REPORT OF THE SUB-GROUP ON
PUBLIC SECTOR'S DRAFT ON PRIVATE SAVINGS
FOR THE TWELFTH FIVE-YEAR PLAN

Planning Commission

(Perspective Planning Division)

August, 2011

INTRODUCTION

In the context of the formulation of the Twelfth Five Year Plan (2012-17) the Planning Commission, Government of India has set up a Working Group on Savings under the Chairmanship of Dr. Subir Gokarn, Deputy Governor, RBI. In its first meeting held on 8th April, 2011, the Working Group, agreed on constitution of six Sub-Groups each dealing with matters relating to a specific area of Aggregate Savings such as (1) House hold sector (2) Corporate Sector (3) Public sector (4) Foreign Sector and (5) Flow of Private investment for Small and Medium Enterprises & Agriculture Sector (6) Flow of funds to infrastructure.

Accordingly the Planning Commission constituted, among others, the Sub-Group on 'Public Sector's Draft on Private Savings' under the chairmanship of Dr. Ashok Sahu, Principal Adviser, Planning Commission, Government of India vide its Office Order dated 22nd May, 2011. The details of the constitution of the Sub-Group and other Terms of its working is given in **Appendix-II.** According to the Order, the Sub-Group will draft its own Terms of Reference (TOR) based on the TOR of the Working Group on Savings and discussions held in the first meeting. The Sub-Group in its first meeting decided that the TOR for the Sub-Group for the 11th Plan would remain the TOR for the 12th Plan. Thus, TOR for the Sub-Group for the 12th Plan is given as under:

- To review the developments and likely behavioral pattern during the 11th Plan period;
- To estimate the public sector draft on private savings keeping in view the fiscal sustainability and commitments under the Fiscal Responsibility Act;
- To explain the procedures followed for estimation.

The Sub- Group met three times at the Planning Commission. In the first meeting held on 3.6.2011, the members agreed upon a broad structure of the Sub-Group report. Planning Commission made a presentation on government finance projection for the 12th plan in the second meeting held on 1.7.2011. Based on the presentation, the assumptions adopted for projecting various budget numbers were discussed and agreed upon. The likely future behaviour of the interest rate was discussed on the basis of information obtained from RBI. It was agreed to finalise the report on the basis of the discussions in these two meetings. The third meeting was conducted on 19.7.2011 and the members commented on the first draft report of the Sub-Group. The report has been finalised keeping in view all the comments and suggestions of the members.

REPORT OF THE SUB-GROUP ON PUBLIC SECTOR'S DRAFT ON PRIVATE SAVINGS FOR THE TWELFTH FIVE-YEAR PLAN

Executive Summary

1. Public sectors' draft on private savings, has three components; namely (a) Gross Fiscal deficit (GFD) of Central government & government of States/UTs taken together, (b) Extra Budgetary Resources (EBR) of Central Public Sector Undertakings (CPSUs) and State Level Public Enterprises (SLPEs) and (c) Disinvestments. Of these, the Gross fiscal Deficit (GFD) is the major component.

2. The public sector's savings comprise: (i) government savings and (ii) savings generated by the public sector undertakings in the form of internal resources (IR).

3. The government saving is linked to the combined revenue deficit of the Central government and all State governments taken together, although the correspondence between the two is not exact due to classification and measurement problems. Nevertheless, savings on government accounts are always reflected in and driven by the revenue account balance of the government. A lower level of combined Revenue Deficit implies lower level of dis-savings or higher government savings.

4. Projection of Government Finances forms the basis for projection of Public Sector's draft on Private Savings and Government Savings. Projection of Government finance for the Twelfth Five Year Plan (2012-17) has been made for both Central Government and State Governments separately and then combined.

5. Two alternative approaches for making projection of the fiscal parameters has been followed: (a) Component wise projections of the government finances and (b) Model based forecast of major fiscal parameters.

6. Our projection has been made under five macroeconomic scenarios corresponding to five combinations of real GDP growth and annual rate of inflation as provided by the 'Working Group on Savings'.

7. The Fiscal Reform and Budget Management (FRBM) legislation mandates significant reduction in the net borrowing (gross fiscal deficit) of the Central government as well as of the State governments. While the Central government is required to bring down the GFD to 3% of GDP by 2014-15, the State governments are required to bring down their GFD to 3% of their respective GSDP. During the

same period, the revenue deficit is required to be completely eliminated. Sub Group's projection of Draft on Private Savings and Government Savings has been made keeping in view the FRBM constraint.

8. Under Component wise Projection of Government Finance, various budget numbers under Expenditure and Receipts are worked out separately for the Central government and all State governments and then combined. The budget numbers are projected and linked through a set of identities and algebraic formulations. While making such projection, inter governmental fiscal transfers are inbuilt in to the system.

9. The model based forecast of major fiscal parameters has been made under a macro-economic framework. The model captures the inter-relationship between real, fiscal and monetary sector of the Indian economy and follows the disaggregated approach for determining government revenues and government expenditure.

10. The sub-group noted that modelling exercise provides some degree of robustness and macro-economic consistency to the projected macro-economic and fiscal parameters. However, in view of the fact that FRBM constraint needs to be inbuilt into the projection, it was considered by the group to adopt the component wise projection as the final numbers.

11. In the component wise projection, Gross Tax Revenue of the Central government is projected with a **tax buoyancy assumption of 1.25 and** tax buoyancy of 1.15 is assumed for State finances.

12. The alternative combinations of growth rate and rate of inflation under which projection has been made, assumes annual inflation rate to vary in the range of 5% to 6.5%. Accordingly the rate of interest for Central government borrowings is assumed in the range of 6.5% to 8% under different scenarios. The corresponding rate for the State Government ranges from 8% to 9%.

13. In our projection the fiscal deficit of Centre is estimated to come down from 4.6% of GDP in the year 2011-12 to about 2% of GDP in the terminal year (2016-17) of Twelfth Plan. The RD of the Centre in the terminal year is projected to be 0.6% of GDP. For State Finances the GFD number is projected to be around 2.7% of GDP and the Revenue balance is projected to be a surplus of around 0.6 to 0.8 per cent of GDP.

14. Not much variation is noticed in the GFD number and RD number while shifting from one GDP growth-inflation scenario to the other since these numbers are restricted with FRBM ceiling.

15. The projected combined budgetary position seems to be quite comfortable in the sense that Government would be in position to mobilise larger resources for the Twelfth Plan while containing the fiscal balance and revenue balance position within the FRBM ceiling. There would be about 2 to 2.2 percentage point gain in the resource mobilization in the terminal year compared to the base year (2011-12).

16. Public Sector's draft on Private Savings for the Twelfth Plan is estimated to be around 7.15% of GDP on average. This includes projected combined GFD of about 5.6%, an estimated disinvestment figure of 0.35% of GDP and EBR of PSUs estimated at 1.2% of GDP.

17. Government savings is projected to be in the range of 1.1% to 1.4% of the GDP in the terminal year of the plan under various scenarios. The average Government savings for the plan period could be marginally negative estimated to be vary from about (-) 0.1% of GDP to (-) 0.3% of GDP.

****

REPORT OF THE SUB-GROUP ON
PUBLIC SECTOR'S DRAFT ON PRIVATE SAVINGS
FOR THE TWELFTH FIVE-YEAR PLAN

Public sector, comprising the Central government, State governments, Central Public Sector Undertakings (CPSUs) and State Level Public Enterprises (SLPEs), claims a substantial proportion of private savings to finance not only public investment, but a sizable part of government's consumption expenditure. This public sector's claim on private savings, also known as public sectors' draft on private savings, has three components; namely (a) Gross Fiscal Deficit (GFD) of Central government & government of States/UTs taken together, (b) Extra Budgetary Resources (EBR) of CPSUs and SLPEs and (c) Disinvestments. Of these, the Gross fiscal Deficit (GFD) is the major component. As a percentage of GDP at current market prices, the combined fiscal deficit of Centre and State is estimated at 7.6 percent in the fiscal year 2010-11. In this year, the EBR mobilized by CPSUs is estimated at about 1 percent of GDP.

Besides making projection for public sector's draft on private savings, the sub-Group is also required to make projection for public sector savings. The public sector's savings comprise: (i) government savings and (ii) savings generated by the public sector undertakings in the form of internal resources (IR). It is the government saving which can properly be linked to the combined revenue deficit of the Central government and all State governments taken together, although the correspondence between the two is not exact due to classification and measurement problems. Nevertheless, savings on government accounts is always reflected in and driven by the revenue account balance of the government. A lower level of combined Revenue Deficit implies lower level of dis-savings or higher government savings.

Table-1 below presents the Government Finance position during the Eleventh Five Year Plan (EFP). The annual average fiscal deficit during the first four years of the Eleventh plan is estimated to be about 7.3% of the GDP comprising 5% of Central Government Finances and 2.4% of State Government Finances. The estimates of corresponding revenue deficit of Centre and States are 3.5% and -0.04% respectively. While all States taken together have improved substantially in managing their revenue balance position, revenue deficit realised under Central government continues to be an area of concern.

Table-I Government Finances during Eleventh Five Year Plan - (2007-12)							
as percent of GDP							
Centre	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Average (2008-11)
Gross Fiscal Deficit	3.3%	2.5%	6.0%	6.4%	5.1%	4.6%	5.0%
Revenue deficit	1.9%	1.1%	4.5%	5.2%	3.4%	3.4%	3.5%
States							
Gross Fiscal Deficit	1.8%	1.5%	2.4%	3.3%	2.5%	2.0%	2.4%
Revenue deficit	-0.4%	-1.0%	-0.2%	0.7%	0.3%	-0.3%	-0.04%
Combined							
Gross Fiscal Deficit	5.0%	3.9%	8.3%	9.6%	7.6%	6.5%	7.3%
Revenue deficit	1.5%	0.1%	4.3%	5.9%	3.7%	3.1%	3.5%

It is important from the point of view of fiscal prudence as well as for ensuring macro economic consistency that public sector generates surplus in its revenue account. Similarly, macro economic consistency also requires the public sector to share a significant proportion of total capital formation in the country. In the context of formulation of Twelfth Five Year Plan (TWFP), projection on the fiscal position of the Central and State governments highlighting both GFD and RD, assumes importance because,

- Containing the public sector's draft on private savings within a sustainable limit is one of the most critical policy objectives.
- It is necessary to make a realistic assessment of plan resources available to finance the plan to support the accelerated growth target set for the Twelfth Plan on a sustainable basis.
- Projection of government finances helps estimation of government savings, which is an integral part of aggregate domestic savings.

This Report presents the projection of Government finance for the Twelfth Five Year Plan (2012-17) for both Central Government and State Governments. The next section of this Report highlights the alternative growth rate and inflation rate scenarios and Fiscal Reform and Budget Management (FRBM) constraint under which the Government finance has been projected for the Twelfth plan. The report includes two alternative approaches for making projection of the fiscal parameters. The Third section explains the first approach i.e. **component wise projections of the government finances**. This part discusses the methodology adopted and assumptions made to project various fiscal numbers; and also highlight the implication of Thirteenth Finance Commission (THFC)

award for both levels of government. The summary findings of the projection are also included in this section. The Fourth section explains in brief the second approach followed to make projection i.e. **model based forecast of major fiscal parameters**. The Fifth section briefly indicates the borrowing requirement of the public sector undertakings as well as the Sub-Group assessment of total public sector draft on private savings. The implication of the Government finance projection for government savings is worked out. The Sub-Group's assessment of Public Sector's savings is included here.

II. Alternative Growth Target Scenarios and FRBM Constraint

It may be noted that the sustainability of Government finances critically depends on the future growth trajectory of the economy as well as the annual rate of inflation, since most of the budget numbers are driven by these two numbers. Our projection has been made under five macroeconomic scenarios corresponding to five combinations of real GDP growth and annual rate of inflation as provided by the 'Working Group on Savings'. The alternative scenarios are listed below:

Table-2

Scenario	Real GDP Growth (%)	WPI Inflation (%)
I	8.5	5
II	9	5
III	9	6
IV	9.5	5
V	9.5	6.5

Enactment of FRBM legislation both at Centre and State level puts limit on the net borrowings of both the Centre and the States as well as on revenue expenditure of both level of governments. The FRBM legislation mandates significant reduction in the net borrowing (gross fiscal deficit) of the Central government as well as of the State governments. While the Central government is required to bring down the GFD to 3% of GDP by 2014-15[1], the State governments are required to bring down their GFD to 3% of their respective GSDP. During the same period, the revenue deficit is required to be completely eliminated. The FRBM constraints at the sub national level are reinforced by both the Twelfth and Thirteenth Finance Commission awards.

---

[1] The original timeframe for GFD reduction to 3% of GDP was set for 2008-09, and this date was compromised due the crisis induced fiscal stimulus provided during 2008-09 to 2009-10.

The FRBM constraint seems to have made the projection of government draft on private savings much simpler since the upper bound of government's net borrowing as well as revenue balance position is given in terms of nominal GDP. Therefore it is implied that under different real GDP growth rate and inflation scenarios it would be possible to work out the government resource position for the TWFP once some realistic assessment of revenue receipt and non-plan expenditure is made.

However, things are not as simple as it transpires to be under fiscal consolidation process. This is primarily because the FRBM target not only imposes ceiling on the GFD, but also makes revenue balance a target variable. Going by the historical relationship between GFD and RD, which have been fairly stable in the past, it is unlikely that a combination of zero RD and GFD at 3% of GDP can be maintained, particularly in the context of Central Government finances. At the Union government level, the structure and classification of government finances is such that a zero revenue deficit can be realised only with a fiscal deficit level of less than 2% of GDP[2].

The stable ratio of GFD to RD is attributed to the principle of classifying the plan outlay under revenue and capital head. As per existing government accounting principles, all loans and advances from the consolidated fund are treated as capital expenditure, whereas all the grants made out of this fund are classified as revenue expenditure. Accordingly, the loan components[3] of the Central Plan Assistance to States are classified as capital expenditure irrespective of the nature of this expenditure. Similarly, the grants given to the States and UTs and other implementing agencies under Central assistance to States plan (NCA and ACA) as well as Centrally Sponsored Scheme (CSS) are classified as revenue expenditure even if a significant proportion of this expenditure is spent on capital formation such as construction of roads and bridges, schools, hospitals, houses, village and block resource centers, rural infrastructure like irrigation etc. The proportion of plan grant spent on creation of physical assets at sub national level worked out to be about 1.6% of GDP in 2010-11 as noted in the Union budget document 2011-12. Therefore, the gross budget support (GBS) to plan under Central finance is substantially revenue expenditure loaded. The revenue component of the GBS is more than 80% at present. This high concentration of plan expenditure under revenue account is primarily explained by the followings: (a) The budgetary dis-intermediation of loans to States by the Centre resulted

---

[2] The gap between GFD and RD under Central Finance is about 1.5% of GDP at present.
[3] Since the year 2005-06, the central plan loans to the States has been discontinued following the recommendation of the Twelfth Finance Commission. Therefore, Centre's GBS does not include loan component of Central Plan Assistance to States any more since the year 2005-06.

in sharp decline in the capital component of the plan outlay since the year 2005-06 and (b) CSS grant to States and State level implementing agencies under flagship programmes of the government increased substantially under inclusive growth strategy of development planning during the Eleventh Plan

If the present pattern of revenue-capital mix of the GBS is maintained during the Twelfth Plan without making any correction for the mis-classification it would be almost impossible to bring down the revenue deficit without compromising with the size of GBS. The implication is that even if the upper bound of the Central government's net borrowing is fixed at 3% of GDP, the revenue deficit constraint under FRBM would allow the Central government to borrow up to a maximum of 1.5% of GDP. Therefore, if RD is taken as the binding constraint, the exiting classification of the budget would end up in a Central government GFD of not more than 1.5% of GDP and to that extent the Centre's budgetary resources for the plan would be limited.

The sub group discussed this issue further. The possibility of adopting adjusted Revenue Deficit target was examined. The medium term fiscal correction path suggested by the Ministry of Finance as laid in the parliament along with the Union Budget-2011-12 was also taken into account. Considering the implication of FRBM under the present structure of government finance, the sub-group agreed to project the government finances with the following variations:

- In the Central government projection, FRBM target for GFD is to be realized by the year 2014-15, RD be taken as the binding constraint, the revenue-capital mix of the plan expenditure would be maintained at a stable level as in the past and RD would be reduced gradually every year by about 0.5%-0.6% point of GDP;

- In the projection of State government finances, revenue balance position is quite comfortable. Both GFD target and RD target are almost compatible. However, for all states together the GFD limit as a percentage of all India GDP would be much less than 3%, because, the gap between all India GDP and all States GSDP is about 10% and this brings down the required GFD to GDP ratio for all States to about 2.8% under a 3.0% GFD/GSDP norm for the States.

III. Two Approaches Followed in Making Projection

Two alternative approaches have been followed in making projections for gross fiscal deficit, combined revenue deficit, budgetary resources for plan and other budget numbers. **In the first approach, component wise projections have been made for the**

government finances. Since different components of government expenditure and government receipts follow different behavior patterns, some of them being fairly predictable on the basis of analysis of historical data, it is considered appropriate to make projection for different budget numbers separately; and combine them to arrive at the projected fiscal parameters

In the second approach, a model based forecast of major fiscal parameters has been made under a macro-economic framework. The model captures the inter-relationship between real, fiscal and monetary sector of the Indian economy and follows the disaggregated approach for determining government revenues and government expenditure. Further disaggregation of government revenue and government expenditure has not been made in this case. Further, finances of Central Government, state Governments have been considered together as general government's revenue and expenditure. The model includes a set of identities and equations to arrive at the projected macro-economic parameters. This model is discussed in Fourth section.

III-A   Component wise Projection of Government Finance

The various budget numbers under Expenditure and Receipts are worked out separately for the Central government and all State governments and then combined. The budget numbers are projected and linked through a set of identities and algebraic formulations as described below:

(i)   GFD= TE- TNDR

(ii)   RD = RE- RR

(iii) TE = PE + NPE

(iv) TNDR = TR + NTR + Rec + Dis

(v)   NPE = Int + WS + Pn + Df + Sbs + gnt + ONP

(vi) $PE = \theta * Y_0 * (1+ g) * (1+ p)$

(vii) $RE = PRE + NPRE = \alpha* PE + (Int + WS + Pn) + \beta* Df + \gamma* ONP$

(viii) RR= TR + NTR

where,

GFD : Gross Fiscal Deficit

RD : Revenue Deficit

TE :   Total Expenditure

TNDR : Total Non-debt receipts

RE and RR : Revenue Expenditure and Revenue Receipts

PE and NPE : Plan Expenditure and Non- Plan Expenditure

PRE and NPRE: Plan Revenue Expenditure and Non-plan Revenue Expenditure

Int : Interest payment

WS : Wages and Salaries

Pn : Pension payments and other retirement benefits

Df : Defence Expenditure

Gnt : Grant to States (non-plan) from Centre

Sbs: Subsidies

ONP : Other non-Plan Expenditure

θ : Plan expenditure to GDP ratio

α, β and γ : share of revenue expenditure in plan expenditure, defence expenditure and other non-plan expenditure respectively, as derived from historical ratios

g and p : growth rate target and assumed rate of inflation

TR : Tax revenue

NTR: Non Tax Revenue

Rec : Recoveries of loans

Dis : Disinvestment receipts

It is worth mentioning here that plan expenditure (PE) to GDP ratio expressed by θ is worked out for each year separately for Central government and State government through an iterative process in conformity with FRBM mandated GFD and RD target. Plan Expenditure, in this approach, is therefore arrived at as residuals.

Different components of Non Plan Expenditure (NPE) and Revenue Receipts (RR) are projected separately since each one of them follow specific behaviour pattern that is reasonably predictable with target growth rate and assumed rate of inflation. It may be mentioned here that State finances would not have defence expenditure component in their non plan budget. Further, while making projection under State finances, inter governmental fiscal transfers are inbuilt in to the system.

The NPE components are estimated as follows:

$Int_t = I_{t-1} + GFD_{t-1} * r$ ……………… (i)

where,

Int_t = Interest payment in year t

GFD $_{t-1}$ = Fiscal Deficit of the year $_{t-1}$

r = marginal nominal interest rate

WSt = WS $_{t-1}$ * (1+p)*(1+inc) ……………(ii)

assuming no pay revision and no addition to employees' number, and 'inc' is the rate of annual increase on base salary

Pnt = Pn $_{t-1}$ * (1+p) * (1+n) ……………..(iii)

where 'n' is the rate of growth of number of pensioners

Dft = μ * Y$_0$* (1+ g) * (1+ p) ……………(iv)

where μ is the ratio of defence expenditure to GDP determined by historical ratios.

On the receipt side **Tax Revenue (TR)** is the major source of revenue for the government and this number is projected with a buoyancy assumption as follows:

TRt = TRt-1 + b * (Yt-Yt-1) ……………(v)

NTR = (1+tr) * (NTRt-1) ……………..(vi)

Where, TRt is tax revenue in year t and 'b' is the assumed tax buoyancy, (separate buoyancy number is assumed for Centre and States)

NTR is non tax revenue projected on the basis of trend growth rate (tr)

Rec is recoveries of loans

Dis is disinvestment receipts

In addition to the above specifications, the following paragraphs describe the assumptions adopted in projecting these specific budget numbers for both level of governments.

III-B   Revenue Receipt and Non- Debt Capital Receipt of the Government
Gross Tax Revenue

Gross Tax Revenue of the Central government is projected with a **tax buoyancy assumption of 1.25**. During the Eleventh Five Year Plan the gross tax revenue of the Centre as percent of GDP came down drastically due to economic slowdown as well as as a result of government's expansionary fiscal policy implemented to counter the slowdown. The gross tax revenue to GDP ratio declined from about 11.9% of GDP in 2007-08 to 9.5% of GDP 2009-10. The economy has started recovering since then and the sub group agreed to build up tax buoyancy that brings the tax GDP ratio to the pre-crisis level of about 12% by the end of the Twelfth Plan. However, this needs to be compared with the findings of the sub-group report on Tax resources of Central Government constituted under the working group on Central Plan resources for Twelfth Five Year Plan.

The share of States in the Central tax revenue

The share of States in the Central tax revenue has been calculated on the basis of THFC recommendation. THFC has recommended 32% of the net proceed of the gross tax revenue of the Centre to be transferred to States. In the absence of exact figure of the net tax proceeds (i.e., gross tax revenue less cost of collection) in the past is not available with us; hence, projection of the share of States in the Central tax revenue has been made on the basis of gross tax revenue of the Centre. The budgeted figure of the share of states in the gross tax revenue of the Centre excluding the cess, in the year 2010-11 and 2011-12 has been around 29.5%. This was discussed in the sub group meeting and the consensus view was to assume 29.5% of the Central Tax Revenue as States' share.

State's Own Tax Revenue

State's own tax revenue is projected by assuming overall tax buoyancy on the basis of tax buoyancy realized in the past as well as specific information on state level policy on revenue mobilization. In this exercise a tax buoyancy of 1.15 is assumed for State finances. This may sound a little optimistic but does not seem infeasible keeping in view the planned introduction of GST and anticipated acceleration in economic activitiy. This is likely to raise states' own tax revenue to GDP (ratio) to the pre-crisis level of 6 percent. It is necessary to compare the estimate with that of the sub-group report on Tax resources of the States constituted under the Working Group of State Plan resources for Twelfth Five Year Plan.

Non-Tax Revenue

The non-tax revenue of the Centre includes interest receipts from the States and UTs, interest receipt from Public Sector Undertakings (PSUs), dividends from departmental and non-departmental undertakings, RBI and Government owned commercial banks. The interest receipts from the States/UTs have declined substantially due to (i) debt restructuring of the States following TFC award (ii) financial dis-intermediation of the Central Government from borrowing by States (iii) pre-payment of interest made by PSUs and Port Trust during the soft interest rate regime and (iv) gradual withdrawal of Central Government from intermediating between market loans and PSUs. The NTR in this case has been projected little higher than the trend growth rate of about 9% realised during the EFP. For State finances its own non tax revenue is assumed to grow at 10% per year, which is comparable to the trend growth rate.

Recovery of Loans

Non-debt capital receipt of the Central Government includes recovery of loans from the States, Union territories and Central PSUs and Disinvestments proceeds of the Central

Public Sector Undertakings (CPSUs). In the absence of significant fresh loan from the Centre to States and CPSUs, it is only the past loan, which has been consolidated and needs to be repaid to the Centre as suggested by the TFC. THFC recommends that the loans from GOI to States and administered by the Ministries/ departments other than MOF outstanding at the end of 2009-10, to be written off. Therefore, this number has been kept at the base year level of about Rs.15020 crore. For State finances also this number has been kept at the base year level of Rs. 4500 crore.

Disinvestment

Disinvestment proceeds of the CPSUs averaged 0.38 % of GDP during 11th Five Year Plan including 0.44% of GDP being estimated to be disinvested in 2011-12. However, the present policy of the Central Government is not clear about further dis-investment in CPSUs in near future. Therefore, budget number under this head for 12th Five Year Plan has been maintained as 0.35% of GDP that is comparable to EFC realization.

III-C   Non Plan Expenditure of the Government

Interest Payment

Interest payment component of the non-Plan Expenditure is driven by the past-debt stock, fresh borrowing of the government and the rate of interest. Regarding future behaviour of the interest payment a note has been received from RBI, which may be seen at **Appendix-I**. In our projection interest rate in future is assumed to move with inflation. The alternative combinations of growth rate and rate of inflation under which projection has been made, assumes annual inflation rate to vary in the range of 5% to 6.5%. Accordingly the rate of interest for Central government borrowings is assumed in the range of 6.5% to 8% under different scenarios. The corresponding rate for the State Government ranges from 8% to 9%. The projected interest liabilities are comparable to RBI's assessment of future interest burden projected for the Twelfth plan.

Non-plan Grant to States:

Important non-Plan expenditure of the Central Government is non-Plan grant to the States. First three years of the 12th Plan are covered under the THFC recommendation. Estimates for the last two years of the Twelfth Plan assume a marginal increase over 2014-15.

Subsidies

The projection of expenditure on subsidies is assumed as a fixed ratio (1.5%) of nominal GDP. While the policy imperatives require gradual withdrawal of non-targeted

subsidies, the ensuing food security bill is expected to put additional burden on the central finances. In our projection the subsidy bill is projected at the base year level of 1.5% of GDP. Other non-plan expenditure of the Central Government is projected to grow at an annual growth rate of 10%.

Other Non Plan Expenditure of States

As per the projection of non-plan expenditure of States made by the THFC, 30% of plan revenue expenditure of the States in the base year of the Twelfth Plan (2011-12) would be shifted to non-plan head in the beginning of Twelfth Plan. In our projection of other non-plan expenditure for States, this principle has been applied. In brief, for the first year of Twelfth Plan 30% of the Plan Revenue Expenditure of the States estimated to be incurred in the year 2011-12 has been included in the other non-plan expenditure of the States. There after this expenditure is maintained at the same level in real terms.

III-D   Summary Findings

Table-3 summarises the projected fiscal parameters for the terminal year of the plan under all the five growth rate/inflation scenarios. The year-wise detail projections along with some more budget numbers are given at **Annexure-I.**

Table-3 Projection of Government Finances for Twelfth Five Year Plan :
Centre and States Combined
Projection for Terminal year of the Twelfth Plan
(% of GDP)

	Base year of 12th Plan	Scenario I 8.50% 5.0%	Scenario II 9.0% 5.0%	Scenario III 9.0% 6.0%	Scenario IV 9.50% 5.0%	Scenario V 9.50% 6.5%
Growth Rate						
Inflation rate						
	2011-12	2016-17	2016-17	2016-17	2016-17	2016-17
Centre						
GBS to Plan	4.9	4.4	4.5	4.6	4.6	4.6
Fiscal Deficit	4.6	2.0	2.0	2.1	1.9	2.0
Revenue Deficit	3.4	0.7	0.7	0.7	0.6	0.6
States						
GBS to Plan	4.9	6.9	7.1	7.2	7.3	7.4
Fiscal Deficit	2.0	2.7	2.7	2.7	2.7	2.7
Revenue Deficit	-0.3	-0.6	-0.7	-0.7	-0.8	-0.8
Combined						
GBS to Plan	8.2	9.9	10.3	10.4	10.4	10.6
Fiscal Deficit	6.4	4.6	4.6	4.6	4.5	4.6
Revenue Deficit	3.1	0.1	0.0	0.0	-0.1	-0.2

As can be noted the fiscal deficit of Centre comes down from 4.6% of GDP in the year 2011-12 to about 2% of GDP in the terminal year of Twelfth Plan. This is much below the FRBM ceiling of 3% of GDP. In our projection, GFD for Centre was required

to be brought down to this level due to the compulsion of meeting revenue deficit target mandated under FRBM Act. The RD of the Centre in the terminal year is projected to be 0.6% of GDP. Not much variation is noticed in the GFD number and RD number while shifting from one scenario to the other since these numbers are restricted with a ceiling. However, compression of GFD has implication for plan outlay as these results in decline in the GBS to the Plan in the terminal year against the base year under all the scenarios.

The State finances are estimated to be in a much better position vis-à-vis Centre. While maintaining the GFD at the FRBM mandated level of about 2.7% of GDP, the all States average would be a surplus in the revenue account and is estimated to remain within the range of 0.6% to 0.8% of GDP. The Plan resources that could be mobilised by the Sates in the year 2016-17 through budgetary process (GBS) would range from 6.9% to 7.4% of GDP under alternative scenarios.

The combined budgetary position is much more comfortable in the sense that Government would be in position to mobilise larger resources for Plan while containing the fiscal balance and revenue balance position within the FRBM ceiling. There would be about 2 to 2.2 percentage point gain in the resource mobilization in the terminal year compared to the base year (2011-12). The combined GFD is projected to decline from 6.4% of GDP in 2011-12 to 4.6% of GDP in 2016-17. The combined RD during this period would be eliminated.

Table 4 summarises the projected fiscal parameters in terms of GDP (average of five year periods) for the entire Twelfth Five year Plan period.

Table-4   **Projection of Government Finances for Twelfth Five Year Plan: Centre and States Combined**

(Twelfth Plan Average as percent of GDP)

	Scenario I	Scenario II	Scenario III	Scenario IV	Scenario V
Growth Rate	**8.50%**	**9.0%**	**9.0%**	**9.50%**	**9.50%**
Inflation rate	**5.0%**	**5.0%**	**6.0%**	**5.0%**	**6.5%**
Centre					
GBS to Plan	4.5	4.5	4.6	4.5	4.6
Fiscal Deficit	3.0	3.0	3.0	2.9	3.0
Revenue Deficit	1.7	1.7	1.7	1.7	1.7
States					
GBS to Plan	6.0	6.1	6.2	6.2	6.3
Fiscal Deficit	2.7	2.7	2.7	2.7	2.6
Revenue Deficit	-0.2	-0.3	-0.3	-0.3	-0.4
Combined					
GBS to Plan	9.1	9.3	9.4	9.4	9.5
Fiscal Deficit	5.6	5.6	5.6	5.5	5.6
Revenue Deficit	1.5	1.5	1.4	1.3	1.3

As can be seen, the FRBM constraint limits the combined fiscal deficit of the general Government to about 5.6% of GDP on average during the Twelfth Plan under alternative combination of growth rate and inflation rate. The combined revenue deficit is estimated to be within the range of 1.3% to 1.5% of GDP. The budgetary resources for Plan are estimated to vary within the band of 9.1% to 9.5% of GDP.

III-E   Plan Expenditure (GBS to Plan)

As has already been noted, Gross Budget Support (GBS) to the Plan has been taken as residual under FRBM constraint. This projected number varies under alternative growth/inflation scenarios. While estimating this number, we assume the capital ratio (K-ratio) of GBS to be fixed at 20%. During the EFP this ratio has been less than 17% on average. Our projection is based on the assumption of a marginal increase in the capital component of GBS or alternatively marginal reduction in the revenue component of Plan expenditure. This is in conformity with the THFC recommendation that suggests indicative ceiling on overall transfer to States on the revenue account to be set at 39.5% of gross revenue receipts of the Centre. Even with this position GBS under Central finances includes a very large revenue component. The only way to bring down the revenue deficit would be to compress the GBS resulting in a level of fiscal deficit, which is much below the FRBM specified level of 3% of GDP.

The plan outlay under State finances is also derived as a residual after making projection for total non-plan expenditure, total revenue receipt and total capital receipt including non-debt capital receipts and government borrowing. It is worth mentioning here that the enacted FRBM legislation at the state level mandates the States to bring down their gross fiscal deficit to 3.0% of their respective GSDP and to bring down the Revenue deficit to zero. As a percent of GDP this implies that all States together would have to maintain their GFD at about 2.7%, since all States' GSDP is about 10% less than all India GDP.

Important issue for State Plan financing is that most of the plan schemes and programmes at the State level follow some non-flexible guidelines under which it may be difficult for the states to change the revenue capital mix of the plan programmes. If the states would continue to be constrained with a fixed revenue capital mix of 55:45 of plan outlay (as in the Eleventh plan) during the Twelfth Plan then the GFD and RD under State finances would maintain a stable ratio. However, State finances have improved substantially during the EFP with realised surplus in the revenue account. During the TWFP the States should continue to maintain comfortable position partly due to higher resource transfer from the Centre due to implementation of THFC award. Therefore it is

expected that States would be in a much better position to mobilise higher plan resources relative to that of the Centre. In terms of percentage gain all States together will be in a position to mobilize at least 2 percentage point higher resources than that realised during the eleventh plan

IV The Model Based Approach to Forecast Major Fiscal Parameters

The model captures the interrelationship between the real, fiscal and monetary sector of the Indian economy. The model follows a disaggregated approach to the determination of government revenues and government expenditure. The level of Government is taken to be the general Government comprising both centre and states. Financing of fiscal deficit by the monetary authority has been assumed to be zero reflecting the elimination of automatic monetization. The objective of the model is to examine the level of deficit and debt in the 12th Five year plan period under alternate growth and inflation scenarios. The model specification including the set of equations and identities applied for building up the model is enclosed at **Annexure-II.** Table-5 presents the model based projection of fiscal parameters having implication for government savings and draft on private savings.

Table- 5   Model Based Projection of Fiscal Parameters (as percent of GDP)

Scenario 1 - Real GDP growth of 8.5% and Inflation of 5%

Parametere	2012	2013	2014	2015	2016	2017	**Average**
Revenue Deficit	3.8	3.4	2.9	2.4	1.8	1.1	2.32
Capital Outlay	3.5	3.7	3.8	4	4.1	4.2	3.96
Fiscal Deficit	7.5	7.3	6.9	6.5	6.1	5.5	6.46

Scenario 2 - Real GDP growth of 9% and Inflation of 5%

Parametere	2012	2013	2014	2015	2016	2017	**Average**
Revenue Deficit	3.8	3.4	2.8	2.3	1.6	0.9	2.2
Capital Outlay	3.5	3.7	3.8	4	4.1	4.3	3.98
Fiscal Deficit	7.5	7.2	6.8	6.4	5.9	5.3	6.32

Scenario 3 - Real GDP growth of 9% and Inflation of 6%

Parametere	2012	2013	2014	2015	2016	2017	**Average**
Revenue Deficit	3.7	3.2	2.6	2	1.3	0.4	1.9
Capital Outlay	3.5	3.7	3.8	4	4.2	4.3	4.0
Fiscal Deficit	7.4	7.1	6.7	6.1	5.6	4.9	6.08

Scenario 4 - Real GDP growth of 9.5% and Inflation of 5%

Parametere	2012	2013	2014	2015	2016	2017	**Average**
Revenue Deficit	3.3	2.9	2.5	2.1	1.7	1.4	2.12
Capital Outlay	3.5	3.7	3.8	4	4.1	4.3	3.98
Fiscal Deficit	7.0	6.7	6.5	6.2	6.0	5.8	6.24

Scenario 5 - Real GDP growth of 9.5% and Inflation of 6.5%

Parametere	2012	2013	2014	2015	2016	2017	**Average**
Revenue Deficit	3.7	3.1	2.4	1.7	0.9	0	1.62
Capital Outlay	3.5	3.7	3.9	4	4.2	4.4	4.04
Fiscal Deficit	7.4	7	6.5	5.9	5.2	4.5	5.82

The above result is not entirely comparable to the result obtained from component-wise projection discussed in the previous section. However, the GFD and RD numbers projected under scenarios 3 and 5 are close to that of component wise projection. The projected capital outlay in the above table is also close to that implied by the projected GBS arrived from component based estimates. The model based projection does not strictly adhere to the FRBM constraint with the implication that there is wide variation in the result across alternative scenarios.

The sub-group appreciated the model based exercise and findings there from. It was noted that this exercise provides some degree of robustness and macro-economic consistency to the projected macro-economic and fiscal parameters. However, in view of the fact that FRBM constraint needs to be inbuilt into the projection, it was considered by the group to adopt the component wise projection as the final numbers.

V. Draft on Private Savings and Projection of Public Savings

The projection of the governments' draft on private savings under the alternative scenario is an exercise to maintain the macro-economic balances under a very high projection of economic growth. The combined gross fiscal deficit of Centre and States under alternative growth rate scenarios and FRBM constraint with assumption of fixed capital ratio to GBS is estimated at about 5.6% on average during the entire Plan period as indicated in the Table 4. Government finances would claim about 5.5 to 5.6 percent of GDP during the Twelfth plan from the private sector's savings on average. The corresponding revenue deficit of the Government works out to be within the range of 1.3% to 1.5% of the GDP.

Disinvestments

In our projection we have assumed zero dis-investment of the PSUs at the state level and for the Centre about 0.35% of GDP is taken as the disinvestment proceeds. If there would be some disinvestment of the PSUs during the Twelfth plan at State level, the implications will be the followings:

(a) Disinvestment of the PSUs would change the budgetary position of the State Government, since the disinvestment proceeds are considered as a part of non-debt receipt. Inclusion of a positive budget number under this head would change the non debt receipt position of the States and push up the plan resources.

(b) The disinvestment proceeds would be considered a draft on private savings.

In the third meeting of the sub-group there was further deliberation on the issue of including disinvestment proceeds as a component of public sectors' draft on private savings. One view was that the disinvestment of PSUs results in depletion of private savings and to that extent pre-empts the private sector to have access to investible resources. Therefore, it should appropriately be treated as a draft on private savings. The other view was that disinvestment of PSUs (a) does not change the overall asset position of the economy but only changes the ownership; and (b) does not change the overall savings of the private sector but transforms the financial savings to physical savings within the private sector itself. Disinvestment of the PSUs therefore may not be treated as a draft on private savings. The considered view is that although the overall asset holding position of the economy as well as level of private savings remains unchanged, this component can appropriately be treated as a draft on private savings since the process pre-empts the possibility of new asset creation.

Extra Budgetary Resources (EBR)/Borrowing by PSUs:

The borrowing decision of the PSUs would be driven by their future investment decision, on which we do not have much information. It may be noted that, a sub-group on IEBR for plan have been constituted under the Working group on Central Plan resources for the Eleventh Plan. Some clear picture of EBR component would emerge once the sub group submits its report.

In the meanwhile, the EBR component of Central PSUs as obtained from the Union budget documents has been analysed with respect to their Revised Estimates (RE) figures. During the Eleventh Plan the realised EBR of CPSUs works out to be around 1.2% of GDP. It is proposed at present to adopt the same figure in our Twelfth Plan projection.

**Table 6 Public Sector's Draft on Private Savings for Twelfth Five Year
Under Alternative Growth Rate and Inflation Scenarios**
(Annual average as percent of GDP)

	Scenario I	Scenario II	Scenario III	Scenario IV	Scenario V
Growth Rate	**8.50%**	**9.0%**	**9.0%**	**9.50%**	**9.50%**
Inflation rate	**5.0%**	**5.0%**	**6.0%**	**5.0%**	**6.5%**
Combined GFD	5.6	5.6	5.6	5.5	5.6
Disinvestment	0.35	0.35	0.35	0.35	0.35
EBR of PSUs	1.2	1.2	1.2	1.2	1.2
Total Draft	7.15	7.15	7.15	7.05	7.15

Table-6 provides the overall assessment of the Sub-Group on public sector's draft on private savings for the Twelfth Five Year Plan as per cent of GDP. Combined GFD estimated at about 5.6% of GDP remains the major component followed by EBR and disinvestment. Under alternative GDP growth-inflation scenario the public sector's draft on private savings is projected to be about 7.15% of GDP.

Public Savings

The public sector's savings are constituted of: (i) government savings and (ii) savings generated by the public sector undertakings in the form of internal resources. It is the government saving which can properly be linked to the combined revenue deficit of the government, although the correspondence is not exact. The reason for this is that (a) the CSO, which measures savings, uses an economic classification of expenditure to distinguish between investment and consumption, while the Government budgets, on the other hand, use an accounting classification (b) CSO factors in the depreciation of government owned capital assets, which is not accounted for in the government budgets and (c) the CSO data includes estimates for local bodies and autonomous institutions (quasi government). These three reasons create a certain amount of non-comparability between the two measures of current expenditures. The other reason for discrepancy between savings and revenue deficit lies in the definitions:

Revenue surplus = Revenue receipts – revenue expenditures

Government Savings = Current receipts – consumption expenditures

The difference between the two is:-

Revenue expenditures = consumption expenditures + net transfers

In the absence of an exact relationship between the combined revenue deficit of the Government and the Government savings, the Government savings could be estimated through the observed relationship between the two variables over the past few years. On the basis of observation of the last few years' data, the gap between Government savings and combined revenue deficit as percentage of GDP at market prices is estimated as 1.2 percentage points on average. Applying this factor to the combined revenue deficit projected in this Sub Group report, the **Government savings is projected to be about 1.2% of the GDP in the terminal year of the plan. The average Government savings for the plan period could be marginally negative estimated at about (-) 0.1% of GDP. The projected government saving does not vary much under alternative growth**

scenario, because the revenue deficit is taken as an exogenous policy variable under FRBM constraint.

As regards the **savings generated by public sector enterprises** in the form of internal resources (IR), no estimate is available for the future. A perusal of the past data, however, reveals that such savings have more or less steadily increased from 2.95% of GDP in 1990-91 to 3.12% in 1999-2000 to 4.1 % in 2004-05 and have been maintained at about 4% of GDP up to 2007-08 to be followed by a decline in the subsequent two years of economic slowdown. If the normal trend were to continue in the future, then the average for the Twelfth Plan period could be at least 4.0% of GDP. It may be appropriate at this stage to maintain the projection of IR at pre-crisis level of 4.0% of GDP. **Thus, total public savings by this method is estimated to be 4.0% higher than the projected government savings that has been discussed in the previous paragraph.**

To sum up Public Sector's draft on Private Savings for the Twelfth Plan is estimated to be around 7.15% of GDP on average. This includes projected combined GFD of about 5.6%, an estimated disinvestment figure of 0.35% of GDP and EBR of PSUs estimated at 1.2% of GDP. Government savings is projected to be in the range of 1.2% to 1.4% of the GDP in the terminal year of the plan. The average Government savings for the plan period could be negative estimated at about (-) 0.1% to (-) 0.3% of GDP. The corresponding Public Savings is projected to be around 5.2% of GDP in the terminal year of the Plan and about 3.7% to 3.9% of GDP for the entire Plan period on average.

*****

Component Wise Projection of Fiscal Parameters- Year Wise Assessment

Government Finance Projection for Twelfth Five Year Plan (20012-17)- Centre
(as percent of GDP)

Scenario: 8.5% GDP growth target with 5% inflation rate							
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	Plan
CENTRE							average
GBS to Central	4.9%	4.6%	4.4%	4.4%	4.4%	4.4%	4.5%
Capital	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Gross tax	10.3%	10.6%	10.9%	11.3%	11.6%	12.0%	11.3%
Fiscal Deficit	4.6%	4.1%	3.5%	3.0%	2.5%	2.0%	3.0%
Revenue Deficit	3.4%	2.8%	2.2%	1.7%	1.2%	0.7%	1.7%
STATES							
GBS to State	4.9%	5.1%	5.4%	6.0%	6.5%	6.9%	6.0%
Capital	2.2%	2.3%	2.5%	2.7%	2.9%	3.1%	2.7%
Own tax	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%	5.8%
Fiscal Deficit	2.0%	2.7%	2.6%	2.7%	2.7%	2.7%	2.7%
Revenue Deficit	-0.3%	0.1%	-0.1%	-0.2%	-0.4%	-0.6%	-0.2%
Combined(Centre+States)							
GBS	8.2%	8.3%	8.6%	9.1%	9.5%	9.9%	9.1%
Capital	3.1%	3.2%	3.3%	3.6%	3.8%	4.0%	3.6%
Tax Revenue	15.8%	16.2%	16.6%	17.1%	17.5%	18.0%	17.1%
Combined FD	6.4%	6.7%	6.0%	5.6%	5.1%	4.6%	5.6%
Combined RD	3.1%	2.9%	2.1%	1.5%	0.8%	0.1%	1.5%

Government Finance Projection for Twelfth Five Year Plan (20012-17)- Centre
(as percent of GDP)

Scenario: 9% GDP growth target with 5% inflation rate							
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	Plan
CENTRE							Average
GBS to Central	4.9%	4.7%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Component	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Gross tax Revenue	10.3%	10.6%	11.0%	11.3%	11.7%	12.0%	11.3%
Fiscal Deficit	4.6%	4.1%	3.5%	3.0%	2.5%	2.0%	3.0%
Revenue Deficit	3.4%	2.8%	2.2%	1.7%	1.2%	0.7%	1.7%
STATES							
GBS to State Plan	4.9%	5.2%	5.6%	6.1%	6.6%	7.1%	6.1%
Capital Component	2.2%	2.3%	2.5%	2.7%	3.0%	3.2%	2.7%
Own tax Revenue	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%	5.8%
Fiscal Deficit	2.0%	2.7%	2.6%	2.7%	2.7%	2.7%	2.7%
Revenue Deficit	-0.3%	0.1%	-0.1%	-0.3%	-0.5%	-0.7%	-0.3%
Combined(Centre+States)							
GBS	8.2%	8.5%	8.7%	9.3%	9.7%	10.3%	9.3%
Capital Component	3.1%	3.3%	3.4%	3.6%	3.9%	4.1%	3.7%
Tax Revenue	15.8%	16.2%	16.7%	17.1%	17.6%	18.1%	17.1%
Combined FD	6.4%	6.7%	6.0%	5.6%	5.1%	4.6%	5.6%
Combined RD	3.1%	3.0%	2.1%	1.4%	0.7%	0.0%	1.5%

Government Finance Projection for Twelfth Five Year Plan (20012-17)- Centre
(as percent of GDP)

Scenario: 9% GDP growth target with 6% inflation rate

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Plan
CENTRE							Average
GBS to Central	4.9%	4.6%	4.5%	4.5%	4.5%	4.6%	4.6%
Capital Component	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Gross tax Revenue	10.3%	10.6%	11.0%	11.4%	11.8%	12.1%	11.4%
Fiscal Deficit	4.6%	4.1%	3.5%	3.0%	2.5%	2.1%	3.0%
Revenue Deficit	3.4%	2.8%	2.2%	1.7%	1.2%	0.7%	1.7%
STATES							
GBS to State Plan	4.9%	5.1%	5.7%	6.2%	6.7%	7.2%	6.2%
Capital Component	2.2%	2.3%	2.5%	2.8%	3.0%	3.2%	2.8%
Own tax Revenue	5.5%	5.6%	5.7%	5.8%	5.9%	6.1%	5.8%
Fiscal Deficit	2.0%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%
Revenue Deficit	-0.3%	0.1%	-0.1%	-0.3%	-0.5%	-0.7%	-0.3%
Combined(Centre+States)							
GBS	8.2%	8.4%	8.8%	9.3%	9.9%	10.4%	9.4%
Capital Component	3.1%	3.2%	3.4%	3.7%	3.9%	4.1%	3.7%
Tax Revenue	15.8%	16.2%	16.7%	17.2%	17.7%	18.2%	17.2%
Combined FD	6.4%	6.6%	6.1%	5.6%	5.1%	4.6%	5.6%
Combined RD	3.1%	2.9%	2.1%	1.4%	0.7%	0.0%	1.4%

Government Finance Projection for Twelfth Five Year Plan (20012-17)
(as percent of GDP)

Scenario: 9.5% GDP growth target with 5% inflation rate

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Plan
CENTRE							Average
GBS to Central	4.9%	4.7%	4.5%	4.4%	4.4%	4.6%	4.5%
Capital Component	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Gross tax Revenue	10.3%	10.6%	11.0%	11.3%	11.7%	12.1%	11.3%
Fiscal Deficit	4.6%	4.1%	3.5%	2.9%	2.4%	1.9%	2.9%
Revenue Deficit	3.4%	2.8%	2.2%	1.6%	1.1%	0.6%	1.7%
STATES							
GBS to State Plan	4.9%	5.2%	5.7%	6.2%	6.7%	7.3%	6.2%
Capital Component	2.2%	2.4%	2.6%	2.8%	3.0%	3.3%	2.8%
Own tax Revenue	5.5%	5.6%	5.7%	5.8%	5.9%	6.0%	5.8%
Fiscal Deficit	2.0%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
Revenue Deficit	-0.3%	0.1%	-0.1%	-0.3%	-0.6%	-0.8%	-0.3%
Combined(Centre+States)							
GBS	8.2%	8.5%	8.9%	9.3%	9.8%	10.4%	9.4%
Capital Component	3.1%	3.3%	3.5%	3.7%	3.9%	4.2%	3.7%
Tax Revenue	15.8%	16.2%	16.7%	17.1%	17.6%	18.1%	17.2%
Combined FD	6.4%	6.7%	6.0%	5.4%	4.9%	4.5%	5.5%
Combined RD	3.1%	2.9%	2.1%	1.3%	0.5%	-0.1%	1.3%

Government Finance Projection for Twelfth Five Year Plan (20012-17)

(as percent of GDP)

Scenario: 9.5% GDP growth target with 6.5% inflation rate

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Plan
CENTRE							Average
GBS to Central	4.9%	4.7%	4.6%	4.6%	4.6%	4.6%	4.6%
Capital Component	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Gross tax Revenue	10.3%	10.7%	11.0%	11.4%	11.8%	12.3%	11.4%
Fiscal Deficit	4.6%	4.1%	3.5%	3.0%	2.5%	2.0%	3.0%
Revenue Deficit	3.4%	2.8%	2.2%	1.7%	1.2%	0.6%	1.7%
STATES							
GBS to State Plan	4.9%	5.3%	5.7%	6.2%	6.8%	7.4%	6.3%
Capital Component	2.2%	2.4%	2.6%	2.8%	3.0%	3.3%	2.8%
Own tax Revenue	5.5%	5.6%	5.7%	5.8%	6.0%	6.1%	5.9%
Fiscal Deficit	2.0%	2.7%	2.6%	2.6%	2.6%	2.7%	2.6%
Revenue Deficit	-0.3%	0.1%	-0.2%	-0.4%	-0.7%	-0.8%	-0.4%
Combined(Centre+States)							
GBS	8.2%	8.6%	8.9%	9.4%	10.0%	10.6%	9.5%
Capital Component	3.1%	3.3%	3.5%	3.7%	4.0%	4.3%	3.7%
Tax Revenue	15.8%	16.3%	16.8%	17.3%	17.8%	18.4%	17.3%
Combined FD	6.4%	6.7%	6.0%	5.5%	5.0%	4.6%	5.6%
Combined RD	3.1%	2.9%	2.0%	1.3%	0.5%	-0.2%	1.3%

****

A Model Based Approach to Forecast Major Fiscal Parameters

The forecast of fiscal parameters of importance to the exercise on public sector's draft on private savings has also been attempted through an empirical model. The model captures the interrelationship between the real, fiscal and monetary sector of the Indian economy. The model is eclectic in nature. The model follows a disaggregated approach to the determination of government revenues and government expenditure. The level of Government is taken to be the general Government comprising both centre and states. Financing of fiscal deficit by the monetary authority has been assumed to be zero reflecting the elimination of automatic monetization. The objective of the model is to examine the level of deficit and debt in the 12th Five year plan period under alternate growth and inflation scenarios. Specifically, we consider the following five scenarios.

Scenario	Real GDP Growth (%)	WPI Inflation (%)
I	8.5	5.0
II	9.0	5.0
III	9.0	6.0
IV	9.5	5.0
V	9.5	6.5

Specification of Model

Keeping in view the objectives stated above, the model has got three blocks viz, real, fiscal and monetary. The individual equations and the model have been estimated for the period 1991 to 2011. The detailed exposition of the model is set out below.

Fiscal Sector

Revenues

Along with indirect tax (IDT) and non-tax (NTAX), the two components of direct tax viz, personal income tax (PIT) and corporate income tax (CIT) have been modelled separately. Direct tax (DT) is derived as an identity by summing up PIT and CIT. The total revenue receipts (RR) is thus derived as an identity summing up DT, IDT and NTAX.

Tax Revenue

Revenue from direct taxes (corporate and income) and indirect taxes and also from non-tax sources is defined as a function of nominal GDP. Increase in nominal income is expected to increase both the tax and non-tax revenue. Here may be pertinent to mention

that the PIT and CIT which is used in the model have been adjusted for discretionary change in tax policy. Accordingly, the following specifications are set out:

Direct tax

LPIT = f (LGDPMP)   (1)

LCIT = f (LGDPMP)   (2)
Indirect tax
LIDT = f (LGDPMP)   (3)

Non-Tax Revenue
LNTAX = f (LGDPMP)   (4)

Expenditure

Revenue expenditure (RE) has been defined as the summation of non-interest revenue expenditure (NIRE) and interest payments (IP) through an identity. Interest payment is modeled to depend on the level of debt. NIRE is expressed as a function of, nominal GDP. Net lending (NL) and capital outlay (CO) have been modeled to depend on nominal GDP only. Accordingly, the following specifications for the different components of expenditure are set out.

Non-Interest Revenue Expenditure
L (NIRE) = F (GDPMP)   (5)

Interest Payment
LIP = f (DEBT)   (6)

Capital Outlay
LCO = f (LGDPMP)   (7)

Net Lending
LNL = f (LGDPMP)   (8)

Real Sector

Private consumption has been expressed as a function of nominal GDP. Investment by the private sector has been explained in terms of the level of economic activity proxied by the real GDP, the interest rate (proxied by weighted average interest rate on central government dated securities) and inflation. Notationally**,**

Private Consumption Expenditure
LPFCE = f (LGDPMP)   (9)

Private Investment
LIPVT = f (LGDPR, R, WPI)   (10)

Monetary Sector

Interest rate (R) defined by the weighted average interest rate on central government dated securities. Level of Government debt, level private expenditure comprising of investment and consumption expenditure and WPI are taken to influence R. Notationally,

Interest rate
$$LR = f (LWPI, LDEBT, L (IPVT+PFCE)) \qquad (11)$$

While estimating the equations necessary corrections for first order serial correlation in the residuals have been made.

The deficit indicators are derived from the following identities:

$$DT \quad = \quad PIT+CIT+ADJTTAX \qquad (12)$$

The direct tax identity uses an adjustment factor ADJTAX as the PIT and CIT series used are adjusted for discretionary change in fiscal policy.

RR	=	DT+IDT+NTX	(13)
RE	=	NIRE+IP	(14)
RD	=	RR - RE	(15)
PRB	=	RD-IP	(16)
FD	=	RD + CO+ NL	(17)
PD	=	FD-IP	(18)
Debt	=	Debt (-1) + FD + ADJT	(19)
DYR	=	(Debt / GDPMP) * 100	(20)

The debt identity uses an adjustment factor ADJT for the non-debt creating deficit. The adjustment factor has been 0.75% of the nominal GDP in the past five years. For the forecast period, the DJT factor has been taken to be 1% of GDP.

List of Endogenous variables	
DT = Direct Taxes	IDT = Indirect Taxes
PIT = Personal Income Tax	NTAX = Non Tax
CIT =Corporate Income Tax	RD = Revenue Deficit
RR= Revenue Receipts	FD = Fiscal Deficit
RE = Revenue Expenditure	IP = Interest Payment
PFCE= Private Final Consumption Expenditure	PD =Primary Deficit
IPVT= Private Investment Expenditure	PRB = Primary Revenue Balance
R = Weighted Average Interest Rate of Government Dated Securities	CO =Capital Outlay
Debt = Outstanding total Liabilities of the Government	NL=Net Lending
DYR = Debt-GDPMP Ratio	NIRE =Non Interest Revenue Expenditure
Exogenous variables:	
GDPR = Real GDP	GDPMP=Nominal GDP
WPI =Whole Sale Price Index	ADJT = Adjustment Factor for Debt Identity
*The Prefix L denotes the log of the variable under consideration	

The model attempts to assess the fiscal situation till 2017 under five different macroeconomic scenarios for growth in real GDP and Inflation.

Model Structure and Model Solution

The model comprises of 11 stochastic equations and 9 identities. In total there are 24 variables in the model with 20 endogenous and 4 exogenous variables. There are 3 recursive blocks and two simultaneous blocks in the model structure. Block-1 consists of 9 recursive equations consisting of equations for personal income tax, corporate income tax, direct tax, indirect tax, non-tax receipts, noninterest revenue expenditure, revenue receipts, capital outlay and net lending. Block- 2 consists of five equations involving interest payments and identities for revenue expenditure, revenue deficit, fiscal deficit and debt in a simultaneous framework. Block-3 has got one recursive equation for private final consumption expenditure. Block-4 has two simultaneous equations for interest rate and private investment expenditure. Block - 5 has got three recursive equations for primary revenue balance, primary deficit and debt-GDP ratio.

Deterministic simulation has been applied to solve the model. Deterministic simulation involves first an analysis of block structure of the model. The equations of the model are then solved for each observation in the solution sample, using an iterative algorithm to compute values for the endogenous variables. The model solution uses Boyden's iterative scheme across all the observations of the sample.

Scenario 1 - Real GDP growth of 8.5% and Inflation of 5%

Parameter	2011	2012	2013	2014	2015	2016	2017
Corporate Income Tax	3.8	4.2	4.6	5.0	5.5	6.0	6.5
Personal Income tax	2.0	2.2	2.3	2.5	2.6	2.8	3.0
Direct Tax	6.1	6.3	6.9	7.5	8.1	8.8	9.5
Indirect Tax	8.7	8.7	8.7	8.6	8.6	8.5	8.4
Tax Receipts	14.7	15.0	15.6	16.1	16.7	17.3	17.9
Non Tax Receipts	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Revenue Receipts	18.4	18.7	19.2	19.8	20.3	20.9	21.6
Non Interest Revenue Expenditure	17.6	17.9	18.1	18.3	18.4	18.5	18.6
Interest Payments	4.7	4.6	4.5	4.5	4.4	4.2	4.1
Revenue Expenditure	22.3	22.5	22.6	22.7	22.7	22.7	22.7
Revenue Deficit	3.8	3.8	3.4	2.9	2.4	1.8	1.1
Net Lending	0.3	0.2	0.2	0.2	0.2	0.2	0.1
Capital Outlay	3.2	3.5	3.7	3.8	4.0	4.1	4.2
Fiscal Deficit	7.3	7.5	7.3	6.9	6.5	6.1	5.5
Primary Deficit	2.7	2.9	2.7	2.5	2.2	1.8	1.4
Primary Revenue Balance	-0.8	-0.8	-1.1	-1.5	-1.9	-2.4	-2.9
Debt-GDP Ratio	64.9	65.5	65.8	65.7	65.3	64.4	63.2
Nominal Interest Rate	7.9	8.3	7.8	7.7	7.6	7.6	7.7

Scenario 2 - Real GDP growth of 9% and Inflation of 5%

Paramete	2011	2012	2013	2014	2015	2016	2017
Corporate Income Tax	3.8	4.2	4.6	5.1	5.5	6.1	6.7
Personal Income tax	2.0	2.2	2.3	2.5	2.7	2.8	3.0
Direct Tax	6.1	6.4	6.9	7.6	8.2	8.9	9.7
Indirect Tax	8.7	8.7	8.7	8.6	8.5	8.5	8.4
Tax Receipts	14.7	15.0	15.6	16.2	16.8	17.4	18.0
Non Tax Receipts	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Revenue Receipts	18.4	18.7	19.3	19.8	20.4	21.0	21.7
Non Interest Revenue Expenditure	17.6	17.9	18.1	18.3	18.4	18.5	18.7
Interest Payments	4.7	4.6	4.5	4.4	4.3	4.1	4.0
Revenue Expenditure	22.3	22.5	22.6	22.7	22.7	22.7	22.6
Revenue Deficit	3.8	3.8	3.4	2.8	2.3	1.6	0.9
Net Lending	0.3	0.2	0.2	0.2	0.2	0.2	0.1
Capital Outlay	3.2	3.5	3.7	3.8	4.0	4.1	4.3
Fiscal Deficit	7.3	7.5	7.2	6.8	6.4	5.9	5.3
Primary Deficit	2.7	2.9	2.7	2.4	2.1	1.8	1.3
Primary Revenue Balance	-0.8	-0.8	-1.2	-1.6	-2.0	-2.5	-3.1
Debt-GDP Ratio	64.9	65.2	65.2	64.8	64.1	62.9	61.4
Nominal Interest Rate	7.9	8.3	7.9	7.8	7.7	7.8	7.9

Scenario 3 - Real GDP growth of 9% and Inflation of 6%

Parameter	2011	2012	2013	2014	2015	2016	2017
Corporate Income Tax	3.8	4.2	4.7	5.2	5.7	6.3	6.9
Personal Income tax	2.0	2.2	2.4	2.5	2.7	2.9	3.1
Direct Tax	6.1	6.4	7.0	7.7	8.4	9.2	10.0
Indirect Tax	8.7	8.7	8.6	8.6	8.5	8.4	8.3
Tax Receipts	14.7	15.1	15.7	16.3	16.9	17.6	18.3
Non Tax Receipts	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Revenue Receipts	18.4	18.7	19.3	19.9	20.6	21.3	22.0
Non Interest Revenue Expenditure	17.6	17.9	18.1	18.3	18.4	18.6	18.7
Interest Payments	4.7	4.5	4.4	4.3	4.1	3.9	3.7
Revenue Expenditure	22.3	22.4	22.5	22.6	22.6	22.5	22.4
Revenue Deficit	3.8	3.7	3.2	2.6	2.0	1.3	0.4
Net Lending	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Capital Outlay	3.2	3.5	3.7	3.8	4.0	4.2	4.3
Fiscal Deficit	7.3	7.4	7.1	6.7	6.1	5.6	4.9
Primary Deficit	2.7	2.9	2.7	2.4	2.0	1.6	1.1
Primary Revenue Balance	-0.8	-0.8	-1.2	-1.6	-2.1	-2.7	-3.3
Debt-GDP Ratio	64.9	64.6	64.0	63.0	61.7	60.0	57.8
Nominal Interest Rate	7.9	8.5	8.3	8.4	8.5	8.7	9.1

Scenario 4 - Real GDP growth of 9.5% and Inflation of 5%

Parameter	2011	2012	2013	2014	2015	2016	2017
Corporate Income Tax	3.8	4.2	4.6	5.1	5.6	6.2	6.8
Personal Income tax	2.0	2.2	2.3	2.5	2.7	2.9	3.0
Direct Tax	6.1	6.4	7.0	7.6	8.3	9.0	9.8
Indirect Tax	8.7	8.7	8.7	8.6	8.5	8.5	8.4
Tax Receipts	14.7	15.0	15.6	16.2	16.8	17.5	18.2
Non Tax Receipts	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Revenue Receipts	18.4	18.7	19.3	19.9	20.5	21.1	21.9
Non Interest Revenue Expenditure	17.6	17.5	17.7	18.1	18.4	18.9	19.4
Interest Payments	4.7	4.5	4.4	4.3	4.1	4.0	3.9
Revenue Expenditure	22.3	22.0	22.1	22.3	22.6	22.9	23.2
Revenue Deficit	3.8	3.3	2.9	2.5	2.1	1.7	1.4
Net Lending	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Capital Outlay	3.2	3.5	3.7	3.8	4.0	4.1	4.3
Fiscal Deficit	7.3	7.0	6.7	6.5	6.2	6.0	5.8
Primary Deficit	2.7	2.5	2.3	2.2	2.1	2.0	1.9
Primary Revenue Balance	-0.8	-1.2	-1.6	-1.8	-2.1	-2.3	-2.5
Debt-GDP Ratio	64.9	64.5	63.8	63.0	62.0	61.0	59.9
Nominal Interest Rate	7.9	8.5	8.2	8.1	8.1	8.0	8.0

Scenario 5 - Real GDP growth of 9.5% and Inflation of 6.5%

Parameter	2011	2012	2013	2014	2015	2016	2017
Corporate Income Tax	3.8	4.2	4.7	5.2	5.8	6.5	7.2
Personal Income tax	2.0	2.2	2.4	2.6	2.7	2.9	3.1
Direct Tax	6.1	6.4	7.1	7.8	8.6	9.4	10.3
Indirect Tax	8.7	8.7	8.6	8.6	8.5	8.4	8.3
Tax Receipts	14.7	15.1	15.7	16.4	17.1	17.8	18.6
Non Tax Receipts	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Revenue Receipts	18.4	18.8	19.4	20.0	20.7	21.5	22.3
Non Interest Revenue Expenditure	17.6	17.9	18.1	18.3	18.5	18.6	18.8
Interest Payments	4.7	4.5	4.3	4.2	4.0	3.8	3.5
Revenue Expenditure	22.3	22.4	22.5	22.5	22.4	22.4	22.3
Revenue Deficit	3.8	3.7	3.1	2.4	1.7	0.9	0.0
Net Lending	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Capital Outlay	3.2	3.5	3.7	3.9	4.0	4.2	4.4
Fiscal Deficit	7.3	7.4	7.0	6.5	5.9	5.2	4.5
Primary Deficit	2.7	2.9	2.6	2.3	1.9	1.5	0.9
Primary Revenue Balance	-0.8	-0.8	-1.3	-1.7	-2.3	-2.9	-3.6
Debt-GDP Ratio	64.9	64.0	62.8	61.4	59.5	57.2	54.5
Nominal Interest Rate	7.9	8.7	8.6	8.8	9.1	9.5	10.1

Inputs for Sub-group on Public Sector Draft on Private Sector Saving for the 12th Five Year Plan – Projection on Interest Payments on Government market borrowings- Note from RBI

As desired in the first meeting of *the Sub-group on Public Sector Draft on Private Sector Saving* held on June 3, 2011, this note attempts to project interest payments on market borrowings of Centre and State governments for the 12th Five Year Plan based on stream of interest payments on the outstanding amount of securities as at end-March 2011 as well as likely interest payments which would fall due for payment during the 12th Plan based on an assumed level of fresh market borrowings undertaken during 2011-12 and the 12th Plan.

Yields and Interest Payments on Government market borrowings during the 11th Five Year Plan (FYP) (2007-08 to 2011-12)

The weighted average yields on market loans raised and the total interest payments by Centre and the State governments during the past five years are in Table 1. While Centre's interest payments (IP) as ratio to GDP showed uptrend in the first three years of 11th FYP, there was a moderate fall in the subsequent two years. However, in absolute terms, interest payment increased sharply in 2009-10 and 2010-11. States' IP-GDP ratio remained in the range of 0.41 to 0.56 per cent during the 11th FYP period.

Table 1: Weighted Average Yield on Central and State Government Securities#						
Year	Weighted Average Yield (%)		Interest Payments (Rs. Crore)		As % of GDP	
	States	Centre	States	Centre	States	Centre
2006-07	8.1	7.89	19,392.5	81,230.0	0.45	1.89
2007-08	8.25	8.12	20,477.2	95,822.2	0.41	1.92
2008-09	7.87	7.69	24,886.7	108,349.9	0.45	1.94
2009-10	8.11	7.23	33,236.7	140,612.0	0.51	2.15
2010-11	8.39	7.92	43,852.7	163,608.3	0.56	2.08
2011-12	...	...	47,546.0*	179,290.2	0.53	2.00
# Interest payment (including accrued interest) on market loans only.						
… : Not Available						
* Based on budget estimates of 27 State governments.						

Projected Interest Payments on Central Government's Market Borrowings for the 12th FYP Period

In the context of projecting the interest payments by the Central government on account of market loans, two factors are important, (i) interest payments on already issued market loans and (ii) interest payments on fresh market borrowings which would be raised during the plan period (2012-17). While the coupon rate is known for the already issued market loans (except for floating rate loans), the interest payments on fresh market borrowing are estimated based on an assessment in respect of fiscal balances of the Central government, level of market borrowings and interest rate environment, etc.

Interest payment obligations on existing stock of Central-government securities are estimated using the coupon rate on various dated securities. It may be noted that the rate of interest on floating rate bonds has been fixed by the Reserve Bank at 8.23 per cent per annum for the half year June 21, 2011 to December 20, 2011.[4] This rate is assumed to prevail during 2012-13 and a rate of 8.0 per cent is assumed for the subsequent years of 12th FYP.

As far as the interest component of fresh market borrowings during the 12th FYP period is concerned, the following scenario is assumed:

(i)   For overall macroeconomic scenario, the average rates of growth and inflation are expected to remain at 8.5 and 5.0 per cent, respectively, during 12th FYP period which is one of the five scenarios provided by the Planning Commission. Accordingly the nominal GDP growth under scenario would be around 13.9 per cent.[5]

(ii)   The Central government would undertake fiscal consolidation and contain GFD-GDP ratio to 3.5 per cent by 2013-14 as envisaged under rolling targets. For the period 2014-15 to 2016-17, GFD-GDP ratio is assumed to decline by 0.3 percentage points of GDP each year. Based on the average of 2009-10 to 2011-12 (BE), it is assumed that around 87 per cent of GFD would be financed through market loans.

(iii)   As regards the coupon rate on fresh issuances of the Central government securities during the 12th FYP period, it is assumed that the average coupon rate would be 8.5 per cent for 2012-13, which is expected to gradually decline to 8.0 per cent for 2013-14 and 7.5 per cent each in 2014-15, 2015-16 and 2016-17. For a particular year's issuances, the interest burden is assumed to be only half of the annual interest burden as issuances take place throughout the year.

Based on the above assumptions, the projected interest payments on market loans of Central government are set out in Table 2. It is estimated that interest payments on market loans as ratio to GDP would decline from 2.1 per cent in 2012-13 to 1.6 per cent in 2016-17. Projections of interest payment on market loans of Central government under other scenarios of growth and inflation are provided in Table 4 to 7 along with the assumptions of GFD-GDP ratios and average coupon rates (Annex Statements).

---

[4] The rate of interest on the Floating Rate Bonds, 2020 (FRB, 2020) applicable for the half year June 21, 2011 to December 20, 2011 shall be 8.23 percent per annum.

Nominal GDP Growth = $[\{(1+g)*(1+\prod)\}-1]$, where g implies real GDP growth and $\prod$ is inflation rate.

Table 2: Projected Interest Payments (IP) on Market Loans of Central Government during 12th FYP

8.5% Growth and 5% Inflation (Rs. Crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1. Interest Payment on Existing Mkt. Loans	1,79,290	1,71,662	1,57,229	1,43,657	1,46,275	1,22,908
2. IP on Fresh Mkt. Loans during 12th FYP		44,666	74,373	1,02,434	1,30,611	1,59,544
3. Total IP on Mkt. Loans (1+2)	1,79,290	2,16,328	2,31,602	2,46,092	2,76,886	2,82,452
4. IP as % of GDP	2.00	2.11	1.99	1.85	1.83	1.64
Memo:						
GFD-GDP Ratio	4.6	4.1	3.5	3.2	2.9	2.6
Weighted Average coupon Rate	8.50	8.50	8.00	7.50	7.50	7.50

Note: Interest Payment for 2011-12 are budget estimates.

Based on budget estimates of State governments, GFD-GDP ratio turns out to be around 2.3 per cent during 2011-12. It is assumed that States would be able to contain GFD-GDP ratio to 2.0 per cent in 2012-13 and 1.7 per cent on average during remaining four years of the Twelfth FYP period and around 65 per cent of States GFD would be financed through State Development Loans (SDLs). Assuming a yield spread of 50 basis points between Centre and State government loans, weighted average yield rates of 9.0 per cent and 8.5 per cent are assumed for 2012-13 and 2013-14, respectively, and 8.0 per cent each for remaining three years of 12th FYP. Accordingly, it is estimated that total interest payments (including interest on already issued SDLs and fresh SDLs during 12th FYP) would be in range of 0.5 to 0.6 per cent of GDP during the 12th FYP period (Table 3). Projections of interest payment on State development loans of State governments under other scenarios of growth and inflation are provided in Table 8 to 11 along with the assumptions of GFD-GDP ratios and average coupon rates (Annex Statements).

Scenario I: Real GDP Growth 8.5% and WPI Inflation 5%

Table 3: Projected Interest Payments (IP) on State Development Loans during 12th FYP (Rs. crore)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
IP on already Issued SDLs	47,840	44,609	41,722	40,040	37,748	36,616
IP on Fresh Issuance		18,069	29,529	40,872	53,428	55,649
Total IP	47,840	62,678	71,251	80,912	91,176	92,265
% of GDP	0.5	0.6	0.6	0.6	0.6	0.5
Memo:						
GFD-GDP Ratio	2.30	2.00	1.70	1.70	1.70	1.70
Weighted Av. Coupon Rate	9.00	9.00	8.50	8.00	8.00	8.00

Upside Risks to Market Borrowings during the 12th Five Year Plan Period The Union Budget for 2011-12 has renewed the focus on the process of fiscal consolidation and budgeted a lower GFD at 4.6 per cent of GDP (5.1 per cent in 2010-11 RE). However, the net market borrowing requirements of the Central Government in 2011-12 are budgeted higher than that in 2010-11 (RE). During the 12th FYP period, apart from overall

macroeconomic conditions, there are mainly two factors which would have implications for the level of market borrowings of the Central government. First, whether the Central government would be able to make credible progress in terms of fiscal consolidation during the 12th FYP period. The Central government is expected to put in place the amended FRBM Act during the current financial year. Furthermore, the government's policy towards deregulation of petroleum products (diesel and LPG) and fertilisers, etc would also have implications for overall fiscal deficit and its financing requirements. Second, it may be noted that the obligations on account of repayment of market borrowing of the Central government are expected to increase sharply from 2014-15 onwards. The repayment obligations on account of maturity of Central government securities in 2014-15 would be 76.9 per cent higher than that in 2013-14 which, in turn, would have implications for the level of fresh gross market borrowings and yield rate during the year.

In the case of State borrowings, if the States utilise their available surplus cash balance as recommended by the 13th Finance Commission and if NSSF continues to remain buoyant, the aggregate amount of net market borrowings for 2011-12 could be lower than that raised during 2010-11. However, managing the borrowing programme during the current year as well as in the near future is going to be more challenging for both Centre and States due to the following reasons. As the interest rates look up reflecting inflation and higher policy rates, market borrowings at a lower cost would be difficult. The option for liquidity management through MSS unwinding would not be available. As the private credit demand picks up, crowding out becomes a real possibility. As many banks hold SLR securities in excess of their statutory requirement, investment demand from the banks may be muted.

To sum up, projected interest payments period are based on the assumption of fiscal consolidation and inflation being contained around 5 per cent during the 12th FYP period. Risks to these estimates are on the upside which can be built into alternative scenarios.

****