlier years, obtained from the difference between expenditure and non-debt current receipts from the same source, or where unavailable, as for the fifties, from Rangamannar, 2002. The change starting FY00 in the role of the Central government as on-lender of small savings to states (see section V) does not affect the consolidated figure.

Notes: 1. Primary deficits are obtained after subtracting interest payments from the reported consolidated figure across Centre and states, which nets out inter-governmental flows. All reported capital expenditure figures are net of loan recoveries, and net out loan repayments.

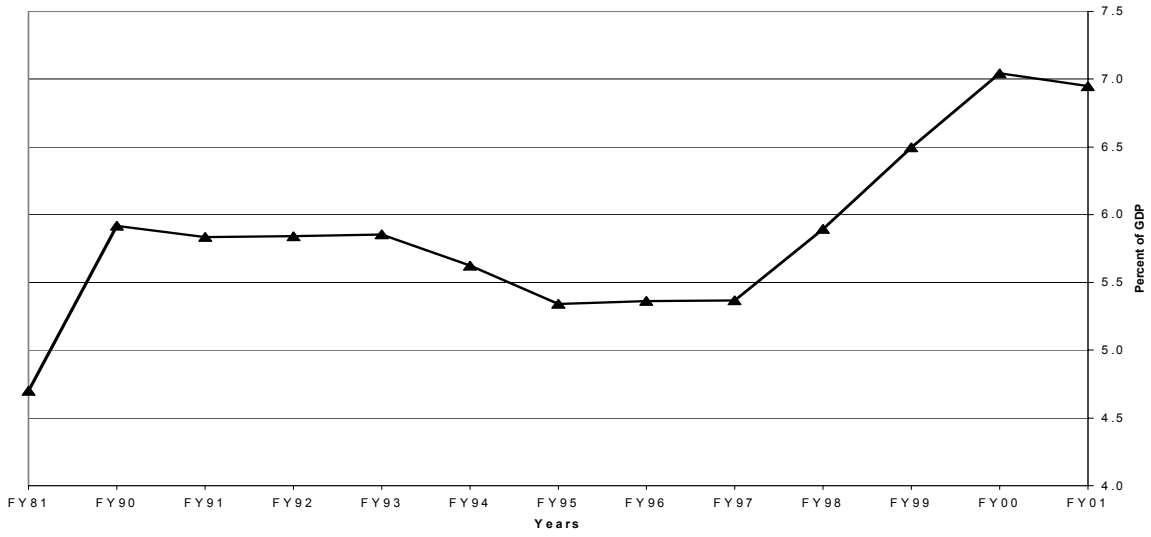
2. Negative values indicate primary surpluses.

Chart 2: Fiscal and Revenue Deficits and Interest Rates on Public Debt



Source and Notes: See source and notes to chart 1.
The interest rate for year t is the average nominal rate, calculated from interest payments in year t on the closing debt stock in year (t-1).

Chart 3: Wages, Salaries and Pensions (Centre+States)



Source: Compensation of employees from National Accounts Statistics, assorted issues; GDP from Economic Survey 2002-03.

Notes: 1. Compensation of employees includes pensions and wages and salaries, consolidated across Centre and states.

2. The GDP figure for FY01 is provisional.

Table 1

Countercyclical and Electoral Underpinnings of Fiscal Indicators 1951-2001 (Consolidated Centre + States)

Fiscal indicator (first differences)	Common intercept	General election intercept		GDP growth rate (%)		$\bar{R}^2$
		Dummy 1 1971-01	Dummy 2 1951-01	(t)	(t-1)	
PFD/GDP	0.42 (1.45)	0.92 (2.70)***		-0.03 (-0.80)	-0.09 (-2.09)**	0.106
	0.28 (0.95)		0.66 (2.23)**	-0.02 (-0.60)	-0.06 (-1.56)	0.064
PRD/GDP	0.19 (0.97)	0.75 (3.26)***		0.02 (0.69)	-0.08 (-2.77)***	0.185
	0.08 (0.40)		0.49 (2.42)**	0.02 (0.86)	-0.06 (-2.04)**	0.109
				Agri. growth rate (%)		
PFD/GDP	0.11 (0.64)	0.76 (2.32)**		-0.02 (-0.93)	-0.05 (-1.89)*	0.088
	0.07 (0.39)		0.57 (1.95)*	-0.02 (-0.79)	-0.04 (-1.49)	0.058
PRD/GDP	0.03 (0.28)	0.69 (3.22)***		0.01 (0.52)	-0.04 (-2.81)***	0.216
	0.01 (0.09)		0.47 (2.38)**	0.01 (0.61)	-0.04 (-2.18)**	0.143

Source: See source to chart 1 for fiscal indicators, and also notes to chart 1. GDP data from GOI, Economic Survey 2002-03. Election years from Butler et.al., 1991 supplemented for recent years from GOI 2002a.

Notes: 1. Figures in parentheses are t-values. Asterisks mark levels of statistical significance, three for $P < 0.01$. All D-W values fell in the range 1.81-2.01.

2. Dependent variables are taken in first differences (t-(t-1)). GDP growth rates are from the factor cost aggregate; GDP and agriculture sector figures for FY01 are provisional, subject to revision.

Table 2

Actual and Compensated Fiscal Deficits (Centre + States): FY90 to FY01

Years	Tax revenue		Overall fiscal deficit		Primary fiscal deficit		Primary revenue deficit	
	Total	Customs	Actual	Compen-sated	Actual	Compen-sated	Actual	Compen-sated
Percent to GDP								
FY90	**15.98**	**3.71**	**8.74**	**8.74**	**4.52**	**4.52**	**-1.04**	**-1.04**
Change over FY90								
FY91	-0.55	-0.08	0.57	0.02	0.39	-0.16	0.81	0.26
FY92	-0.18	-0.30	-1.80	-1.98	-2.32	-2.50	-0.35	-0.53
FY93	-0.72	-0.53	-1.96	-2.68	-2.53	-3.25	-0.59	-1.31
FY94	-1.79	-1.13	-0.61	-2.40	-1.35	-3.14	0.30	-1.49
FY95	-1.38	-1.06	-1.82	-3.20	-2.73	-4.11	-0.47	-1.85
FY96	-1.23	-0.70	-2.22	-3.45	-2.96	-4.19	-0.68	-1.91
FY97	-1.36	-0.58	-2.48	-3.84	-3.38	-4.74	-0.51	-1.87
FY98	-1.49	-1.07	-1.58	-3.07	-2.52	-4.01	0.03	-1.46
FY99	-2.60	-1.37	0.21	-2.39	-0.89	-3.49	2.08	-0.52
FY00	-1.80	-1.21	0.73	-1.07	-0.74	-2.54	1.63	-0.17
FY01	-1.47	-1.45	0.40	-1.06	-1.06	-2.53	1.79	0.32
FY02	*-2.17	-1.96	*1.17	*-1.00	-0.73	-2.90	1.80	-0.37
Percent to GDP								
FY01	**14.51**	**2.26**	**9.14**	**7.67**	**3.46**	**1.99**	**0.75**	**-0.72**
FY02	***13.81**	**1.75**	***9.91**	***7.74**	***3.79**	***1.62**	***0.76**	***-1.41**

Source: Public Finance Statistics 2002-03, supplemented by Central Finance Accounts for 2001-02.

Notes: *All figures for FY02 include pre-actuals (RE) for some states. The consolidated fiscal deficit figures for FY02 are approximations constructed from the most updated estimates available. The official figure will be reported only after audited actuals are in for all state governments. Negative figures for deficits indicated surpluses.

Table 3

Fiscal Responsibility Legislation

	Karnataka	Kerala	Punjab	Tamil Nadu
Notified	2002 Bill No. 28	17 September 2003 Act No. 29	5 May 2003 Act No. 11	17 May 2003 Act No. 16
Documentary Obligations	MTFP – 4 year Half yearly review	MTFP – 3 year FPSS – 1 year	MTFP – 3 year Quarterly review	MTFP – Multi year Half yearly review
Targets: RD	Target: 0 Year: FY06 Path: Not specified.	Target: 0 Year: FY07 Path: Not specified	Path: ≥5% RR fall/year Target: 0 (no year)	Target: <5% RR Year: FY08 Path: 3-5% RR fall/year
FD	Target: ≤ 3% GSDP Year: FY06 Path: Not specified	Target: 2% GSDP Year: FY07 Path: Not specified	Path: ≤2% absolute increase/year Target: 3% GSDP (no year)	Target: ≤ 3% GSDP Year: FY08
Modifiable for:	Security/calamity	-	Calamity	Security/calamity
Inflexible Targets				
Guarantees	As specified in Karnataka Ceiling to Govt. Guarantee Act 1999	None	Cap: 80% RR	Cap: 100% RR (total) or 10% GSDP 75% RR (risk-weighted) or 7.5% GSDP
Total debt	≤ 25% GSDP 31 March 2015	None	40% GSDP 31 March 2007	-
Protection	Exp. on elem. edu., basic health, rural water supply	-	No fiscal sops six months before elections	-
Ambiguities	1. Revenue receipts from the Centre 2. Estimated GSDP (time-lag) 3. Non-compliance penalties			

Source: The Karnataka Fiscal Responsibility Bill, 2002, No. 28; Kerala Fiscal Responsibility Act, 2003, No.29; Punjab Government Gazette, Monday, 5 May 2003;Tamil Nadu Fiscal Responsibility Act, 2003 as amended on 10 February 2004.

Notes: The Macro-economic: Framework statement is to provide an assessment of growth in GDP, the fiscal balance and external balance of payments. The MTFP is a Medium Term Fiscal Programme with a rolling time horizon as specified; FPSS is a Fiscal Policy Strategy Statement; RR is total revenue receipts.

Table 4

Fiscal Compression Implicit in Fiscal Responsibility Legislation with Alternative Revenue Parameters

(%)

		1997-02			
		Karnataka	**Kerala**	**Punjab**	**Tamil Nadu**
Annual growth	Nom. GSDP(fc)	11.57	11.71	11.12	11.88
	Total revenue receipts	9.75	8.06	9.90	9.49
Average	Own revenue/total revenue	73.16	72.40	74.70	83.99
	Interest/debt (%) (FY02)	12.11	10.41	11.42	12.25
Annual growth	Capital expenditure	13.60	-5.91	11.38	8.32
	Non-interest revenue expenditure	12.10	10.04	17.71	9.26
P R O J E C T E D					
Achieved rev. buoy		**2002-06**	**2002-07**	**2002-07**	**2002-07**
Annual growth	Capital expenditure	19.51	32.30	7.90	31.51
	Non-interest revenue expenditure				
	(10.5% interest)	2.35	0.0	3.78	5.07
	(11.5% interest)	1.68	…	2.85	4.58
Projected rev. buoy = 1.0		**2002-06**	**2002-07**	**2002-07**	**2002-07**
Annual growth	Capital expenditure	19.51	32.3	6.07	31.84
	Non-interest revenue expenditure				
	(10.5% interest)	4.50	4.77	5.45	7.99
	(11.5% interest)	3.87	…	4.57	7.56

Source: State-wise data from RBI State Finances, supplemented by actuals for FY02 from the Ministry of Finance. Simulations based on targets in table 3.

Notes:

1. Nominal GSDP is projected to grow at the same rate as in the five-year period 1997-02. The GSDP figure for FY02 is a quick estimate, subject to revision. The first correction year is assumed to be FY03 for all states.
2. The Punjab projections are based on the debt target of 40 percent of GSDP for FY07, since the path limits on FD led to a debt stock at 46 percent of GSDP in the target year. The RD was assumed to grow at the path limits. The eventual FD and RD targets (see table 3) are reached in FY08 and FY11 respectively. The lower end of the path limit range in the amended TN Act led to a revenue surplus in the target year.
3. The Punjab figures for growth in capital and non-interest revenue expenditure are for the period 1996-01, since an unusually low capital expenditure in FY97 gave very high rates of subsequent increase when used as the base year.
4. Since the interest rate on Kerala debt going in was only 10.41 percent, no simulations were performed at 11.5 percent.