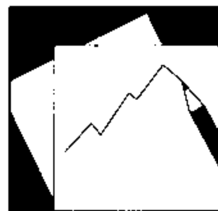
Working Paper

INTERNATIONAL MONETARY FUND

WP/09/175



IMF Working Paper

India's Experience with Fiscal Rules: An Evaluation and The Way Forward

Alejandro Sergio Simone
and Petia Topalova

INTERNATIONAL MONETARY FUND

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IMF Working Paper

Asia and Pacific Department

India's Experience with Fiscal Rules: An Evaluation and The Way Forward

Prepared by Alejandro Sergio Simone and Petia Topalova

Authorized for distribution by Laura Papi

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Abstract

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The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

This paper examines India's experience with fiscal rules with a view to inform the design of a possible successor fiscal framework to the FRBMA. Among several proposals to strengthen the FRBMA, a framework that focuses medium-term fiscal policy on debt sustainability by the use of a medium term debt target, and annual nominal expenditure growth rules is proposed. This approach tackles the deficit bias at its core and enables countercyclical fiscal policy through automatic stabilizers. Numerical targets should be supported by structural reform measures for both revenues and expenditures, while the coverage of the fiscal rules should be expanded.

JEL Classification Numbers: E62, E61, H60

Keywords: Fiscal rules, fiscal sustainability, public debt

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I. Introduction

India is currently reviewing its fiscal rules framework with a view to inform the design of a successor arrangement[1]. After a decade of large and intractable fiscal deficits, India adopted a rules-based fiscal framework, the Fiscal Responsibility and Budget Management Act (FRBMA), in 2003. The FRBMA's stated objective is to ensure inter-generational equity in fiscal management and the fiscal sustainability necessary for long-term macro-economic stability. India's states were given incentives by the Twelfth Finance Commission (TFC) to implement their own fiscal responsibility laws (FRLs) in the form of conditional debt restructuring and interest rate relief.[2] With the FRBMA and FRLs only setting out targets until March 2009, the Thirteenth Finance Commission is currently reviewing India's fiscal rules framework.

So far, India's experience with fiscal rules has been mixed. The FRBMA strengthened India's fiscal policy framework. The implementation of the FRBMA initiated in the 2004/05 budget period also coincided with a decline in India's central government fiscal deficit[3] by about 1.8 percent of GDP between its introduction and 2007/08. At the same time, however, the date for achieving the FRBMA current deficit targets has been postponed on repeated occasions, off-budget activities increased, and significant slippages with respect to the 2008/09 deficit targets were expected even before the global crisis precipitated calls for fiscal stimulus,[4] raising questions about the effectiveness of the FRBMA. While most Indian states also adopted their own FRLs and have experienced significant improvements in their overall balances in the last few years, a more detailed look at the nature of this consolidation is warranted given the combination of a rapidly growing economy, large vertical imbalances, and a large pool of captive savings.

This paper aims to contribute to the policy debate on a successor arrangement for the FRBMA. Section II starts by analyzing the fiscal performance at the central and subnational government levels since the implementation of FRBMA and the state FRLs providing a preliminary assessment of the impact of fiscal rules on fiscal discipline in India. On the basis

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[1] For the purposes of this paper fiscal rules are defined as in Kopits and Symansky (1998) as a permanent constraint on fiscal policy in terms of an indicator or a set of indicators of overall fiscal performance.

[2] The Finance Commission is a constitutional body established under article 280 of the Indian Constitution every five years with the primary purpose of determining the sharing of centrally collected tax proceeds between the central and state governments and the distribution of grants-in-aid of revenues across states. The terms of reference of the Finance Commissions can be expanded by order of parliament.

[3] Expenditures financed through subsidy-related bonds are included in this definition, however not in the official definition, of the deficit.

[4] The overall balance including off budget bonds would exceed the FRBMA target by more than 4 percentage points of GDP. See section II A.2 for more details.

of India's fiscal performance and international experience, it then assesses strengths and weaknesses of the current fiscal rules framework in Section III. Section III also draws from existing literature to argue that fiscal rules need to be accompanied by complementary reforms to strengthen fiscal discipline. Finally, Section IV concludes by proposing reform options, which encompass both design options for a successor FRBMA and complementary reforms to further strengthen fiscal discipline in India. In particular, it suggests a simple fiscal rule which is anchored on a medium-term debt target with annual nominal expenditure growth rules. This approach would tackle the deficit bias at its core, and allow room for macroeconomic stabilization through automatic stabilizers.

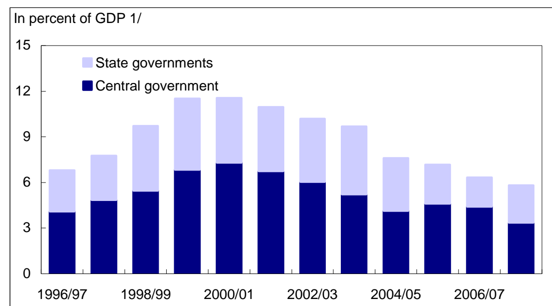
II. India's Numerical Fiscal Rules and Fiscal Discipline

During the second half of the 1990s, government finances in India deteriorated continuously, leading to large and intractable fiscal imbalances. The deterioration was the result of the combined effect of significant reform-induced losses in revenue (namely from reductions in customs and excise duty rates), poor tax performance due to a narrow tax base and low tax buoyancy (Poirson, 2006), and government's inability to contain current public spending. Both the center and the state governments contributed to the fiscal deterioration in India, with the implementation of the civil service wage increases recommended by the Fifth Pay Commission widening deficits, especially at the state level (Figure 1). Persistent primary deficits led to a sharp accumulation of debt[5] (Figure 2). In 2003/04, at 9 percent of GDP, India had one of the largest general government deficits in the world (Kochhar and Purfield, 2004) and its debt reached more than 87 percent of GDP. Fiscal consolidation was required not only to facilitate sustained long-run growth by minimizing the crowding out of investment and allowing the removal of constraints imposed on the domestic financial system[6] by government's financing needs, but also to create the fiscal space for counter-cyclical fiscal policy and crisis-related spending. The importance of the latter was highlighted by the 2008/09 global financial crisis.

[5] The debt definition includes domestic liabilities of the central government (internal debt, small savings deposits, provident funds and others, reserve funds and deposits), liabilities of the state governments (market loans, provident funds and other accounts) and external debt at fiscal year-end exchange rates.

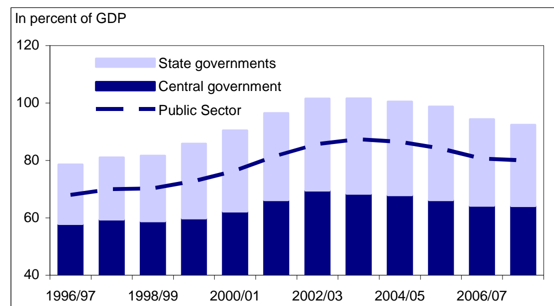
[6] Indian banks are required to invest 25 percent of their total demand and time liabilities in cash or government approved securities under the Statutory Liquidity requirement (SLR). In response to the global financial crisis, the SLR was reduced to 24 percent of liabilities.

Figure 1. Fiscal Balances of the Center and States



1/ Includes off-budget bond issuance.

Figure 2. Outstanding Liabilities of the Center and States



A. Central Government

Rules

Against this fiscal background and after three years of discussion, India enacted the FRBMA in August 2003. The FRBMA covers only the central government and its stated objective is to ensure inter-generational equity in fiscal management, achieve fiscal sustainability necessary for long-term macro-economic stability, and improve the transparency of central government fiscal operations. In July 2004, a set of implementing rules came into force. Similar to most FRLs around the world, the FRBMA establishes the broad framework for conducting fiscal policy by setting out both procedural as well as numerical rules.[7]

The procedural rules of the FRBMA specify the principles of transparency and accountability in designing, implementing and assessing fiscal policy. They require the government to commit up-front to a monitorable fiscal policy strategy over a multiyear period, and to report and publish fiscal outcomes and strategy changes on a routine basis. The bill prescribes the submission to parliament of yearly statements on medium-term fiscal policy, the fiscal policy strategy, and a macroeconomic framework that outline rolling targets for prescribed fiscal indicators. These statements should include the underlying macroeconomic assumptions, the policies of the government including relating to taxation, expenditure, borrowing, and key fiscal measures. Fiscal targets are monitored by the Ministry of Finance, which prepares quarterly reports on the trends in revenue and expenditure. These reports are sent to parliament for information. If substantial deviations from the fiscal targets were to occur, the Minister of Finance is obliged to present to parliament an explanation of the deviations and remedial measures to address them. However, there is no timeframe by which the deviations need to be addressed, and failure to meet the targets does not trigger any explicit sanction.

[7] Procedural rules refer to those that define attributes and interaction of participants in the budget process aiming to enhance transparency, accountability and fiscal management. Numerical rules instead are defined on the basis of overall indicators of fiscal policy such as fiscal balances, debt, revenue, and expenditure.

The law also prohibits borrowing by the government from the Reserve Bank of India starting April 2006.

The FRBMA and the associated rules set out fiscal targets in a multiyear context. The Act includes a single, medium-term, zero-current-balance target for the central government to be achieved by March 2008. The associated rules, meant to guide the execution of the provisions of the Act, set out the following numerical rules: (i) reduction of current deficit by at least 0.5 per cent of GDP in each financial year beginning with 2004/05; (ii) reduction of the fiscal deficit by at least 0.3 percent of GDP in each financial year so that the fiscal deficit is brought down to not more than 3 per cent of GDP at the end of March 2008; (iii) limit of 0.5 percent of GDP on the incremental amount of guarantees given by the central government; and (iv) initial annual limit on debt accumulation of 9 percent of GDP, to be progressively reduced by at least one percentage point of GDP each year. Precise accounting definitions of the relevant target indicators are not provided in the legislation. The original deadline to meet the above specified targets was postponed to March 2009 (in 2005/06) and then again to March 2010 in the 2008/09 Budget. According to the Act, breaches of the fiscal targets are allowed on grounds of national security or national calamity or such other exceptional grounds as the Central government may specify.

Performance

Up until 2007/08, the introduction of FRL legislation coincided with significant improvements in headline fiscal indicators. Between 2003/04 and 2007/08 (provisional estimates), the central government fiscal deficit declined from 5.1 to 2.8 percent of GDP, achieving one-year in advance the medium-term target of 3-percent of GDP (Table 1). The reduction in the central government current deficit was equally significant: the 2007/08 current deficit, at 1.2 percent of GDP, was a third of its 2003/04 level. More than two-thirds of the fiscal adjustment over this time period was due to revenue gains, with improvements in tax performance underpinned by rapid economic growth, strong corporate profits, and improvements in tax administration as measured by effective tax rates. The rest of the adjustment came mostly from declining interest payments. The outstanding liabilities of the central government declined by 4.4 percent of GDP.

The improvements in the fiscal position suggested by headline indicators is reduced when broader fiscal indicators for the same period are considered. The pressure to comply with the numerical fiscal targets encouraged the increasing use of subsidy-related bonds to meet current spending needs. Compensation to state-owned oil marketing companies, the Food Corporation of India and fertilizer producers for losses incurred from the subsidized provision of commodities was provided through the issuance of special bonds, which are excluded from current spending and the authorities' definition of the deficit. If these quasi-fiscal expenditures are taken into account, the actual fiscal adjustment until 2007/08 has been less than the headline budget numbers would suggest (see augmented overall and current balance in Table 1). Moreover, there has been almost no correction on the expenditure side

with the entire fiscal adjustment driven by enhanced revenue. However, even including the off-budget subsidy-related expenditure, India was roughly on track to meet the (postponed) FRBMA targets until 2007/08 (Figure 3), and revenue performance closely followed the FRBMA implementation roadmap.[8]

Table 1. Adjustment in Central Government Finances, 2003/04—2008/09

	2003/04	2004/05	2005/06	2006/07	2007/08 Prov.	Cumulative Change 2003/04-2007/08	2008/09 IMF Staff proj.
			(In Percent of GDP)				
Total revenue and grants	10.2	10.2	10.1	10.9	11.8	1.6	11.0
Net tax revenue	6.8	7.2	7.6	8.5	9.3	2.5	8.9
Nontax revenue	3.3	2.9	2.4	2.3	2.4	-0.9	2.0
Total expenditure and net lending	15.3	14.3	14.3	14.3	14.5	-0.8	16.8
Current expenditure 1/	13.8	12.7	12.7	12.8	13.0	-0.8	14.9
Capital expenditure and net lending 2/	1.5	1.6	1.6	1.5	1.6	0.0	1.9
Overall balance	-5.1	-4.1	-4.1	-3.4	-2.8	2.3	-5.8
Overall balance (augmented) 3/	-5.2	-4.1	-4.6	-4.4	-3.4	1.9	-7.1
Current balance	-3.6	-2.5	-2.6	-1.9	-1.2	2.4	-4.0
Current balance (augmented) 3/	-3.7	-2.5	-3.1	-2.5	-1.8	1.9	-4.2
Subsidy-related bonds 4/	0.1	0.0	0.5	1.0	0.6	0.5	1.3
Central Government Debt 5/	68.4	67.9	66.1	64.2	64.1	-4.4	…

Sources: Data provided by the Indian authorities; and staff estimates.

1/ Includes the surcharge on Union duties transferred to the National Calamity Contingency Fund.

2/ Authorities' treatment of state debt swap scheme (DSS) in 2002-05 shows the prepayment by States of on-lent funds to the center as net lending. The Center's prepayment of its debt to the National Small Savings Fund (NSSF) is treated as a capital expenditure.

3/ Includes subsidy-related bond issuance as current expenditure.

4/ Issued by the central government to the Food Corporation of India, fertilizer producers, and the state-owned oil marketing companies as compensation for losses incurred from the subsidized provision of commodities.

5/ Comprises public sector concessional and non-concessional debt at yearly exchange rates.

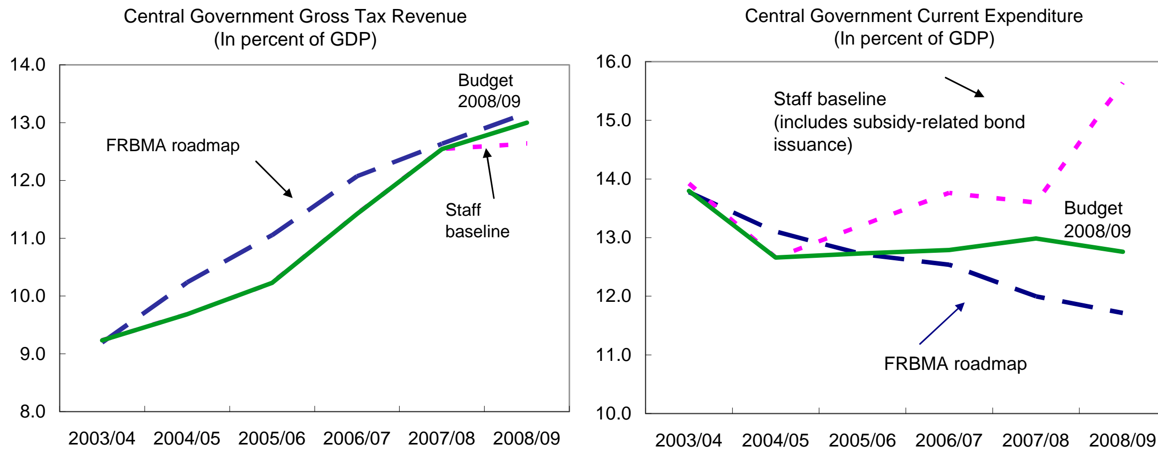
In 2008/09, the central government deficit is set to reach a historical high eliminating the fiscal improvement since the introduction of the FRBMA. Part of this widening can be attributed to the fiscal measures undertaken since October 2008 to support economic growth in response to the global financial crisis (estimated at 0.6 percent of GDP) as well as a deceleration in tax revenue due to the slowdown in economic activity. However, the fiscal deficit was set to deteriorate to high levels well before any calls for crisis-related fiscal stimulus measures. Despite ambitious annual targets,[9] with elections approaching, the 2008/09 budget introduced a number of costly schemes, such as an agricultural debt write-off, an expansion of the National Rural Employment Guarantee scheme, and a revision of the income tax brackets. In addition, the Sixth Pay Commission award, which recommended a 20 percent hike in government salaries, was also implemented. Most importantly, in the

[8] The FRBMA roadmap is taken from the 2004 Report of the Task Force on the Implementation of the FRBMA. It refers to Table 6.10 of the reform scenario.

[9] The 2008/09 central government budget targets a headline (i.e. non augmented) deficit of 2.5 percent of GDP.

absence of expenditure reform, the subsidy bill increased dramatically with the run-up of global commodities prices in the first half of 2008. These developments undermined the credibility of government's commitment to fiscal discipline and suggest that going forward revenue gains can not single-handedly carry fiscal adjustment and the sustainability of India's fiscal policy.

Figure 3. India: FRBMA Roadmap and Fiscal Outturns



B. State Governments[10]

Rules

India has adopted a bottom-up approach in its institutional mechanism towards overall fiscal discipline. With roughly half of the general government fiscal deficit accounted for by India's states, the success of fiscal adjustment and reduction of general government debt hinges critically on the fiscal performance of the subnational governments. India's states were given incentives to follow suit and implement their own FRLs through the provisions of the TFC for conditional debt restructuring and interest rate relief.[11]

[10] For a detailed discussion of states' fiscal performance, policy initiatives and institutional framework, see the RBI series "States Finances: A Study of Budgets."

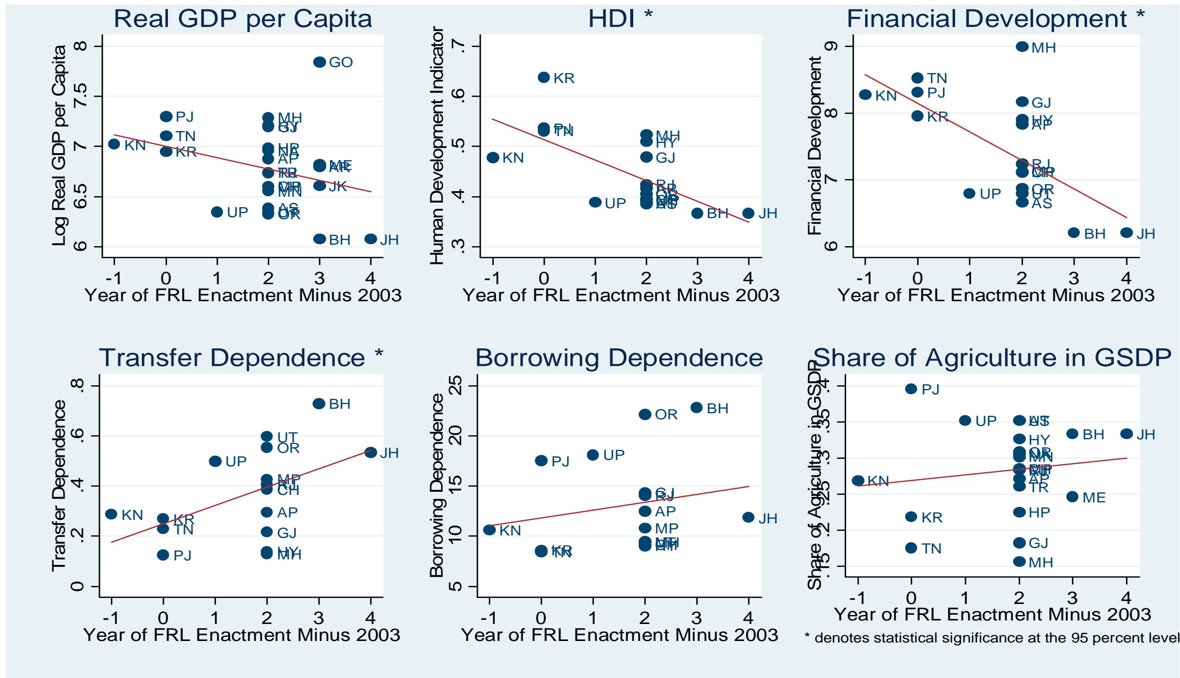
[11] The Twelfth Finance Commission (2004) recommendations aimed to alleviate states' fiscal distress by (i) raising the share of central government revenue (from 29.5 to 30.5 percent) and the amount of grants received by states, (ii) conditional debt restructuring and interest rate relief, provided that the states pass and implement FRLs targeting revenue balance by 2008/09 and a 3 percent of GDP overall deficit by 2009/10, (iii) a stricter borrowing ceiling with the center setting global ceilings on borrowing and only lending to fiscally weak states.

As of mid 2008, twenty-six of India's 28 states have enacted FRLs.[12] While there is some variation in the design of the FRLs across states (Appendix Table 1), a number of features of the FRBMA have been adopted in the states' FRLs, following the recommendations of the TFC and the model legislation created by the Group of State Finance Secretaries in 2005. The TFC suggested that the FRL of each state should provide for the elimination of the current deficit by 2008/09, the reduction of the overall deficit to 3 percent of gross state domestic product (GSDP), along with annual reduction targets of current and fiscal deficits, measures to enhance transparency in budgetary operations, and a medium-term fiscal policy framework. Some states have set out direct targets for outstanding liabilities as a percent of GSDP for a pre-specified date in the future. Some states have even instituted rules for expenditure management (such as limits on the state wage bill as a share of state own revenue or state current expenditure). A few of the states have imposed limits on the incremental guarantees or the total amount of outstanding guarantees. The Medium Term Fiscal Plans of the States, formulated in terms of their FRLs, aim to correct the structural weaknesses that have contributed historically to poor fiscal performance, through measures to improve tax administration, remove tax distortions and prioritize expenditure.

There appears to be a pattern in the order in which India's states decided to set up an institutional framework with numerical rules to guide their fiscal policy. Simple partial correlations between state characteristics in the pre-FRBMA period (taking an average of observations for the period 2001/02-2003/04) and the timing of FRL enactment at the state level reveal that states with higher Human Developed Indicators, better infrastructure (not shown), and more financially developed (as measured by real credit per capita) were more likely to be early adopters of a fiscal responsibility framework (Figure 4). On the other hand, states with a high transfer dependence (measured as the share of grants and shared revenue received by the state in the pre-FRBMA period as a share in state's total revenue) were slower in adopting a FRL. Interestingly, the borrowing dependence (stock of central government loans to states' GSDP) and states' economic characteristics (such as reliance on agriculture) are not significantly associated with the timing of FRL enactment.

[12] The state of West Bengal and Sikkim are the only two states that have not yet enacted fiscal responsibility legislation.

Figure 4. State Characteristics and FRL Enactment



Performance

The enactment of the FRLs coincided with a process of fiscal consolidation at the subnational level. Deficit indicators demonstrated a marked improvement (Table 2). The states' consolidated deficit was more than halved from 4.5 percent of GDP in 2003/04 to 2.5 percent in 2007/08. The aggregate current balance swung from a deficit of 2.2 percent to a surplus of 0.5 percent of GDP, a correction of 2.7 percent of GDP. The levels of debt of the states also declined, with state government guarantees on a downward path as well. As of 2007/08, most of the states were well ahead of the stipulated time schedule in reaching their current and overall balance targets.

The fiscal consolidation at the state level was achieved on the back of growing own revenues and higher resource transfers from the central government. More than three-quarters of the 2 percent of GDP decline in the states' aggregate fiscal deficit was due to an increase in state revenue. As noted by Kishore and Prasad (2007), increased transfers from the central government, namely through shared taxes and grants, accounted for the bulk of the increase in revenue. The gain in own tax revenue of 0.4 percent of GDP (reflecting the implementation of VAT by the majority of states during this time period as well as measures to improve tax administration) was partially eroded by a marginal decline in non-tax revenue. On the expenditure side, a significant reduction in current expenditure (of 0.6 percent of GDP) stemmed entirely from declining interest payments, reflecting the restructuring of

states' debt under the recommendations of the TFC and the lower volume of borrowings from the National Small Savings Scheme which typically carry a higher interest cost.

Table 2. Adjustment in State Government Finances, 2002/03—2008/09

	2003/04	2004/05	2005/06	2006/07	2007/08 R.E.	Cumulative Change 2003/04-2007/08	2008/09 B.E.
Total revenue and grants	11.3	11.7	12.0	12.7	13.0	1.7	13.3
Tax revenue	8.2	8.5	8.6	9.0	9.4	1.3	9.7
Share of Central Government tax revenue 1/	2.4	2.5	2.6	2.9	3.2	0.8	3.4
State taxes	5.8	6.0	5.9	6.1	6.2	0.4	6.4
Non-tax revenue	1.4	1.5	1.3	1.5	1.3	-0.1	1.3
Grants from Central Government 1/	1.7	1.7	2.1	2.2	2.2	0.5	2.4
Total expenditure, O*f which*	15.8	15.2	14.5	14.6	15.5	-0.3	15.7
Capital expenditure and loans & advances	2.8	2.6	2.6	2.7	3.1	0.2	3.0
Revenue expenditure	13.4	13.0	12.2	12.2	12.9	-0.6	13.0
Of which: Interest payments	2.9	2.8	2.3	2.2	2.2	-0.7	2.0
Overall balance	-4.5	-3.5	-2.5	-1.9	-2.5	2.0	-2.4
Revenue balance 2/	-2.2	-1.2	-0.2	0.6	0.5	2.7	0.5
Overall balance (excl. Net resources transferred and Interest Payments)	-6.1	-5.2	-4.8	-4.8	-5.8	0.3	-6.1
Net resources transferred from central government	4.6	4.5	4.6	5.1	5.6	1.0	5.8
State government debt	33.2	32.7	32.6	30.2	28.4	-4.8	…
State government guarantees 5/	8.0	6.5	5.5	…	…	…	…

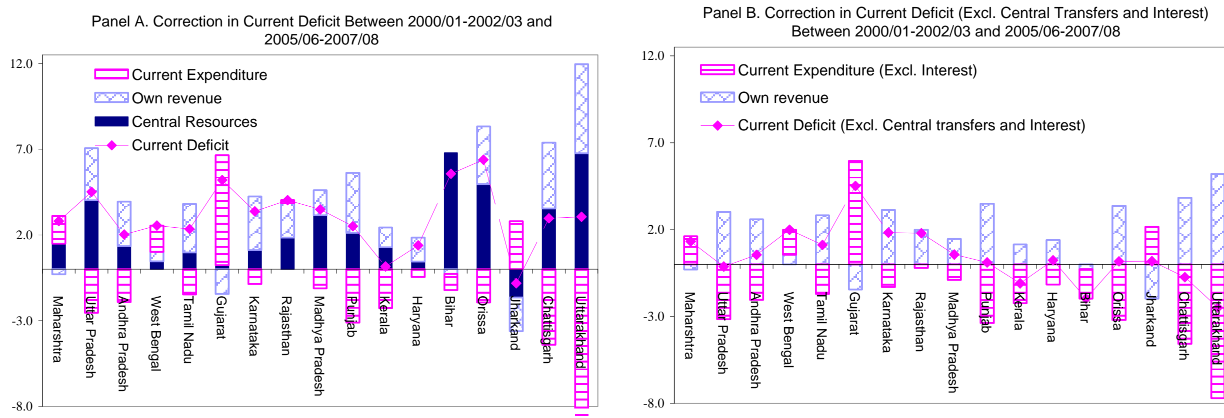
Sources: Data provided by the Indian authorities; and Fund staff estimates and projections.

1/ According to central government accounts.
2/ According to the RBI Study of State Budgets which uses state accounts' estimates of central government transfers.

There is heterogeneity in the way individual states have adjusted their fiscal deficit. Figure 5, Panel A decomposes the correction in the current deficit as a share of GSDP between 2000/01-2002/03 and 2005/06-2007/08 for each of India's 17 major states into (i) increase in own revenue, (ii) increase in central government transfers and (iii) decrease in current expenditures. In Panel B, the correction in the current deficit as a share of GSDP, excluding central transfers and interest payments is decomposed into improvements in own revenue gains and non-interest current expenditure cuts. The extent to which states benefited from higher central government transfers and managed to raise own resources varied substantially. However, the aggregate pattern is confirmed in the state-level data: fiscal correction has been revenue-led with a large role played by higher central government transfers. Only 4 out of these 17 states have managed to actually decrease non-interest current expenditure as a share of GSDP during this time period.

In sum, the aggregate states' fiscal consolidation masks a relatively modest fiscal adjustment that can be attributed purely to states' own fiscal efforts. A better measure of consolidation due to states' own effort, the overall deficit excluding central transfers and interest payments, shows a modest decline of 0.3 percent of GDP. Going forward, the important role central government transfers played in the consolidation at the state level highlights the potential vulnerability of the states' fiscal positions to a slowdown in economic growth. In this connection, the projected slowdown in economic growth in 2008/09 and 2009/10 will likely be a set back for the process of fiscal consolidation in the states as well as of in the center.

Figure 5. Individual States: Correction in Current Deficits



Adoption of Fiscal Rules and Fiscal Adjustment Across India's States

The variation in the timing of enactment of FRLs across India's states can be used to investigate whether there is a relationship between the adoption of fiscal rules and the observed fiscal adjustment. Specifically, for each of India's 17 states, we construct a time-varying state-specific indicator, which equals the interaction of (i) an indicator for whether the state has ever enacted a FRL, and (ii) an indicator specifying whether the time period is the post-FRL enactment period. Since all of the states' FRLs include a target for current deficit (following the TFC's recommendations), we choose the current deficit as a share of GSDP as the measure of fiscal stance. In order to better capture the states' own fiscal effort, we refine the current deficit measure by excluding resource transferred from the center, as well as interest payments. We then regress this measure of the current deficit as a share of GSDP on the post-FRL indicator. We include year fixed-effects to control for economy-wide changes (such as economic growth, higher revenues at the central level, implementation of the TFC recommendations) and state fixed-effects to control for time-invariant heterogeneity in fiscal conditions across India's states. All specifications also control for the (log of) state GSDP, the lagged value of the debt to GSPD ratio, and an indicator for the adoption of the VAT at the state level.

Table 3. State Fiscal Adjustment and Fiscal Rules

Dependent Variable	Current Deficit			Current Deficit Excluding Central Transfers			Current Deficit Excluding Central Transfers and Interest Payments		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post * FRL	-0.0087**	-0.0078*	-0.0076	-0.0037	-0.0029	-0.0033	-0.0034	-0.0022	-0.0044
	[0.0040]	[0.0042]	[0.0047]	[0.0031]	[0.0036]	[0.0037]	[0.0033]	[0.0034]	[0.0038]
Sample / Specification	1997-2007	1995-2007	Arellano-Bond	1997-2007	1995-2007	Arellano-Bond	1997-2007	1995-2007	Arellano-Bond
N	188	216	185	188	216	185	188	216	185

Note: This table summarizes state-level regressions of various measures of current defict as a share of GSDP on a post FRL enactment indicator, state and year fixed effects. All columns control for lagged debt-GSDP ratio, log GSDP, and VAT implementation indicator. Columns (1), (2), (4), (5), (7) and (8) include the lag of the dependent variables. Columns (3), (6) and (9) present Arellano-Bond estimator results. Robust standard errors in parenthesis. Significance: * 10 percent, ** 5 percent. The states included in the regressions are Andhra Pradhesh, Bihar, Chattisgarh, Gujarat, Haryana, Jharkand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, and West Bengal.

The evidence of the effect of fiscal rules on fiscal performance in India's states is weak. According to our simple empirical exercise, the conventional measure of the current deficit significantly declines once a state adopts an FRL (columns (1)-(3)).[13] The result is robust to varying the time-period covered or using alternative estimation techniques (such as the Arellano Bond dynamic panel GMM estimator). However, once the measure of current deficit is refined to exclude the resources transferred by the center (columns (4)-(9)), the coefficient on the post-FRL indicator becomes not only statistically insignificant but declines substantially in magnitude. Fiscal rules do not appear to be associated in a statistically significant manner with greater fiscal adjustment at the state level.

The variation in the design of FRLs across India's states allows an examination of whether certain design features of the fiscal rules are correlated with better fiscal performance. Namely, some states have adopted a specific target for their outstanding debt as a share of GSDP for a pre-specified date in the future; some states have adopted some rules on expenditure. States also differ in the frequency with which compliance with the fiscal rules is supposed to be examined. Some states require quarterly review of expenditure and receipts against budget estimates, while other require half-yearly or annual review of compliance. We constructed indicators of whether the state law includes (i) a debt target or, (ii) expenditure rules, and (iii) whether the performance review is at least half-yearly. We then interact these state law design features with the post FRL indicator to examine whether fiscal performance after the introduction of fiscal rules varies with the presence or absence of these features.

[13] This does not allow to assess whether there is a causal effect of numerical fiscal rules on fiscal adjustment since passing a law is a choice by the state, reflecting its desire/commitment/need for an institutional framework for the conduct of fiscal policy.

Table 4. State Fiscal Adjustment, Fiscal Rules and Fiscal Law Design

Dependent Variable	Current Deficit	Current Deficit Excl. Central Transfers	Current Deficit Excl. Central Transfers and Interest Payments	Current Deficit	Current Deficit Excl. Central Transfers	Current Deficit Excl. Central Transfers and Interest Payments	Current Deficit	Current Deficit Excl. Central Transfers	Current Deficit Excl. Central Transfers and Interest Payments
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Post * FRL	-0.0049	0.0019	0.0018	-0.006	-0.0027	-0.0024	-0.0065	-0.0027	-0.0047
	[0.0048]	[0.0039]	[0.0046]	[0.0036]	[0.0030]	[0.0033]	[0.0063]	[0.0046]	[0.0050]
Post * FRL * Debt Target	-0.0055	-0.0083**	-0.0076*						
	[0.0062]	[0.0038]	[0.0042]						
Post * FRL * Expenditure Target				-0.0158**	-0.0063**	-0.0059**			
				[0.0055]	[0.0026]	[0.0024]			
Post FRL Enactment * Compliance Frequency							-0.0033	-0.0016	0.0019
							[0.0076]	[0.0048]	[0.0049]
N	188	188	188	188	188	188	188	188	188

Note: This table summarizes state-level regressions of various measures of current deficit as a share of GSDP on a post FRL enactment indicator, state and year fixed effects. All columns control for lagged debt-GSDP ratio, log GSDP, VAT implementation indicator and the lag of the dependent variables. Robust standard errors in parenthesis. Significance: * 10 percent, ** 5 percent. The states included in the regressions are Andhra Pradhesh, Bihar, Chattisgarh, Gujarat, Haryana, Jharkand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, and West Bengal, and the data cover the 1997-2007 period.

Among India's states, the disciplining effect of FRLs appears to be stronger if the fiscal rules include a specific debt target or expenditure rules. The interaction of the post-FRL indicator and the dummies for debt target or expenditure targets are negative and statistically significant, suggesting that fiscal consolidation (including in the current deficit, excluding all central transfers) was larger after the enactment of the FRL in states in which laws also included these design features. The frequency of fiscal performance review, on the other hand, is not associated with differential fiscal performance after the FRL introduction. While it is hard to pinpoint the direction of causality in these correlations given the endogenous nature of states' fiscal law characteristics, the findings provide some interesting guidance on features that could potentially increase the effectiveness of fiscal rules in the Indian setting.

III. India's Current Fiscal Framework: Strengths and Weaknesses

A. Assessing a Fiscal Rules Framework: The International Experience

In the past decade, many countries have sought to improve fiscal management and fiscal outcomes through the use of fiscal rules. The specifics of the rules, as well as the relative emphasis on procedural versus numerical rules, vary significantly across countries reflecting the country-specific structure of fiscal institutions, the budget, and the economy. However, international experience suggests that certain design, implementation, and monitoring features of fiscal rules can enhance their effectiveness. In this connection, it is useful to briefly highlight these features as outlined in Kopits and Symansky (1998) and IMF (2005)

which will be the basis for the assessment of strength and weaknesses of India's fiscal rules framework presented in the following section. The alluded features are:

- *Clarity of definition.* A fiscal rule should be clear as to the indicator to be constrained, the institutional coverage and the specific escape clauses. Ambiguities in the definition, narrow coverage (including not covering quasi fiscal activities through institutions beyond the general government such as public nonfinancial and financial enterprises) and poorly defined escape clauses can lead to ineffective enforcement, provide room for creative accounting, and/or provide incentives to shift operations to areas of the budget not covered by the rules or directly off budget.

- *Transparency.* Adequate information on government operations including on accounting, forecasting and institutional arrangements supporting the fiscal rules should be disclosed to the public to allow detailed assessments of whether the rules' objectives and targets were met, thus enhancing the accountability and credibility of fiscal rules.[14]

- *Simplicity.* Simple rules can be more easily communicated and may therefore enhance their appeal to the legislature and to the public, helping garner critical political support. Moreover, simple rules require less capacity for successful implementation and simplify enforcement.

- *Flexibility.* Rules should allow the accommodation of exogenous shocks beyond the control of the authorities to avoid undermining their credibility. An example refers to cyclical fluctuations. Cyclical fluctuations have been addressed either by defining rules over the business cycle, by requiring a structural or cyclically adjusted balance, or by incorporating expenditure rules that allow automatic stabilizers to operate. Other examples are extreme situations such as wars and natural disasters, which are typically covered in escape clauses.

- *Adequacy with respect to the goals sought and internal consistency.* The design of fiscal rules should be guided by clearly defined goals to be achieved given inevitable tradeoffs among some desirable design features.[15] Fiscal rules should also be

[14] The key transparency principles include clarity of roles and responsibilities, an open budget process, public availability of information, and assurances of integrity. They are outlined in detail in the Code of Good practices in Fiscal Transparency and Manual on Fiscal Transparency (2007).

[15] For example, a trade-off will exist between flexibility and simplicity of a fiscal rule. The more flexible the rule is designed to be, the more complex it is likely to be as illustrated by rules that correct for the impact of business cycles by targeting cyclically adjusted balances. There is also a trade off between flexibility and credibility. In the extreme, if the rules are as flexible as discretion they are unlikely to generate credibility improvements.

consistent both internally and with other macroeconomic policies. For example, debt targets and expenditure targets need to be set taking into account that they are linked through the government budget constraint.

- *Enforceability.* While informal agreements and reputational cost mechanisms could in theory provide sufficient incentives for complying with fiscal rules, experience with fiscal rules in the European Union, the United States and Latin America suggest they are not enough (Anderson (2006), Webb (2004)). Fiscal rules appear to be more effective when at a minimum they are enshrined in laws that establish a clear legal basis and are accompanied by sanctions for noncompliance that create adequate incentives for compliance by key players in the fiscal system and with critical procedural rules.

- *Independent monitoring.* Recent research (e.g. Debrun et al. 2008) has highlighted the potential role of independent fiscal institutions, called fiscal councils,[16] in reducing politically driven assessments and forecasting biases by increasing the political cost of inappropriate fiscal policy. The aspects of fiscal policy delegated to fiscal councils could include: (i) objective analysis of current fiscal developments, long term sustainability, and budgetary initiatives costs; (ii) independent forecasts of budgetary and relevant macroeconomic variables; and (iii) normative assessments of the fiscal stance for a given year and its consistency with the goals defined by the government within a medium term fiscal framework.

- *Adequate supporting policy measures.* Adherence to fiscal rules is unlikely to be long lasting if it is not backed by requisite policy measures including structural reforms. For example, in countries with growing pension liabilities, fiscal rules that are not supplemented by adequate pension reform are unlikely to be credible or sustainable, since their adherence may require infeasible revenue increases or reductions in other spending areas.

- *Effective Public Financial Management (PFM) support***.** PFM weaknesses undermine the ability to monitor and control budget execution and thus to detect noncompliance and take appropriate corrective actions. Effective PFM is therefore a necessary condition for proper implementation of numerical fiscal rules.

- *Medium-term fiscal frameworks.* These frameworks can enhance the credibility of fiscal rules by providing incentives for an open public discussion of the policies

[16] Kumar et al. (2007) suggest that conditions to bolster the effectiveness of fiscal councils include: (i) a well defined mandate (ii) fiscal rules since they provide a clear benchmark against which policies can be assessed (iii) integration of the fiscal council work into the budget process and (iv) a legal basis for the fiscal council.

underlying fiscal targets and by helping future governments commit to sound fiscal policy.

B. Central Government: The FRBMA

India's current FRBMA is in line with well designed FRLs around the world in highlighting the importance of sound procedural rules. The strength of the FRBMA lies predominantly in the adoption of important procedural rules including: (i) a medium-term fiscal framework, and (ii) enhanced transparency requirements that supplement the existing constitutional procedures governing budget processes[17]. These rules have similarities with the frameworks of advanced countries, such as New Zealand, the EU and Canada, and have contributed to improving fiscal management in India.

However, on several dimensions, the FRBMA could be strengthened. The main weaknesses in India's current FRBMA are:

- *Absence of well defined accounting definitions for target fiscal indicators.* Accounting and definitional procedures underpinning the FRBMA are delegated to supporting rules that require the government to inform parliament of "significant" changes in accounting standards. Nevertheless, these rules do not contain exact definitions of the concepts underpinning the prescribed fiscal indicators. As a result, and in order to meet targets, these ambiguities have been exploited by meeting current expenditure through the issue of special bonds (e.g., subsidy-related bonds).[18] These creative accounting measures undermine the credibility of government's commitment to fiscal discipline.

- *Insufficient transparency in budget preparation.* The FRBMA numerical targets were not supported by a comprehensive plan of medium-term policy measures for expenditures. At the time of the FRBMA implementation, measures on the revenue side were discussed in detail, and actual revenue performance was very close to the FRBMA roadmap. However, measures underpinning expenditure projections, where all the slippages occurred (Figure 3), were kept at a very general level. Furthermore, the assumptions underpinning the budget do not always include annual forecasts for

[17] As described in Section II.A.1, the FRBMA obliges the executive to submit to parliament a medium-term fiscal policy statement assessing deficit and debt sustainability, a fiscal policy strategy statement articulating the key fiscal measures for the next year, and a macroeconomic framework statement. Quarterly reports on execution as well as annual reports on tax and non tax arrears, government guarantees, and assets need to be submitted to parliament.

[18] The 2008/09 Budget attempted to improve transparency by reporting the amount of special securities issued to oil marketing and fertilizer companies instead of cash subsidies in its revised estimates for 2007/08.

key macroeconomic variables such as GDP growth, inflation, imports, exports and the exchange rate. There is also insufficient discussion of fiscal risks.[19] Such a discussion could have identified the impact of increased international oil prices on subsidies and recognized the risks of delays in subsidy reform. Going forward, India's ambitious plan for infrastructure investment through PPPs will raise contingent liabilities. The potential fiscal risks should be disclosed and incorporated into the medium-term fiscal framework.

- *Focus on deficit type targets.* International experience illustrates that deficit type targets such as the current balance are more likely to reduce incentives for fiscal savings in good times, and to force adjustment in bad times (i.e. procyclicality).[20] In addition, while targeting the current balance has some advantages including promoting intergenerational equity and protecting investment from bearing the brunt of fiscal adjustment, it has important drawbacks. These include biasing spending against human capital investments in health and education, which have important current expenditure components, implicitly assuming that public investment yields adequate returns when this may not necessarily be the case, and allowing weaknesses in budget classification to be exploited to misclassify current expenditures as capital expenditures.[21]

- *Lack of expenditure rules and a debt target*[22]. Despite rapid economic growth and buoyant revenues, India's inability to contain expenditure growth (see Figure 3) led to very modest declines in the general government debt. Since the enactment of the FRBMA, general government debt fell by only 7-8 percent of GDP and, at 80 percent of GDP as of March 2008, is very high by emerging markets standards[23].

[19] Fiscal risks, defined as the possibility of deviations in fiscal variables from what is expected, are generated from different sources such as unexpected fluctuations in traditional macroeconomic variables including real growth, exchange rates, interest rates, commodity prices as well as unexpected contingent liabilities stemming from banking crises, natural disasters, state owned enterprises, subnational government bailouts, legal claims, government guarantees and public-private partnerships (see IMF (2008) for an in-depth discussion).

[20] See Anderson (2006) for a discussion of the European experience, and Buiter and Patel (2006) for a discussion of this feature of India's FRBMA.

[21] See "Public Investment and Fiscal Policy" IMF (2004) for additional discussion.

[22] While as indicated in section II.A.1 there is a ceiling on debt accumulation, there is not a specific target on the stock of debt.

[23] Note that IMF staff's estimates of public sector debt, which use information on external sovereign debt from Ministry of Finance publications, differ from the general government debt series published by the Reserve Bank of India (RBI).

- *Absence of well-defined sanctions for noncompliance.* Enforcement of the FRBMA relies on the loss of reputation that the government may experience from failing to meet the fiscal targets. Thus, there are no explicit penalties that are applied automatically when fiscal targets are missed and/or budget procedures are not followed.[24] International experience shows that in countries with a history of weak fiscal discipline, institutional sanctions (e.g., withholding of transfers, borrowing restrictions, and fines) and/or personal sanctions (e.g., fines, dismissal, and penal prosecution) are likely to be needed. For example, in Brazil, the FRL specifies comprehensive institutional sanctions and is complemented by the Fiscal Crimes Law, which outlines stringent personal sanctions that can escalate up to penal prosecution.

- *Widely defined escape clauses.* Breaches of the ultimate medium-term target, or of the annual targets set under the supporting rules are permitted for reasons of natural disaster, security or other circumstances specified by central government. In addition, corrective measures only kick in if there are very large deviations. These features allow suspending the law under a variety of circumstances (which has been reflected in the multiple postponement of deadlines for meeting targets) and tolerate significant deviations from targets. International experience so far (e.g., in Peru's early FRL) suggests that escape clauses should only apply in truly exceptional circumstances, be clearly defined, and require objective analysis and scrutiny to invoke their application to ensure that credibility of the FRL is not undermined.

- *No independent assessment of compliance with the FRBMA.* There are no independent assessments of compliance with statistical and accounting standards and fiscal rules ex ante (i.e., budget forecasts, assessment of the impact of measures and targets) and ex post (execution, invocation of escape clauses, assessment of compliance with medium-term fiscal strategy). India's track record suggests that an ex-ante independent assessment could be particularly useful. Historically, budget projections have been subject to systematic forecast errors. In particular, revenues tended systematically to be overestimated (2000/01-2005/06) or underestimated (2006/07-2007/08) (See Table 5). Expenditures have consistently being underestimated in recent years, particularly so if subsidy-related bonds are included. Unbiased projections for key macroeconomic variables, revenue and expenditure are important for the credibility of a fiscal rules framework.

[24] The minister of finance is required to propose to parliament corrective measures mid-year in the event revenues fall below 40 percent of the budget target or the fiscal or current deficits are in excess of 45 percent of the budget target, and to report to parliament on the extenuating circumstances after the targets have been missed.

Table 5. India: Implementation of Central Government Budget
(In percent of GDP unless otherwise indicated)

	2003/04	2004/05	2005/06	2006/07	2007/08	Average 1992/92-1996/07	Average 1997/98-2002/03	Average 2003/04-2007/08
Revenue								
Budget	9.9	10.5	10.6	10.5	11.7	10.2	9.9	10.6
Outturn	10.2	10.2	10.1	10.9	12.5	9.8	9.5	10.8
Outturn/Budget	104	98	98	107	109	100	93	103
Expenditure 1/								
Budget	16.0	15.0	14.9	14.2	15.0	15.0	15.4	15.0
Outturn	15.4	14.3	14.7	15.3	15.9	14.9	15.2	15.1
Outturn/Budget	97	97	102	111	108	103	96	103
Fiscal Balance								
Budget	-6.1	-4.6	-4.3	-3.7	-3.3	-4.8	-5.4	-4.4
Outturn 1/	-5.2	-4.1	-4.6	-4.4	-3.4	-5.0	-5.6	-4.3
Outturn/Budget	86	92	109	123	105	111	105	103
Nominal GDP								
Outturn/Budget	100	101	103	103	102	104	97	102

Source: Budget documents and Staff estimates.
1/ Includes off-budget bond issuance.

C. State FRLs and Intergovernmental Fiscal Relations

Subnational FRLs are likely to share the strengths and weaknesses of the FRBMA. While there is variation in subnational FRLs as discussed in section II, most of the FRLs have been inspired by the FRBMA and the recommendations of the TFC. Most states target a current balance and an overall deficit of 3 percent of GSDP by a certain date. An additional weakness at the subnational level is the difficulty of obtaining reliable information on state finances on a timely basis. While the lags have been reduced substantially and the coverage of relevant fiscal information in the states' budgets has expanded considerably in recent years[25], there is scope for further improvement.

The approach for setting numerical targets for subnational governments may need to be revisited given the significant disparity of financial conditions across India's states. As illustrated by Flanagan and Purfield (2006) and Rajaraman (2007), states face widely different initial fiscal conditions and diverse growth prospects. Thus, some states require more fiscal adjustment and/or debt relief than others to achieve a sustainable debt position. In

[25] For example, most of the state governments are now providing additional information under the Medium-term Fiscal Plan and the Fiscal Policy Strategy Statement along with other important disclosures on state finances. In addition, most of the state budget documents are available on the respective state government websites.

this regard, the experience of Latin American countries, with similarly large subnational disparities, vividly illustrates this point[26].

The introduction of fiscal rules by the States needs to be accompanied by complementary reforms to strengthen incentives for subnational fiscal discipline. A large body of literature has examined both theoretically and empirically the reasons for fiscal profligacy by subnational governments in a federal setting, such as the common pool problem, soft budget constraints, unfunded mandates, interregional competition, and short electoral cycles.[27] The intergovernmental fiscal relations system in India is not immune to such weaknesses.[28] Large vertical imbalances stem from the constitutional assignment of expenditure and revenue powers between the center and the states.[29] This, in turn, leads to a high dependence on central transfers, with multiplicity of often poorly coordinated transfer channels that may limit states' incentives to raise own revenue. While the borrowing regime was strengthened by the TFC, some differences of opinion remain among authors regarding the degree of macroeconomic control if offers. Kishore and Prasad (2007) and Hauseman and Purfield (2004) suggest that even though states have to seek central government approval for market borrowing under Article 293 of the Indian Constitution, and there is an explicit aggregate borrowing cap, some forms of borrowing are not constrained by this provision and have been significant in recent years (Table 5)[30]. On the other hand, Rajaraman (2007) argues that the center had macroeconomic control over state level borrowing through all changes, and therefore over the consolidated fiscal imbalance.

[26] See Webb (2004) for a survey of the Latin American experience with subnational fiscal rules .

[27] See for example Ter-Minassian (2005) and Singh and Plekhanov (2005).

[28] See for example Anand et al (2004), Hausmann and Purfield (2004), Purfield and Flanagan (2006).

[29] The constitutional assignment of expenditure responsibilities and revenue authority between the central and state government is intentionally imbalanced to enable regional redistribution by the central government (see Khemani, 2007).

[30] The forms of borrowing includes debt issued to small savings schemes, borrowings under the public accounts (under these accounts States act like bankers by accepting deposits). Borrowing from these "uncontrolled" sources (by the center) provided as much as 40-50 percent of total financing in recent years. Other ways of borrowing mentioned include guaranteeing borrowing from special purpose vehicles related to infrastructure or state enterprises.

Table 6. Control Over Financing of States' Fiscal Deficit

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
					Prov.	RE	BE
				(in percent of total)			
Financing	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Market borrowings (net) (Article 293 permission)	27.9	38.4	31.1	17.0	16.5	54.6	50.0
Loans from center (net) 1/ (Controlled)	-2.0	-27.6	-29.8	-4.0	2.4	3.3	1.2
Securities issued to NSSF (Uncontrolled)	51.2	54.6	80.0	81.9	70.5	8.2	17.3
Other 2/ (Uncontrolled)	23.0	34.6	18.7	5.0	10.5	33.9	31.5

Source: See Kishore and Prasad (2007). RBI Study of State budgets and Handbook of Statistics of the Indian Economy 2007/08.

1/ Based on central government budget documents.

2/ Includes loans from banks and Financial institutions, Provident Fund, Reserve Fund, Deposits & Advances, Suspense and Miscellaneous, Remittances, Compesnation and other bonds, Loans from other institutions, Appropriation to Contingency Fund, Inter-state Settlement and Contingency Fund.

International experience suggests that fiscal rules cannot promote fiscal discipline on their own. Countries have used several other approaches to improve fiscal discipline: (i) *Market discipline:* generating the conditions that allow the proper functioning of markets to adequately promote subnational fiscal discipline through financing and interest rates,[31] (ii) *Cooperative arrangements:* creating an appropriate institutional set-up to make the politicians accountable through moral suasion and peer pressure,[32] (iii) *Intergovernmental fiscal relations reforms*: balancing the revenue and expenditure assignments, reforming the transfer system, and tightening subnational borrowing controls, (iv) *Administrative constraints:* direct central government control on subnational governments using a variety of mechanisms.[33]

[31] According to Lane (1993) these conditions are availability of timely and reliable information on subnational finances, governments' responsiveness to early market signals, no privileged access to financing, no history or expectation of bailouts by central government, an adequate base of own revenues. Only a few countries have a system where fiscal discipline is mostly based on markets (for example, the United States and Canada).

[32] Examples of these types of controls include the National Loan Council in Australia, the High Finance Council in Belgium, a Financial Policy Council in Spain which includes the finance ministers of the center and the regions. Enforcement of these arrangements can be applied administratively, by penalties and sanctions or by independent entities.

[33] These include setting administratively limits on the overall debt of individual subnational jurisdictions (e.g. Lithuania), special treatment or outright prohibition of external borrowing (as in Mexico and India), review and approval of individual borrowing operations (India, Bolivia), centralization of all government borrowing with on-lending to subnational governments (Latvia and Indonesia), cuts to public officials wages in ministries or other responsible when targets are missed (Canada), remove defaulting authorities from office and replace them by an administrator appointed by the central government (Ireland, Argentina), limits on the purchase of goods and services and prohibition to hire new staff or borrow for investment (Italy).

IV. THE WAY FORWARD

The discussion in the previous sections suggests several options that could be considered in the review of India's fiscal rules framework. Given the guiding role of the central government in promoting fiscal prudence, the reform should start by reestablishing fiscal discipline at the center as soon as macroeconomic conditions improve to restore the credibility of its commitment to prudent fiscal policy.

A. Reforming the FRBMA

1. *To reduce opportunities for creative accounting and biased forecasts.*

- Define precisely the accounting framework and definitions for target fiscal indicators**.** Adopting an international standards budget classification (such as GFSM (2001)) and reforming the chart of accounts to be fully consistent with it could be useful in curbing possibilities for creative accounting.

- Empower an independent scorekeeper**.** Consider expanding the role of existing independent agencies that monitor government funds (e.g., Controller Accountant General and Controller Auditor General) before creating a new one for this purpose. The autonomous scorekeeper could be in charge of: (i) providing and assessing compliance with standardized accounting standards for all levels of government; (ii) preparing objective and timely reports that allow to verify compliance with the FRBMA and other budgetary rules and targets. With these functions, the score keeper would have a role similar to that of EUROSTAT in the European Union.

- Expand the coverage of the fiscal accounts and target fiscal indicators. This includes bringing all subsidy-related expenditures above the line and gradually expanding the coverage of the fiscal accounts to include public enterprises that pose fiscal risks and the accounts of special purpose vehicles created for funding government spending such as PPPs, both at the central and subnational levels.

2. *To continue to increase the transparency of fiscal policy.*

- The new FRBMA numerical targets should be supported by a concrete underlying plan of short- and medium-term policy measures for both revenues and expenditures. The plan should be discussed in detail in the policy statements required by the FRBMA.

- The assumptions underpinning the budget should always include annual forecasts over a medium-term horizon for key macroeconomic variables such as GDP growth, inflation, imports, exports and the exchange rate.

- The budget documents should discuss fiscal risks and potential responses to mitigate them. Including a statement of fiscal risks in the budget, as is done in Indonesia, could be a first step in this regard.[34] Additional disclosure along these lines will allow improved market monitoring and pricing of risks.

3. *To focus medium-term fiscal policy on debt sustainability, consider using debt and expenditure growth targets.* This approach would tackle the deficit bias at its core, and allow room for macroeconomic stabilization through automatic stabilizers.[35] This could be achieved by:

- Setting a medium-term debt target and debt reduction path to achieve it. Given the stated central objective of the FRBMA, i.e. ensuring fiscal sustainability, a direct rule on gross public debt should be a logical part of the FRBMA successor. Setting the exact debt level target requires judgment about sustainable debt levels and India's debt tolerance. As India continues its gradual integration with global financial markets, the judgment should also be informed by the debt levels observed in other emerging markets following sound fiscal policies. While theory does not provide a clear rationale for any specific debt target level in general,[36]recent research suggests that emerging markets tend to have less debt tolerance than advanced economies[37]. The debt target level should also be prudently defined to allow some room for discretionary countercyclical fiscal policy if automatic stabilizers were not sufficient.

- Complementing the medium-term debt target with a consistent nominal expenditure growth rule.[38] Given the target debt path and a projected revenue path based on

[34] IMF (2008) provides useful guidance on the disclosure and management of fiscal risks.

[35] The Appendix illustrates how a fiscal rule with a medium-term debt target and nominal expenditure growth rules could be designed for the case of India. It also compares its cyclical properties relative to a standard constant fiscal deficit as a percent of GDP rule under different assumptions for the underlying business cycle.

[36] The optimum level of debt is highly dependent on model assumptions. For a model that features incomplete markets and heterogeneous agents, with precautionary savings motives, see Aiyagari and Mcgrattan (1998). When parameterized to match various features of the US economy, their model estimates the optimal debt level to equal roughly 50-60 of GDP. For additional and more general discussion of this issue see for example Danninger (2002) or Kell (2001).

[37] Chapter III of the September 2003 World Economic Outlook indicates that 55 percent of debt crisis episodes in emerging markets occurred with debt levels below 60 percent of GDP (which is currently the Maastrich level for many advanced countries) while 35 percent of the crisis episodes occurred with debt levels below 40 percent. Characteristics of the emerging markets, such as the more limited and volatile revenue base and the weaker response of the size of primary surpluses to the level of debt, are suggested as explanations for the lower debt tolerance by investors.

[38] In the literature it is argued that a nominal expenditure rule may be problematic if inflation forecasts are poor and that a real expenditure rule could be better in that case. However, this is not a concern in India's case. In addition, several other features make a nominal expenditure rule attractive for India relative to a real

(continued…)

conservative trend GDP growth, a nominal expenditure path and implied nominal expenditure growth ceilings consistent with them can be computed. Expenditure rules have better cyclical properties since they let automatic stabilizers operate in a downturn (through their impact on revenue) and induce savings of windfall gains (through the limits on nominal growth of spending) during an upturn without requiring any specific cyclical adjustment method to do so (for a discussion, see Anderson and Minarik (2006) and Debrun et al. (2008)). The latter feature is attractive for India since the use of a cyclically adjusted fiscal balance target may be difficult to implement and could result in a loss of transparency as discussed in IMF 2005.[39]

Expenditure rules have other advantages: they are conceptually simple and transparent, they make the availability of financial resources predictable for policymakers, they tackle the deficit bias at the main source (in India's case government's inability to control expenditures) and make governments accountable for the fiscal aggregate most directly under their control. In addition, while expenditure control is only one approach to fiscal improvement, it has proved to be associated with lasting fiscal consolidations (Alesina and Perotti, 1997). Expenditures rules are becoming an increasingly popular feature in the design of fiscal policy rules around the world, and recent cross-country evidence suggests that the adoption of expenditure rules has had a significant impact on fiscal performance (though the effect is weakened once the endogenous nature of the fiscal rules design is taken into consideration) (see Guichard et al. 2007, Wierts, 2007).

- Considering specific expenditure rules for addressing some weaknesses of simple expenditure rules while keeping the number of specific rules limited. For example, capital spending or critical recurrent spending such as operations and maintenance are easy targets for cuts during fiscal consolidation. Specific expenditure rules on these categories of spending depending on relevance could be included to address this problem while limiting their number to avoid an increase in complexity. Another approach to address these issues is to exclude the specific spending categories concerned from the definition of the expenditure aggregate. However, the cost is opening the door to creative accounting and incentives to push spending to excluded categories. This suggests that some additional complexity cost of the specific rules approach may be preferable.

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expenditure rule including its clarity for public disemination purposes, simplicity of enforcement, robustness to creative accounting, and better cyclical properties. See for example Franco, Zotteri et al (2008) and Ljungman (2008) for additional discussion .

[39] The definition and measurement of potential GDP growth is fraught with uncertainties, even in more advanced countries. In addition, identifying the turning points of business cycle or distinguishing between structural and cyclical output changes may come with a lag.

4. *To prevent excessive use of escape clauses and frequent deviations from targets.*

- Revise the escape clauses to limit them to specific extreme events eliminating loopholes, to the extent possible .

- Impose both institutional and personal penalties for breaching numerical and procedural rules. If there is a breach of the rules, the government and parliament should have a clearly defined time period to bring matters into conformity.

- Consider instituting automatic and time-bound mechanisms to correct deviations from numerical targets. These could be established on the basis of a pre-set prioritization of cuts if agreement of how to reestablish compliance with the rule cannot be reached after a clearly defined period of time. This provides incentives to reach agreement and avoid protracted negotiations. Brazil, for example, instituted across the board cuts to automatically reestablish conformity with the fiscal rules.

5. *Consider setting up an independent fiscal council to assist with ex-ante and ex-post monitoring of fiscal rules.* Fiscal councils, which provide an independent normative assessments on the particular fiscal stance for a given year or on the consistency with the government previously defined goals, have been found to be useful in a number of countries (see Kumar et al. (2008)). Independent scrutiny could also be helpful in monitoring the use of escape clauses and providing objective analysis of the impact of fiscal policies.

B. Strengthening Subnational Fiscal Responsibility

6. *Given similarities of subnational FRLs with the FRBMA, reforms of FRLs at the subnational level should be consistent with reforms at the center,* in terms of ensuring well defined targets and statistical standards, enhancing fiscal transparency, moving to a debt target cum expenditure rule combination, incorporating an independent assessment of compliance with the rules, and a strengthening of automatic deviation correction mechanisms and sanctions for non compliance. In particular the subnational reforms should seek to:

- Define subnational debt targets that are consistent with national debt reduction objectives and with the repayment capacity of the different states. For example, Brazil defines a national debt to net revenue ratio that all governments have to meet that is consistent with the national debt target defined by the center. This approach not only seeks to ensure the internal consistency of the rules at the center and subnational level but also provide more incentives to strengthen subnational revenue collection, make borrowing a function of repayment capacity, and better capture differences in the states' financial conditions.

- Ensure timely and reliable reporting of subnational fiscal operations.

7. *Combine fiscal rule reforms with other strategies to promote fiscal discipline.* In particular, continue to strengthen financial market control mechanisms as well as cooperative arrangements across government levels and pursue reforms to the intergovernmental fiscal relations system. To strengthen these arrangements:

- Provide the conditions necessary for an effective market-based control mechanisms for fiscal discipline**.** An important step in this regard would be to gradually eliminate the availability of large nonmarket-based and captive sources of financing such as a statutory liquidity requirement for banks to hold state issued paper, compulsory investment by the National Small Savings fund in state paper and borrowing from the state employees' pension fund. Establishing a firm commitment to a no-bailout policy will also strengthen the incentives for discipline faced by local authorities.

- Explore further possibilities for cooperative approaches to promote fiscal discipline. Arrangements enhancing cooperation between the center and regional governments such as the bi-annual conference of State Finance Secretaries could be transformed into a forum where both the center and the states could discuss subnational FRL reforms and facilitate discussions on borrowing ceilings consistent with national objectives.

- Persevere with intergovernmental fiscal reforms in particular to reduce states' dependence on central transfers, simplify the transfer system, and review the design of the transfer system on the basis of needs and fiscal capacity of the different states.

APPENDIX I. EXAMPLE OF A FISCAL RULE WITH A MEDIUM-TERM DEBT TARGET AND EXPENDITURE GROWTH RULES

This appendix discusses how a simple fiscal rule of a medium-term debt target with annual nominal expenditure growth rules could be applied in the case of India. The rule is anchored on the objective of lowering India's general government debt to 65 percent of GDP by 2015/16, assuming implementation begins in 2010/11. The discussion is meant to be purely illustrative and not a recommendation of any particular level for the debt target, and/or a particular speed of fiscal adjustment, which are beyond the scope of this paper. The analysis also abstracts from the questions of what should be the relative contribution from the center and the states in lowering India's public debt, and the relative adjustment that is needed across India's states. The goal is simply to illustrate how a fiscal framework with a debt anchor and expenditure rules could be applied, and to compare its performance in terms of the fiscal flexibility it provides over the business cycle relative to a (comparable in terms of final objective) standard constant general government deficit rule as a percent of GDP.

As discussed in the paper, the proposed framework relies on three ingredients: (i) setting a medium-term debt target and debt reduction path to achieve it; (ii) complementing the medium-term debt target with a consistent nominal expenditure growth rule. Given the target debt above and a revenue path projected based on the projected trend GDP growth, a nominal expenditure path and implied nominal expenditure growth ceilings consistent with them is computed from the government budget constraint; and (iii) deciding on a debt-feedback mechanism, which would allow significant deviations from the desired debt path to trigger a revision in the nominal expenditure growth ceiling so that the ultimate debt target is achieved.

The example below considers a simple deterministic scenario in which the ultimate objective is to bring the general government debt level from 82 percent of GDP as of end 2009/10 (as projected in IMF India Article IV Staff Report 2008) to 65 percent of GDP by 2015/16 as the anchor to determine the required expenditure path. It also assumes a back loaded debt adjustment path (or debt norm) since it takes into account the difficulties in withdrawing quickly the large fiscal stimulus that was imparted in 2008/09. The debt norm was set assuming that actual growth equals trend GDP growth.

By the end of 2009/10, the global economy is expected to have entered a recovery phase. In India as well, after a sharp drop in 2009/10, growth is projected to gradually return to its potential of 8 percent. With annual growth rate averaging roughly 7.7 percent over this time period, the real interest rate at 4 percent, and assuming a constant elasticity of total general government receipts (including both tax, non-tax and grants) of 1.03 with respect to nominal

GDP (computed as the average historical observed elasticity),[40] a nominal annual non-interest expenditure growth rate of 9.8 percent would bring the debt-to-GDP ratio to the 65 percent level by 2015/16. Thus, this nominal non-interest expenditure growth ceiling is the implementation component of the rule and would be the focus during budget policy discussion. In this setting, a constant maximum nominal expenditure growth ceiling consistent with the debt objective is calculated. Adjustments of the expenditure growth ceiling are allowed only when the actual public debt deviates too much – for example 4.5 percentage points of GDP - from the desired path. Anchoring the expenditure rules around the debt target is key for the credibility of this framework. Even if biased revenue forecasts, to which expenditure rules are vulnerable, can be avoided, unforeseen emergency spending can undermine the link between the ultimate debt target and the spending rules. However, by allowing a feedback mechanism from the deviation from the desired debt path to the expenditure rules, the risk of not achieving the debt objective can be alleviated.[41]

We compare the public debt dynamics and cyclical properties of fiscal policy of the rule presented above relative to a simple constant general government deficit rule in Appendix Figures 1 and 2 under varying macroeconomic assumptions. Given the trend GDP growth assumed, a general government deficit of 4.9 percent of GDP is consistent with achieving the debt target. We consider three scenarios: (i) a relatively mild business cycle around the trend GDP growth of 7.7 percent; (ii) an amplified business cycle around the trend, (iii) a slow recovery towards potential GDP growth, during which the cumulative output gap over the time period remains negative. In the third case, we simply take the medium-term real growth projections as in the India Article IV staff report 2008. We assume that the nominal expenditure growth ceiling is binding and met every year, and that a revision of the expenditure ceiling is triggered if the actual debt-to-GDP ratio exceeds the debt norm by more than 4.5 percentage points of GDP. In case the revision is triggered, the expenditure growth rule is set such that the medium-term debt target is achieved over the remainder of the period.

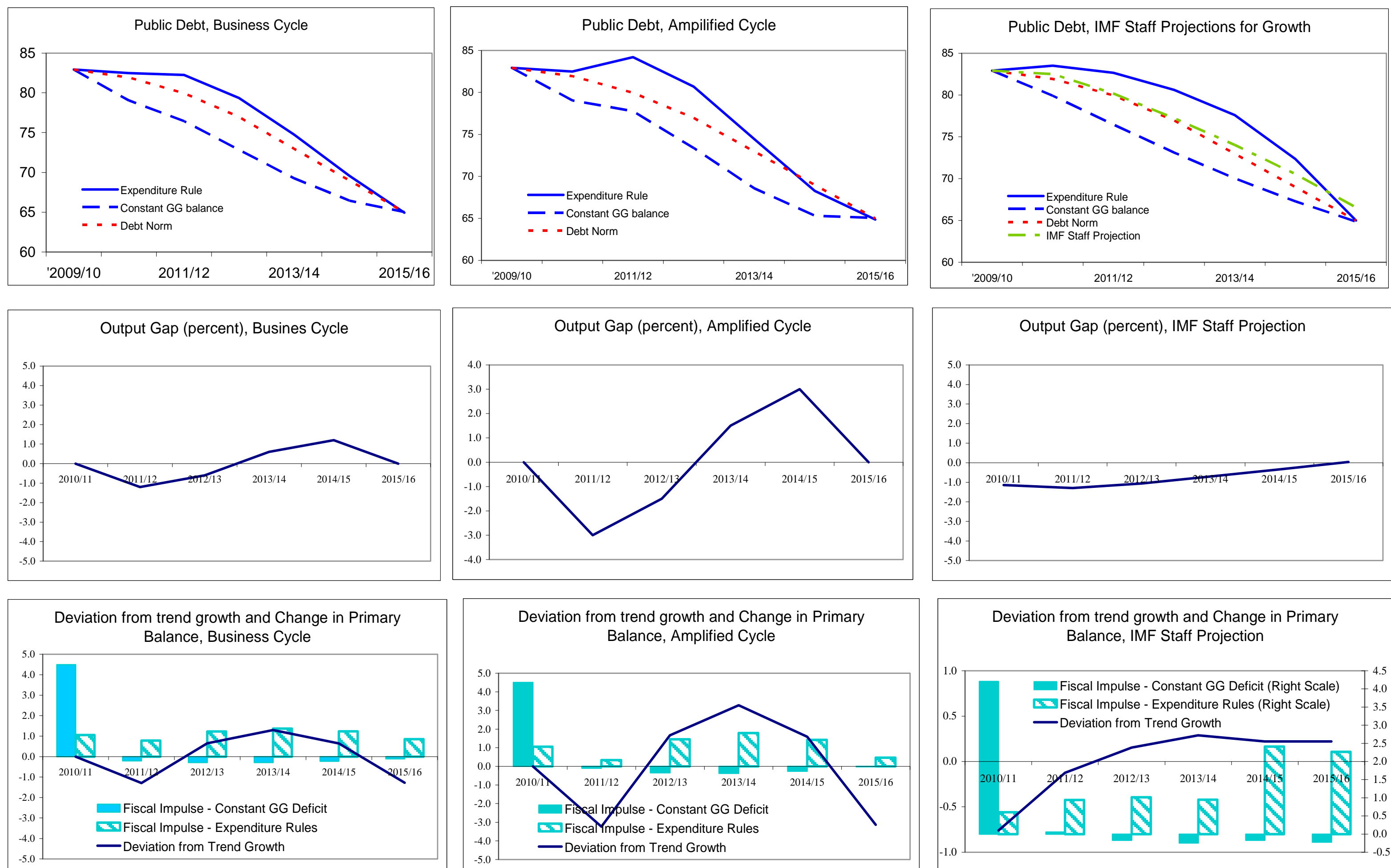
To assess the comparative performance of the medium-term debt target with annual nominal expenditure growth rules relative to a constant general government deficit rule, we follow the approach in Debrun et al. (2008) and consider three indicators of the realization of the debt target: (i) the room mean squared deviation from the debt norm, (ii) the mean deviation from

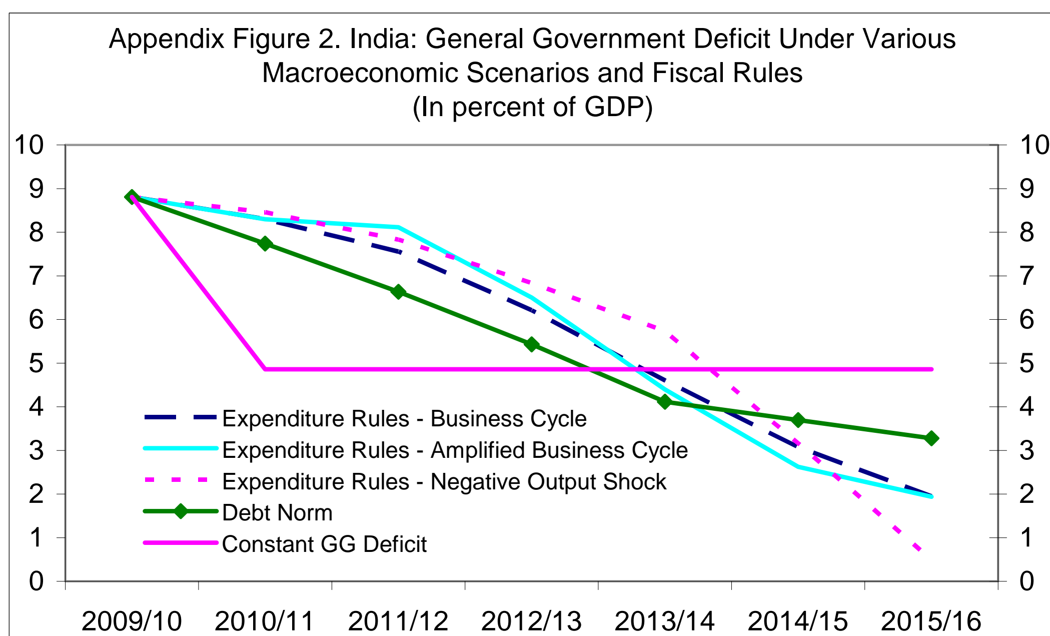
[40] The constant elasticity is assumed for simplicity. Allowing for a procyclical buoyancy of revenues would further highlight the greater flexibility in response to shocks of the expenditure rule. Also note that the revenue projections do not take into account the upcoming introduction of the GST, which is expected to have a significant positive impact on the efficiency of indirect tax collection in India.

[41] As Debrun et al (2008) point out, an important issue is whether revisions to the debt norm should be allowed. The authors conclude that revisions could be considered under well-motivated conditions, including national emergencies or significant errors in the underlying assumptions about long-run growth, interest rates, revenue buoyancy etc. which make the debt norm and medium-term debt target untenable.

the norm, and (iii) the deviation from the medium-term debt target in the final year (2015/16). To assess how procyclical the two fiscal rules are, the change in the primary balance (the fiscal impulse) is plotted against the deviations of real growth with respect to trend. A pro-cyclical impulse would imply an improvement in the primary balance (i.e. a positive fiscal impulse indicating that the primary deficit narrows) during bad times (when growth is below trend), and a deterioration of the primary balance (i.e. a negative fiscal impulse) in good times (when growth is above trend)

Appendix Figure 1. India: Simulated Debt Path Under Alternative Fiscal Rules and Business Cycle Scenarios, 2009/10-2015/16
(Percent of GDP, unless otherwise indicated)





Appendix Table 1.Comparative Performance of Alternative Fiscal Rules for India, 2010/11—2015/16

	Constant GG deficit	Debt Target + Nominal Growth of Spending Rules
	Business Cycle	
Root mean square deviation with respect to the norm path 1/	3.11	1.58
Mean error with respect to the norm path 1/	-2.80	1.26
Difference from 65 percent in 2015/16	0.02	-0.06
	Amplified Cycle	
Root mean square deviation with respect to the norm path 1/	3.13	2.42
Mean error with respect to the norm path 1/	-2.78	1.53
Difference from 65 percent in 2015/16	0.04	-0.15
	Staff Growth Projections / Negative Output Shock	
Root mean square deviation with respect to the norm path 1/	2.67	3.05
Mean error with respect to the norm path 1/	-2.36	2.65
Difference from 65 percent in 2015/16	-0.15	0.00

1/ In percent of GDP.

The comparison highlights two key differences between a constant general government deficit and a fiscal rule that is based on a debt target and implemented through annual expenditure rules.

- The expenditure rules exhibit less procyclical bent than a constant deficit rule. In all scenarios, the very sharp fiscal consolidation imposed by the constant deficit rule in 2010/11, implies a large negative fiscal impulse when growth is either below trend (case 3) or right at trend. On the other hand, the constant deficit rule implies a loosening of fiscal policy precisely when above trend growth would force extra

savings under the expenditure rules (2012/13-2014/15). The superior cyclical properties of the expenditure rules are most visible in the case of the negative output shock/IMF staff growth projections (case 3). In all years, the constant deficit rule implies a procyclical fiscal stance. While the expenditure rules do not exclude all procyclical responses (for example in the first year, the primary balance improves despite below-trend growth), as growth accelerates, so does the extent of primary balance improvement. Under this scenario, the debt-feedback mechanism is triggered in 2014/15 as the actual debt level exceeds the debt norm by more than 4½ percentage points of GDP. Resetting the expenditure rules so that the medium-term objective can be met leads to larger consolidation in the last two years, precisely when real growth exceeds trend.

- The two rules entail a relatively similar precision in targeting of the 2015/16 debt objective, and the annual debt norm. In fact, the expenditures rule is, if anything, closer to the debt norm both in terms of the root mean square deviation as well as the mean error from the desired debt path. However, this is sensitive to the choice of the debt norm.

Appendix Table 2. Fiscal Rules in India's States

State	Year of Enactment	Gross Fiscal Deficit	Revenue Deficit	Guarantees	Liabilites
Karnataka	Sep-02	Not more than 3 percent of GSDP by March 2006	Nil by March 2006	Not to give guarantee for any amount exceeding the limit stipulated under the Karnataka Ceiling to Government Guarantees Act, 1999	Not to exceed 25 percent of GSDP by March 2015
Kerala	Aug-03	• 3.5 per cent of GSDP by 2005-06 • 2 per cent of GSDP by 2006-07	2 percent of GSDP by 2005-06 Nil by 2006-07	-	-
Tamil Nadu	May-03	Not more than 3 percent of GSDP by March 2008 and adhere to it thereafter	Ratio of RD to Revenue Receipt below 5 percent by March 2008; Eliminate RD by 2008-09 and adhere to it thereafter.	Cap the total outstanding guarantees to 100 percent of the total revenue receipts in the preceding year or at 10 percent of GSDP, whichever is lower.	-
Punjab	Oct-03	Contain annual growth rate of GFD to 2 percent in nominal terms till GFD is below 3 per cent of GSDP	Reduce Revenue Deficit to Revenue Receipts by at least 5 percentage points from the previous year, until revenue balance is achieved.	Cap outstanding guarantees on long-term debt to 80 percent of revenue receipts of the previous year and guarantees on short-term debt to be given only for working capital or food credit and fully backed by stocks.	Ratio of Debt-GSDP to be 40 percent by 2006-07
Uttar Pradesh	Feb-04	Not more than 3 percent of GSDP by March 2009	Nil by March 2009	Not to give guarantee for any amount exceeding the limit stipulated under any rule or law of the State Government for the purpose.	Not to exceed 25 percent of GSDP by March 2018
Orissa	Jun-05	Not more than 3 percent of GSDP by 2009; Reducing by 1.5 percent of GSDP every year from 2004-05	Nil by 2008-09	-	• Debt stock to be limited to 300 percent of revenue receipts by 2007-08 • Interest payment as ratio to revenue receipts is to be limited to 18-25 percent.
Maharashtra	Apr-05	Shall specify, by rules, targets for reduction of GFD. GFD to be interpreted as expenditure on interest to revenue receipts.	To eliminate RD by 2009 and maintain revenue surplus balance thereafter.	-	-
Rajashtan	May-05	3 percent of GSDP following a path of minimum average annual reduction of 0.4 per cent of GSDP.	Nil by March 2009 with an average annual reduction of 3 percent in RD-RR ratio.	-	Outstanding Debt excluding public account and risk weighted outstanding guarantees not to exceed twice the receipts in the Consolidated Fund of the State.
Assam	May-05	3 percent of GSDP by March 2010.	Nil by March 2010.	Restrict the guarantee to 50 percent of State's own tax and non-tax revenue of the previous year or 5 per cent of GSDP of the previous year at current prices, whichever is lower.	Restrict total Debt stock including the Government guarantees to 45 percent of GSDP of the previous year at current prices by March 2010.
Gujarat	Mar-05	Not more than 3 percent of GSDP by March 2009.	Nil by March 2008.	Cap outstanding guarantees within the limit provided in the Gujarat State Guarantees Act,1963.	Ratio of Debt-GSDP to be 30 percent by March 2008.
Himachal Pradesh	Apr-05	-	Reduce RD-RR ratio atleast by 2 percentage points each year until revenue surplus is achieved.	Progressively reduce outstanding guarantees on long-term debt, until it can cap outstanding risk weighted guarantees at 80 percent of total revenue receipts in the preceding year for which actuals are available as per finance accounts.	-
Haryana	Jul-05	Not more than 3 percent of GSDP by March 2010.	Nil by 2008-09 and generate revenue surplus thereafter.	-	Ensuring outstanding total debt including contingent liabilities to 28 percent of GSDP by March 2010.
Chhatisgarh	Sep-05	3 per cent of GSDP by March 2009	Nil by March 2009	-	-
Madhya Pradesh	Aug-05	Bring down to 3 percent of GSDP by March 2009	Nil by March 2009 and generate revenue surplus thereafter	Not to exceed 80 percent of the total revenue receipts in the year preceding the current year	Not to exceed 40 percent of GSDP by 2015
Tripura	Jun-05	3 percent of GSDP by March 2010	Strive to remain revenue surplus by making a balance in revenue receipts and expenditure and build up further surplus.	Limit the amount of annual incremental risk weighted guarantees to 1.0 percent of GSDP	Not to exceed 40 percent of GSDP by 2010
Andhra Pradesh	Oct-05	Bring down to 3 percent of GSDP by March 2010	Nil by March 2009 and generate revenue surplus thereafter	Limit the amount of annual incremental risk weighted guarantees to 90 percent of total revenue receipts	Not to exceed 35 percent of GSDP by March 2010
Manipur	Aug-05	3 percent of GSDP	Strive to have revenue balance and remain revenue surplus	Limit the amount of outstanding guarantees as per the provisions of the Manipur ceiling on State Government Guarantees Act, 2004	-

Appendix Table 2. Fiscal Rules in India's States

State	Year of Enactment	Gross Fiscal Deficit	Revenue Deficit	Guarantees	Liabilites
Nagaland	Aug-05	3 percent of GSDP by 2009	Strive to have revenue balance and remain revenue surplus	Limit the amount of annual incremental risk weighted guarantees to 1 percent of total revenue receipts or 1 percent of GSDP in the year preceding the current year, whichever is lower.	Total debt stock not exceed more than 40 percent of the GSDP by March 2010
Uttaranchal	Oct-05	• 3 percent of GSDP by March 2009 • Reduce the ratio in each FY	• Nil by March 2009 • Reduce the ration in each FY	Not to give any guarantee for any amount exceeding the limit stipulated under any rule or law of the State Government	Total outstanding liabilities not more than 25 percent of the GSDP by March 2015
Arunachal Pradesh	Mar-06	3 percent of GSDP by March 2010	• Nil by March 2009 • Reduce the ration in each FY	Will be conservative in giving guarantee	-
Meghalaya	Mar-06	3 percent of GSDP by 2008/09	Nil by 2008/09	Restrict issuing of guarantees except on selective basis	Total outstanding liabilities on the consolidated fund not more than 28 percent of the GSDP
Bihar	2006	3 percent of GSDP by 2008/09	Nil by 2008/09	-	-
Goa	May-06	• 3 percent of GSDP by March 2009 • Reduce GFD/GSDP by 0.5 percent in each financial year beginning April 2006	• Nil by March 2009 • Reduce RD/RR by 1.5 percent in each FY from April 2006	Cap the total outstanding guarantees within the specified limit under the Goa State Guarantees Act, 1993	• Total outstanding liabilities not more than 30 percent of the GSDP by March 2009 • Ratio of IP/RR not to exceed 20 percent by March 2009
Jammu and Kashmir	Aug-06	• 3 percent of GSDP by March 2010. • Reduce GFD/GSDP by 0.5 percent in each financial year beginning April 2006.	• Maintain revenue surplus. • Initiate steps to strengthen revenue surplus.	• Limit the amount of annual incremental risk weighted guarantees to 75 percent of the total revenue receipts (TRR) in the year preceding the current year or at 7.5 percent of GSDP in the year preceding the current year, whichever is lower.	• The total outstanding liabilities shall not exceed 55 percent of estimated GSDP in 2010. • Annual reduction in the outstanding liabilities / GSDP ratio by 500 basis points every year.
Mizoram	Oct-06	• 3 percent of GSDP by March 2009. • Reduce GFD/GSDP by such percentage points in each financial year so as to achieve 3 percent of GSDP in March 2009.	• Nil by March 31, 2009.	• Risk weighted outstanding guarantees in a year shall not exceed twice that of the estimated receipts in the consolidated fund of the State at the close of the financial year.	• Total outstanding debt, excluding public account, in a year shall not exceed twice that of the estimated receipts in the consolidated fund of the State at the close of the financial year.
Jharkand	May-07	• 3 percent of GSDP by March 2009. • Reduce GFD/GSDP by such percentage points in each financial year so as to achieve 3 percent of GSDP in March 2009.	• Nil by March 31, 2009.	-	• The total debt stock should be limited to 300 per cent of the TRR of the State by 2007-08. • In order to bring the debt stock to a sustainable level, interest payments (IP) to revenue receipts (RR) ratio is to be limited to 18 to 25 percent.

Source: RBI Study of State Finances, various issues.

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