CHAPTER IV

FISCAL DEFICIT AND ITS FINANCING IN INDIA

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"Fiscal deficits are like obesity. You can see your weight rising on the scale and your clothing size increasing, but these is no sense of urgency in dealing with the problem."

- Martin Feldstein Address to Reserve Bank of India, January 12, 2004

4.1 INTRODUCTION

To designate the deficit budget of the Government the usage of the term fiscal deficit has become very common. The term has been widely used to denote the financial strength of the economy and is actively monitored by economists and analysts. The government also considers this as one of the most important statistic and not only publishes this along with other budgetary numbers but also computes the expected fiscal deficit when it presents its annual budget and moreover provides guidance on what the expected level of fiscal deficit would be for the coming years.

To put simply**,** Fiscal deficit is an "economic phenomenon, where the Government's total expenditure surpasses the revenue generated. It is the difference between the government's total receipts (excluding borrowing) and total expenditure. Fiscal deficit presents a more comprehensive view of budgetary imbalances" (Economy Watch, 2010).

This chapter is further divided into following sections: Section 4.2 helps distinguishing fiscal deficit from other budgetary deficits, Section 4.3 tells us about the introduction of fiscal deficit concept in India, Section 4.4 deals with the concept of fiscal deficit, its meaning, fiscal deficit is good or bad, formula and measurement of fiscal deficit, causes of fiscal deficit and components of fiscal deficit, Section 4.5 depicts the trends of fiscal deficit of central government in India by using time series data of fiscal deficit as percentage of the GDP and helps establishing the relationship between dependent variable (Gross Fiscal Deficit) and independent variables (Revenue Deficit as percentage of GDP and Capital expenditure as percentage of GDP) through regression analysis, Section 4.6 presents the modes of financing fiscal deficit in India and Section 4.7 summarizes the chapter.

4.2 MEANING and TYPES OF BUDGETARY DEFICIT

Budget Deficit is defined as the difference between Government's Total Expenses and Government's Total Receipts, it is also called as Overall Budgetary Deficit. Both Capital Expenditure and Revenue Expenditure are combined as part of Total Expenditure. On the same line, both Capital Receipts and Revenue Receipts are taken into consideration to calculate the Total Receipts.

Overall Budget Deficit = Total Expenditure (Revenue Expenditure + Capital Expenditure) – Total Receipts (Revenue Receipts + Capital Receipts)

Table 4.1 shows the three types of Budget deficit i.e., Revenue Deficit, Fiscal Deficit and Primary Deficit with their formulas (Jain and Ohri, 2010).

Table 4.1 Types of Budget Deficit

Deficit Type	Revenue Deficit	Fiscal Deficit	Primary Deficit
Explanation	Defined as shortage on revenue account i.e. when there is difference between Government's revenue expenditure and Government's revenue receipts, it is known as revenue deficit. The major sources of government's revenue expenditure are the money spent on those items which do not result in asset creation, e.g. Expenses on defense,	Fiscal Deficit aka Gross Fiscal Deficit is the difference between government's total expenses (including loans, net of repayments) and revenue receipts and certain non-debt capital receipts.	It is calculated by taking a difference of fiscal deficit and net interest payment (Interest payments - Interest receipts). Generally, in budgetary documentation interest receipts aren't accounted to obtain a smaller primary deficit.

	law and order, subsidies, civil administration and so on. Whereas sources of government's revenue receipts are tax and non-tax revenues.		
Formula	Revenue Deficit = Revenue expenditure – Revenue receipts	Fiscal deficit = Total Expenditure – Revenue receipts – non-debt capital receipts	Primary Deficit = Fiscal deficit – Interest payment

Source: Researcher's own Compilation.

4.3 INRODUCTION OF FISCAL DEFICIT CONCEPT IN INDIA

Until 1991-92, deciphering the fiscal deficit itself required some effort, if not research. The Budget document of the Central Government also did not even report the fiscal deficit figure. What was reported was the 'budgeted' or uncovered deficit, which was the "excess of total expenditure (both revenue and capital) over total receipts (both revenue and capital). This gap is financed by the issue of 91-day Treasury Bills (including ad hoc Treasury Bills held by the RBI), and draw down of cash balances", as stated in Explanatory Note to Budget at a Glance, 1996-97, p.16 (as cited in Narayan 2006).

The Sukhamoy Chakravarty Committee (1982-1985) presented a report on the "Review of the Working of the Monetary System in India" and recommended that "the fiscal deficit rather than the uncovered deficit more accurately represented the Government's draft on credit available in the economy." Six years later, fiscal deficit made its first appearance in the Economic Survey 1990-91, under the shadow of the impending IMF structural adjustment programme in 1991, by the then Finance Minister, Dr. Manmohan Singh and later its way into Central Government Budget documents ultimately in 1991-92. The Explanatory Note to the Budget at a Glance in 1991-92 stated: "From this year the document shows, apart from revenue deficit and overall budgetary deficit, the fiscal deficit also. Fiscal deficit is the difference between the revenue receipts (plus certain non-debt capital receipts) on the one hand and the total expenditure including loans, net of repayments (Narayan, 2006)."

4.4 CONCEPT OF FISCAL DEFICIT

4.4.1 Meaning and Definition of Fiscal Deficit

In layman terms, if the Government spends more than it earns we have a situation which is called fiscal deficit. Fiscal deficit measures the indebtedness of the government and throws light on the extent to which the government exceeds its means. Thus it is the sum of budgetary deficit together with government's market borrowings and liabilities undertaken.

To explain from a different perspective the government expenditure is financed partly from the receipts and for the balance the government may be required to borrow or incur dis-savings. This portion of government expenditure which is financed by borrowings and drawing down of cash balances is referred to as the fiscal deficit.

The size of a country's fiscal deficit would depend upon the objectives that economy sets to achieve by undertaking the deficit. Thus for a meaningful comparison country's fiscal deficit is usually communicated as a percentage of its gross domestic product (GDP).

According to Dasgupta and De, 2011 (as cited in De, 2012), "The gross fiscal deficit (GFD) of government is the excess of its total expenditure, current and capital, including loans net of recovery, over revenue receipts (including external grants) and non-debt capital receipts." The net fiscal deficit is the gross fiscal deficit reduced by net lending by government.

4.4.2 Is Fiscal Deficit Good or Bad?

Common understanding is that any kind of deficit is generally unwelcome, however there economists have had mixed views. Economist's basis their empirical studies haven't been able to reach a common ground on whether incurring a fiscal deficit i.e. financing of government expenditure is good, bad, or neutral. Economists focused their studies towards analysing the real effects of fiscal deficit on growth and investment (Mohanty, 2013).

Broadly, the schools of thought covering the economic effects of budget deficits can be spelt out as Neoclassical, Keynesian and Ricardian (Bernheim, 1989). The neo-classical view considers fiscal deficit to have negative effect on investment and growth, while in the Keynesian theory, it constitutes a key policy instruction. Theorists of Ricardian school of thought contend that fiscal deficits have no material impact except for smoothening the adjustment to expenditure or revenue shocks. The neo-classical and Ricardian schools emphasize on the long run, the Keynesian view emphasizes on the short run effects (Rangarajan and Srivastava, 2005).

Neo Classical View of Fiscal Deficit

Keynesian View of Fiscal Deficit

Ricardian View of Fiscal Deficit

4.4.2.1 The Neo-Classical View

Revenue expenditure not provided by the revenue receipts would imply a decrease in the government's level of savings or an increase in its dis-savings. The neo-classical perspective opines that the fall in government's savings if not met by an equivalent rise in private savings would lead to decrease in the overall savings rate. Lower savings rate would lead to higher interest rate and thus lower credit off take which will in turn adversely affect growth. The neo-classical theorists assumed that markets are clear and in economy full employment level is attained. Thus, fiscal deficit would lead to higher consumption by transferring the burden of taxes to the future generations. In a closed economy with full employment level, increased consumption would lead to lower savings and in an open economy with lower domestic savings would be financed by external borrowing which would further lead to appreciating currency and lower export revenues. Thus either ways the fall of savings would be followed by a certain combination of fall in investments and/or exports. Neo-classical approach is based on the assumption that individuals can borrow and lend at market rates and can optimize consumption over time periods. Another of their assumption is that people in each generation have finite life spans and the life spans of succeeding generations overlap.

4.4.2.2 Keynesian View of Fiscal Deficits

In the framework that the economy is short of full employment level, the Keynesian view articulates that a rise in the autonomous government expenditure either investment or consumption, financed through borrowing will lead to an increase in output through a multiplier process. Traditional Keynesian theory is agnostic to the use of fiscal deficit between investment expenditure or consumption and also does not differentiate among the sources of financing the deficit, be it through internal borrowing, external borrowing or through monetization.

Subsequent works along the Keynesian proposition argued that an increase in output would lead to increased demand for money and if at all the fiscal deficit is financed using borrowings then then the overall interest rate level in the economy will rise which shall partially offset the multiplier effect.. The Keynesians responded to this by stating that increase in aggregate demand brought from the functioning of the multiplier effect would raise the profitability for private investors enough to compensate for the increased interest rates.

Keynesian loyalists also put forth the argument that since there exist unutilised resources in the economy, the deficits would lead to higher savings and increased returns on investment. However in an economy at full employment fiscal deficit may lead to crowding-out of private investments.

4.4.2.3 Ricardian Equivalence Perspective

According to the Ricardian equivalence, fiscal deficits are considered to have no positive or negative impact on growth. The theory says that deficits in the long run will be recovered through taxes, thus financing of deficits only leads to postponement of taxes. Mathematically, the current period deficit is equal to the present value of the future taxes such that it pays off the additional debt arising from the deficit. In other words, the deficit must be paid off through taxes either today or tomorrow or later. From another perspective the government may be required to incur certain capital or revenues exceptional expenses in certain periods, financing these in the same period may have uneven taxes across years, by being able to borrow now and recover later the government smoothens the tax impacts. The approach further considers consumption as a function of present value of future incomes reduced present value of future taxes. Thus a potential deficit will be offset by a higher private savings, thereby leaving the aggregate level of savings unchanged. This implies that there is no effect on the real interest rate.

Ricardian equivalence assumes that individuals are foresighted having visibility of their future incomes, future tax rate and tax liabilities. The time horizon may extend well beyond the individuals life span in which case they save with a view to making altruistic transfers to take care of the tax liabilities of their future generations. Further they are able to freely lend and borrow at the same rate as the government. The theory has been criticised for its extremely perfect world assumptions.

Table 4.2 summarizes the main differences in these alternative paradigms.

Table 4.2 Fiscal Deficit and the Schools of Thought

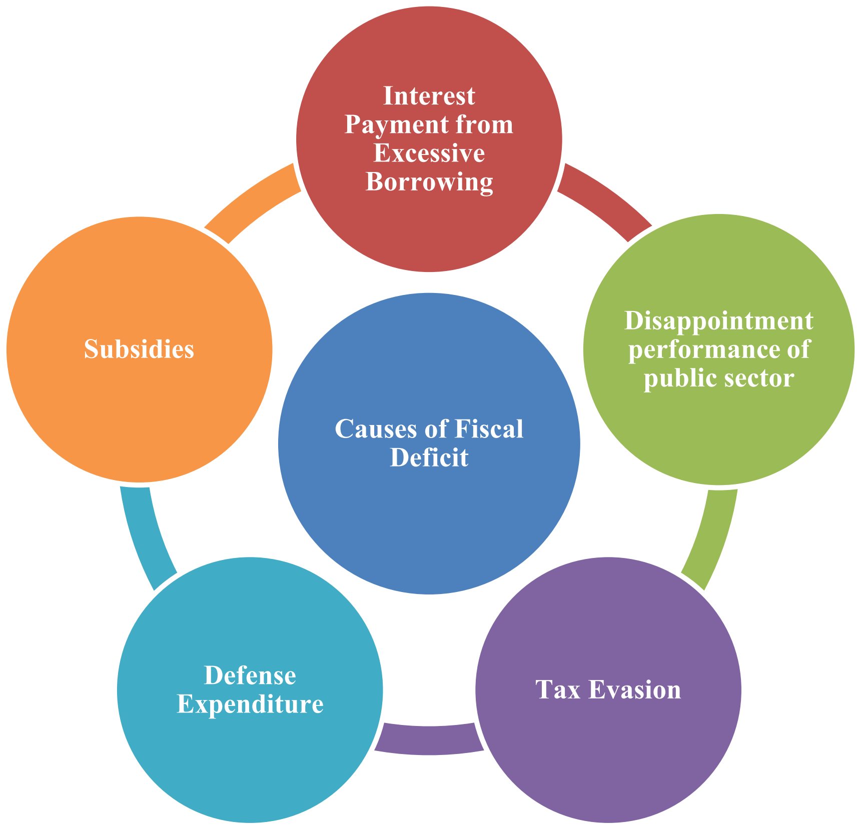
	Neo-Classical	Ricardian	Keynesian
Consumers	Finite, life-time horizon	Infinite time perspective through altruistic transfers	Myopic, liquidity constrained
Effects of a deficit based cut on private saving	Private saving would fall	Private saving remains unaffected	Aggregate demand increases
Employment of resources	Full employment	Full employment	Resources not fully employed
Effect on interest rate	Interest rate increases	No effect	Interest rate increases
Contention	Fiscal deficits detrimental	Fiscal deficits irrelevant	Fiscal deficits beneficial

Source: Researcher's own Compilation.

4.4.3 Causes of Fiscal Deficit

Generally fiscal deficit takes place either due to revenue deficit or a major hike in capital buildings. While capital expenditure is towards creation of capital assets that are expected to yield benefits in the long term, the revenue deficit leads to no addition in the asset base and is simply an added burden. The major causes of fiscal deficit other than capital expenditure are as follows (Figure 4.1).

Figure 4.1 Causes of Fiscal Deficit



Source: Researcher's own Compilation

4.4.3.1 Interest payment from excessive government borrowings

One of the major constituents of the government's revenue expenses is the interest payment for the loans from internal and external sources. These loans have amplified to a great extent over past few decades which has resulted in increased interest burden on government.

4.4.3.2 Disappointing Performance of Public Sector

Poor performance of some of the units in the public sector because of factors like corruption, excess unskilled inefficient staff and political interference etc. means that the government is unable to get a return on its capital and in fact has to take up the losses from the inefficiency, thereby putting pressure on its revenue budgets.

4.4.3.3 Tax Evasion

While the government over the years has attempted to simplify the tax structure, lower the tax rates and widen the tax net, still there is significant evasion of taxes thus resulting in loss to the government ex-chequer.

4.4.3.4 Defense Expenditure

Security concerns at the borders and terrorism have meant that that government has very little room to reduce the defense budget. Further constant improvement in technology has meant replacing the old equipment with the new also adds to the revenue deficit.

4.4.3.5 Subsidies

While the government has made efforts over the years in reducing the subsidy quantum, still there exists various subsidies on various commodities like on LPG, on petrol/ diesel, on food items and agriculture which are though required for public welfare but have no corresponding benefit to the government on the receipt side.

4.4.4 Formula and Measurement of Fiscal Deficit

While we have seen the definition of Fiscal Deficit, let us now see its component wise break down. The same can be better understood in terms of a mathematical equation, which is as follows;

Fiscal Deficit = Total Expenditure – Total Receipts other than Borrowings

By expanding the term Total Expenditure as Revenue Expenditure and Capital Expenditure and Total Receipts as Revenue and Capital Receipts, we can rewrite the above formula as:

Fiscal Deficit = (Revenue Expenditure + Capital Expenditure) – (Revenue Receipts + Capital Receipts other than borrowings)

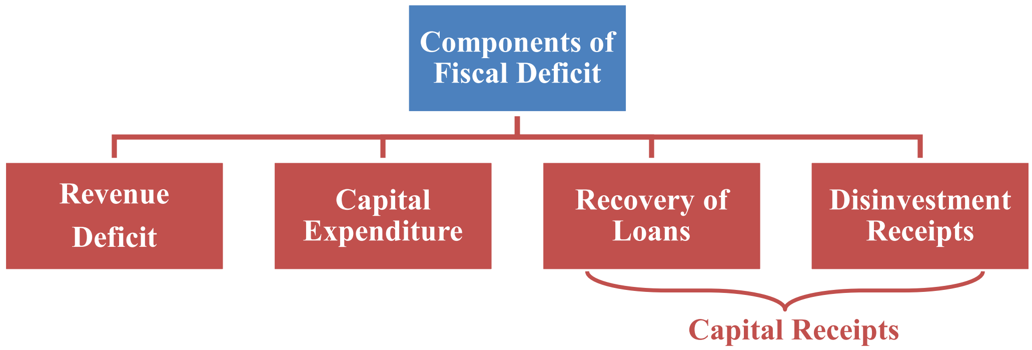
Now by rearranging the terms:

Fiscal Deficit = (Revenue Expenditure - Revenue Receipts) + Capital Expenditure - (Recoveries of loans + other Receipts)

4.4.5 Components of Fiscal Deficit

Out of the four components identified in the Figure 4.2, Revenue Deficit and Capital Expenditure are the more significant ones, we shall look at them in a greater detail in the ensuing paragraphs.

Figure 4.2 Components of Fiscal Deficit in India



Source: Researcher's own Compilation

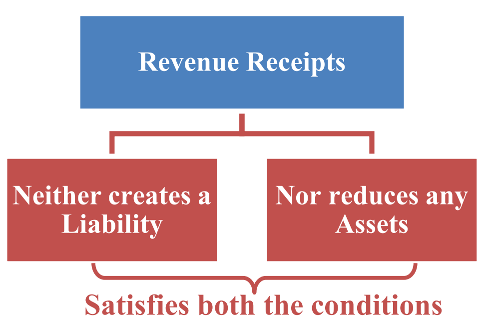
4.4.5.1 Revenue Deficit

In simple words it is defined as difference of revenue expenditure from revenue receipts. Governments' revenue deficit is the gap between the current (revenue) expenses and total current receipts, where borrowing are not included in current receipts. It has two components revenue receipts and revenue expenditure.

4.4.5.1.1 Revenue Receipts

This is an annual recurring revenue that central government makes on regular basis with its standard activities. Any income created from sale of assets is not accounted as revenue receipts since revenue receipts never results in asset reduction or liability creation. For any receipt to be considered as revenue receipt, the below two conditions as shown in Figure 4.3 should be met.

Figure 4.3 Two Conditions of Revenue Receipts



Source: Researcher's own Compilation

(i) It should never result in Government's Asset reduction. A receipt from disinvestment from a public organization is not a revenue receipt since the disinvestment is from sale of an asset i.e. it results in lessening of Government Assets.
(ii) It should never result in Government's Liability addition like income collected from government imposed taxes are revenue receipts. Whereas Government borrowing are not revenue receipts since it results in creation of liability of repayment.

Sources of Revenue Receipts

We can classify government's revenue receipts in two major sources:

- Tax Revenue and
- Non-Tax Revenue

Tax Revenue

It is defined as the cumulative income received by government from the levied taxes and other duties. Every applicable entity i.e. Individual or Company has an obligation to pay taxes to the government without mention of any direct value i.e. there are two characteristics of taxes:

- Tax is an obligation and no one can deny to pay it, tax defaulters have to face strict legal actions;
- Tax payer cannot expect a guaranteed direct benefit in return. This income is spent by the government for common welfare of the people of the nation.

Income from taxes is the prime source of regular revenue receipts for the government as it collects variety of taxes from various avenues. This income is used to meet its day-to-day expenditures.

There are 2 types of Tax Revenues

- Direct Taxes
- Indirect Taxes

Direct Taxes:

It is defined as taxes which are levied on incomes and property of a company or an individual. These are direct in nature since they are to be paid directly to the government. The same person (Individual/ Companies) bears the 'liability to pay' the tax (i.e. impact) and 'actual burden' of the tax (i.e. incidence), i.e. its burden cannot be shifted to others, like in case of income tax, the liability to pay tax and 'actual burden' is on the same person on whom it is levied. These taxes directly control the buying power of nation's population which directly controls the demand levels in the country. Some Direct taxes are- Corporate tax, Income tax, Wealth tax, Interest tax, Death duty, Capital gains tax.

Indirect Taxes:

While direct taxes affects the income and property of individuals and companies directly, indirect taxes affects them through individuals and companies consumption expenditure. These are applied on goods and services.

Different person can bear the 'liability to pay' the tax (i.e. impact) and 'actual burden' of the tax (i.e. incidence), i.e. tax burden can be moved to others. Like in case of sales tax, seller has the liability to pay taxes to the government (i.e. impact) but the 'actual burden' (i.e. incidence) is on customers since the same gets added to the invoices which is paid by customers. Some Indirect taxes are Service tax, Sales tax, VAT, Custom duty, Excise duty, etc.

Although like Direct taxes, Indirect taxes are also compulsory payments but they can be avoided by using alternate transaction which have no indirect taxes applicable. For example, purchase of fabrics/clothes from Khadi Gram Udyog carries no indirect taxes.

Non-Tax Revenue:

All Government revenue receipts from all avenues except tax receipts are considered as Non-Tax Revenue. These are variety of such avenues like:

Interest Income:

Central Government gives loans to Public, Private, State Government and Union Territories etc. and receives interest on these loans, which becomes a vital source of non-tax revenue.

Fines and Penalties:

This is another source of government revenue which is levied on law breakers. They vary from violating a traffic signal to fines levied on fraud/cheating etc. Fines and taxes are different to each other since Fines are imposed to maintain law and order, on the other hand taxes are to generate revenue.

License Fee:

As the name suggest, this fee is charged to obtain a license for something. Fees paid for permission of keeping a gun or to get a National Permit for commercial vehicles are few examples.

Profits and Dividends:

Government runs many public sector organizations like Indian railways, BHEL, etc. and it gets profits from their operations. Sometimes government also sells stake in such enterprises and earns profit. Also Government earns dividend from the stakes it has in other companies.

Fees:

Government apply fee charges to cover the cost of regular services that it provides. These fees are paid by people who avail these services. These are also mandatory charges like tax and if someone avails these services they have to pay the charges e.g. court fees, property registration fees, import fees, etc.

Gifts and Grants:

Government mainly gets revenue under this head during catastrophes like flood, war etc. since many institutions like foreign government, international organization, individual and companies willingly give money to the Government.

Escheats:

When a person, who doesn't have any inheritor, dies then Government has the prerogative on the property.

Forfeitures:

These charges are levied by courts when the courts orders are not complied like non fulfilment of contracts etc.

Special Assessment:

When there is sudden rise in property value due to the developmental activities carried by the government then government can ask owners to make some payment like many times when a Metro Station is constructed the value of the property increases, then government recovers some development expenses from the owners in form of special assessment.

4.4.5.1.2 Revenue Expenditure

Similar to revenue receipts, revenue expenditure can also be identified using thumb rule that if an expense that doesn't result in Asset creation or Liability reduction then that expenditure is categorized as Revenue Expenditure. Few examples are employee salaries, pension, interest payment on past debt, rural development, grants and subsidies etc. Such expenses are funded from Government revenue receipts. As per above examples, we can see that revenue expenditure are incurred by Government for normal running of the government departments and maintenance of services.

These are repetitive expenses which are incurred every year for short periods whereas capital expenditure are non-recurring long period expenditures. The objective of such revenue expenditure is to ensure the routine functioning of government and not to build any capital asset. Point to be noted that all grants that central government gives to state governments are categorized as revenue expenditure however some of these grants may result in asset creation.

4.4.5.2 Capital Expenditure

The thumb rules for identifying capital expenditure are exactly the opposite of those required to identify revenue expenditure. Capital expenditure always result in either asset creation or liability reduction. Capital expenditure for asset creation are expenses on acquisition of land, buildings, machinery, investment in shares, loans by Central government to state government, foreign governments and government companies, cash in hand and acquisition of valuables.

Capital expenditures are incurred on development programs, creation of financial or physical assets that meant to provide benefits for a long period of time. This type of expenditure leads to capital formation and increases the economy's capacity to raise output in the future. Construction of roads, bridges, dams, setting us of public sector enterprises could be regarded as capital expenditures.

Capital expenditure for liability reduction is repayment of loan. Government funds these expenditures from the capital receipts including transfer of capital from rest of the world.

4.5 TRENDS OF FISCAL DEFICIT IN INDIA

We shall now visit the trends of fiscal deficit in India. While our focus shall be fiscal deficit but for an overall perspective we will briefly touch upon the revenue and primary deficits as well.

To understand the trends in a better way we have divided the trends into three parts: Era of Pre Liberalisation (1980-81 to 1990-91), Post Liberalisation and till FRBM Act (1990-91 to 2002-03) and Post FRBM Act, 2003 till 2015-16.

4.5.1 Era of Pre-Liberalisation, 1980-81 to 1990-91

While India is considered a mixed economy, until 1990-91 the balance of the economic structure was titled more towards socialism. The vision of the policy makers had that post-independence the country needed significant expenditure into key long term industries and projects which the private sector may not undertake as these initiatives had long gestation period. Also in order to be in control of economy the government policies restricted the private sector in engaging into certain strategic sectors such as banking, civil aviation, mining etc.

As a result of a protectionist approach most of the capital expenditure was being funded by the government sector and it's funding for these put a lot of burden on the government to continue incurring capital expenditure and thereby running high level of fiscal deficit.

Table 4.3 and Figure 4.4 show that from the period 1980-81 to 1990-91, the fiscal deficit of the Central Government rose sharply from 5.55% of GDP in 1980-81 to 8.13% in 1986-87 and stood at 7.61% of GDP in 1990-91. This period witnessed rapid deterioration of the fiscal balances largely attributable to unchecked growth of non-planned revenue expenditure particularly on interest payments and subsidies rose sharply during 1980s.

With respect to the revenue deficit, as the higher interest payments led revenue deficit as percentage of GDP to increase from 1.36% in 1980-81 to 2.48% in 1987-88 to and to 3.17% in 1990-91.

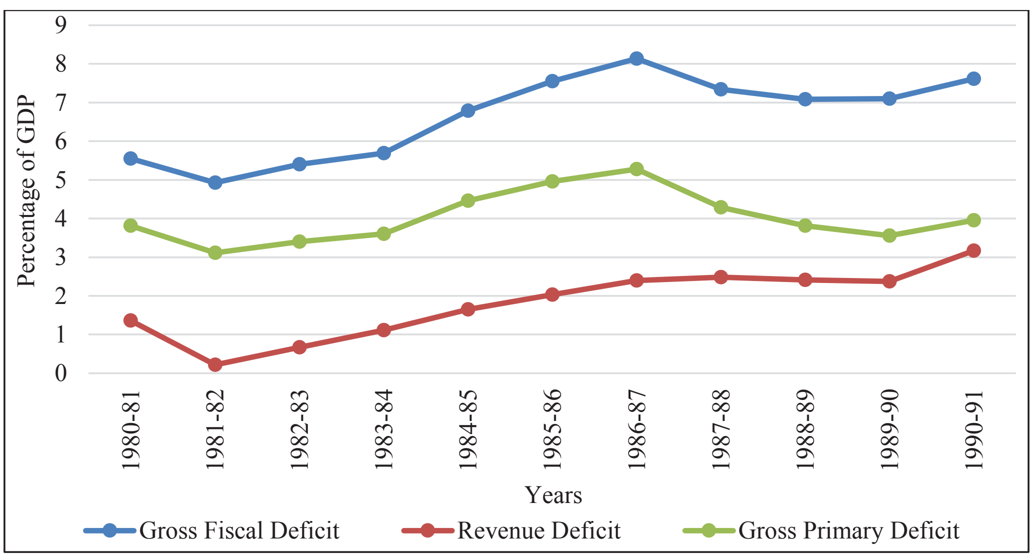
Table 4.3 Deficits of the Central Government as Percentage of GDP (1980-81 to 1990-91)

Years	Gross Fiscal Deficit	Revenue Deficit	Gross Primary Deficit
1980-81	5.55	1.36	3.81
1981-82	4.93	0.22	3.11
1982-83	5.4	0.67	3.4
1983-84	5.69	1.11	3.6
1984-85	6.79	1.65	4.46
1985-86	7.55	2.03	4.96
1986-87	8.13	2.4	5.28
1987-88	7.34	2.48	4.29
1988-89	7.08	2.41	3.81
1989-90	7.1	2.37	3.56
1990-91	7.61	3.17	3.95

Source: Select Fiscal Indicators of the Central Government, (As percentage of GDP), Handbook of Statistics on Indian Economy 2014-15, Reserve Bank of India.

Notes: 1. Data for 2014-15 are revised estimates and 2015-16 are budget estimates.
2. Negative (-) sign indicates surplus.

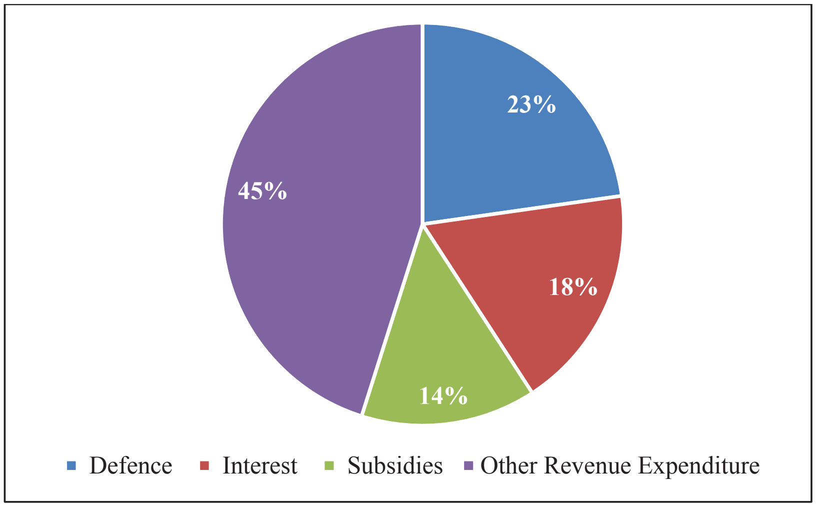
Figure 4.4 Trends of Deficits of the Central Government as Percentage of GDP (1980-81 to 1990-91)



Source: Researcher's own compilation based on Table 4.3

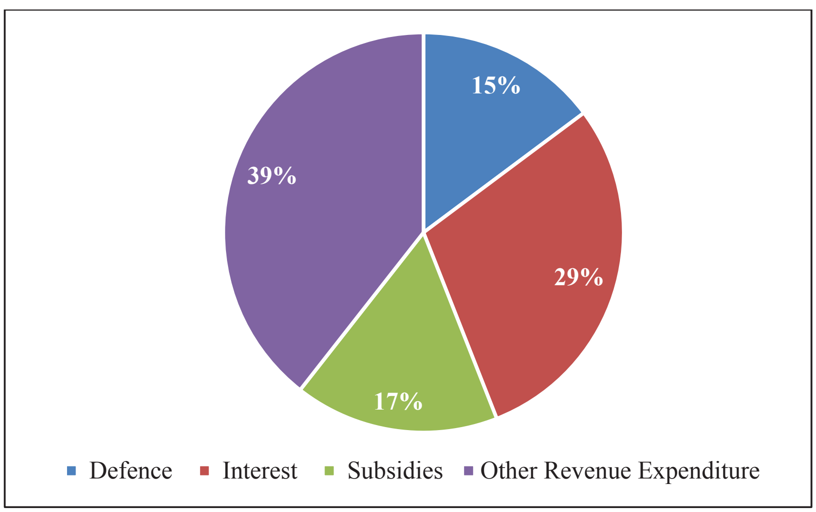
During the period 1980-81 to 1990-91, the contribution of interest payments and subsidies as percentage of the revenue expenditure rose from 18% and 14% in 1980-81 to 29% and 17% in 1990-91 respectively. For the same period, the contribution of defense and other revenue expenditure has declined from 23% and 45% in 1980-81 to 15% and 39% in 1990-91 respectively (Figure 4.5(a) and 4.5(b)).

Figure 4.5(a) Composition of Central Government Revenue Expenditure (1980-81)



Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India.

Figure 4.5(b) Composition of Central Government Revenue Expenditure (1990-91)



Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India.

Fiscal deficit is also related to the revenue deficit through capital expenditure and capital receipts. With government holding and taking the onus of building the capital intensive projects, the gap between the fiscal and revenue deficit stood at 4.19 percentage points in 1980-81 and rose to 4.44 percentage points in 1990-91(Figure 4.4).

Since the major rise in the deficits during the decade beginning 1981 was on account of debt servicing, the primary deficit did not go up significantly. As a percentage of the GDP primary deficit changed from 3.81% in 1980-81 to 3.95% by 1990-91. In that period it spiked up to 5.28% in 1986-87 (Figure 4.4).

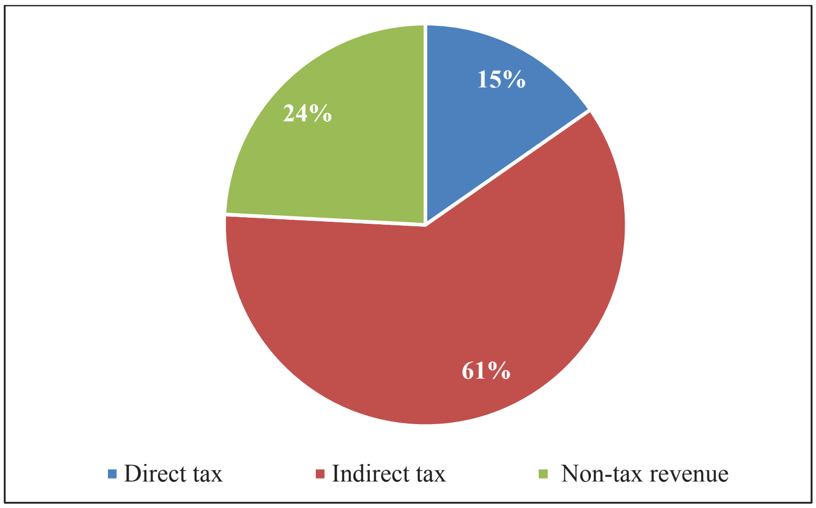
4.5.2 Post Liberalisation, 1990-91 till FRBM Act, 2002-03

By 1990-91 the Indian economy was quite weak, it was burdened with heavy debt rising interest costs and deficits. India traditionally had a current account deficit with significant portion of the imports being that of oil and petroleum products. The weak economic situation further worsened with the Gulf-war which led to rise in oil prices coupled with drying up of credit lines and investors pulling out money. The country's foreign exchange reserves had depleted significantly and the level of reserves was only sufficient to finance imports of another three weeks (Karunagaran, 2011). India had to arrange for emergency funds from the IMF to avoid default on external obligations. In response to the crisis the government headed by Prime Minister Narasimha Rao commenced on the path of economic liberalisation whereby the economy was opened up to foreign investment and trade, the private sector was encouraged and the system of quotas and licenses were dismantled. Fiscal policy was re-oriented to cohere with these changes. In order to augment the receipts the government undertook to reform both the direct and indirect taxes and for the first time the country embarked on the policy of disinvestment.

The measures proposed above to meet the crisis are often referred to as the New Economic Policy of 1991. These measures could broadly be classified under three heads viz. liberalisation, privatisation and globalisation. Under liberalisation many industries were freed from the licensing requirement, the investment limit in small scale industries was enhanced, free determination of interest rates by commercial banks and abolition of restrictive trade practices. With privatisation, the government invited the private sector to own and manage part of Public Sector Enterprises. And among the measures for globalisation included reducing tariffs, partial convertibility of the currency and increasing limits of foreign investment in India.

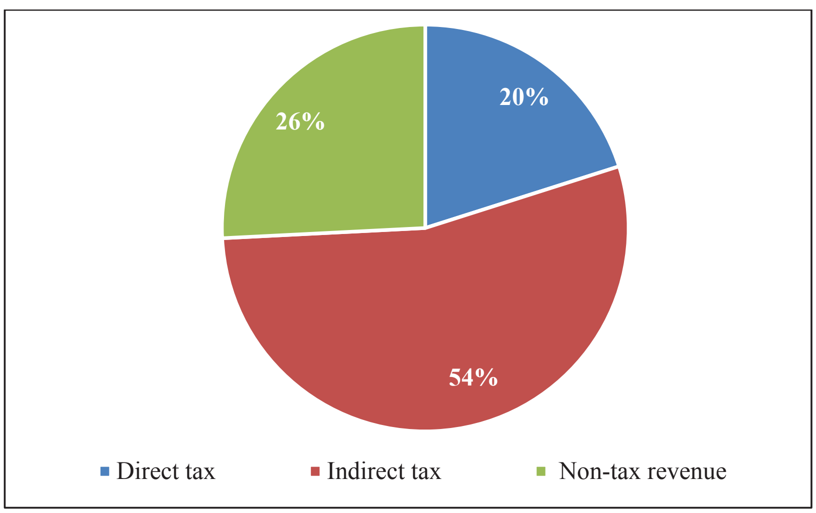
In addition to the above, the government also brought in reform in the tax structure and reduce the non-capital expenditure like subsidies. The reforms were calibrated to bring about revenue neutrality in the short term and to enhance revenue productivity of the tax system in the medium and long term. The overall thrust was to decrease the share of trade taxes in total tax revenue, increase the share of domestic consumption taxes by transforming the domestic excises into a VAT, and increase the relative contribution of direct taxes. The share of direct taxes as part of total revenue receipts rose from 15% in 1991-92 to 20% in 1996-97 and to 26% in 2000-01, correspondingly the share of indirect taxes fell from 61% in 1991-92 to 54% in 1996-97 and to 45% in 2000-01, the same is brought out in the following figures (Figure 4.6(a), 4.6(b) and 4.6(c)).

Figure 4.6(a) Percentage Composition of Revenue Receipts of Central Government (1991-92)



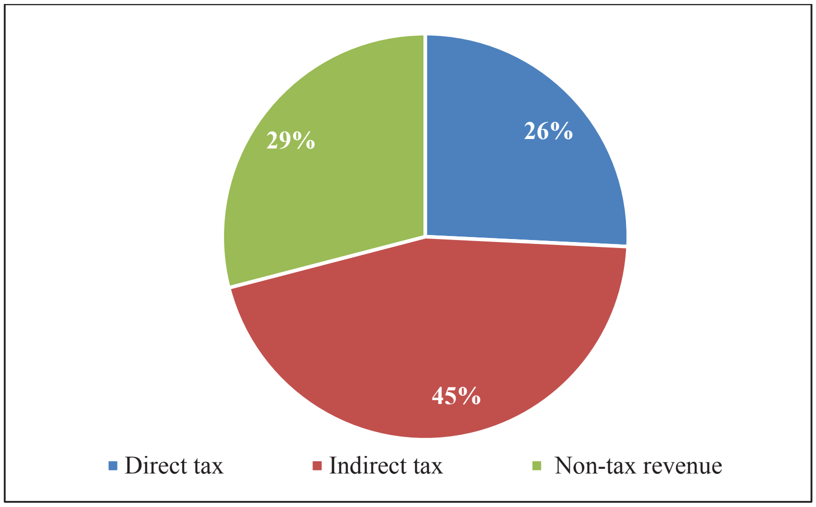
Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.6(b) Percentage Composition of Revenue Receipts of Central Government (1996-97)



Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

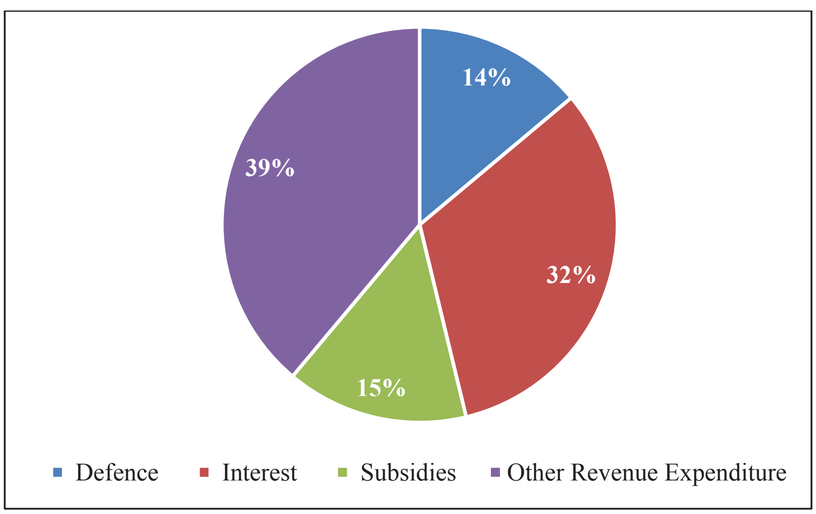
Figure 4.6(c) Percentage Composition of Revenue Receipts of Central Government (2000-01)



Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

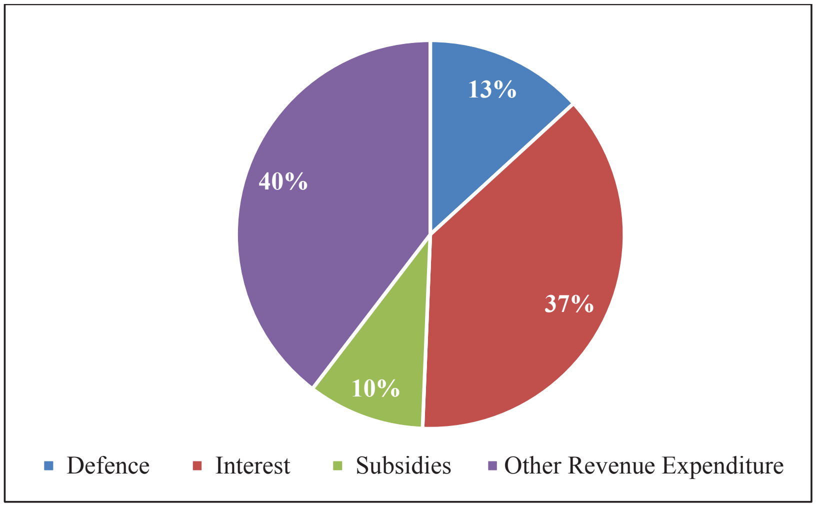
Correspondingly significant efforts were also made to reduce subsidies and cut down the non-capital expenditure. However, given the large debt burden meant that the interest component would not reduce significantly or at a rapid pace as desired. The proportion of interest to total revenue expenditure rose form 32% in 1991-92 to 37% in 1996-97 and stood at 36% in 2000-01, over the same period share of subsidies fell from 15% in 1991-92 to 10% in 1996-97 and was maintained at 10% in 2000-01 (Figure 4.7(a), Figure 4.7(b) and 4.7(c)).

Figure 4.7(a) Composition of Central Government Revenue Expenditure (1991-92)



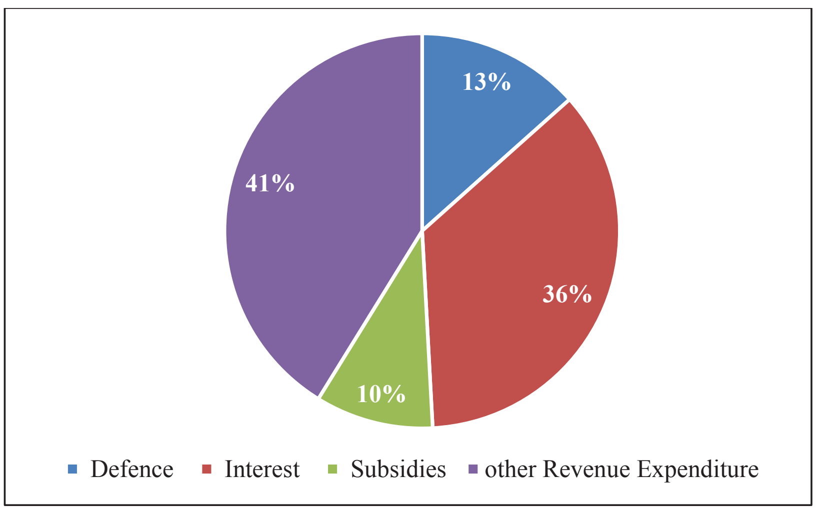
Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.7(b) Percentage Composition of Revenue Expenditure of Central Government (1996-97)



Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.7(c) Percentage Composition of Revenue Expenditure of Central Government (2000-01)



Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

The economic policy had fairly significant positive impacts on the revenue and primary deficits as well. The new economic policy brought with itself a fresh approach, the government not only liberalised the licensing it also began with the disinvestment of the public enterprises and it's holding. This had a twin effects; firstly, it lead to lowering the capital expenditure and secondly, it increased the capital receipts. Thus post 1991 there was steady decline in the primary deficit as percentage of GDP, it fell 3.95% in 1990-91 to 0.51% in 1996-97. However the interest burden continued to mount and thus the difference between the fiscal and primary deficits rose from 3.66 percentage points in 1990-91 to 4.19 percentage points in 1996-97 (Table 4.4 and Figure 4.8).

Table 4.4 Deficits of the Central Government as Percentage of GDP (1990-91 to 2002-03)

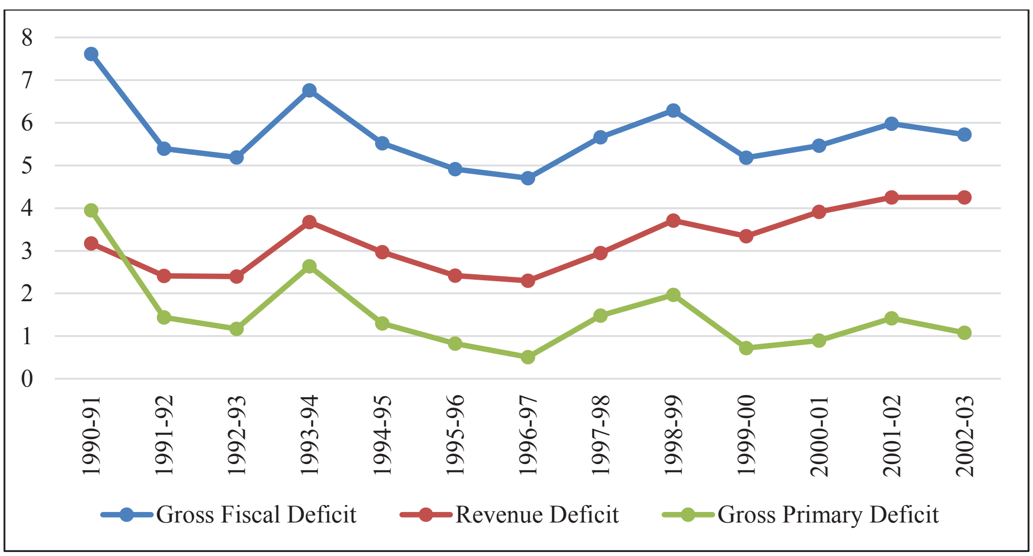
Years	Gross Fiscal Deficit	Revenue Deficit	Gross Primary Deficit
1990-91	7.61	3.17	3.95
1991-92	5.39	2.41	1.44
1992-93	5.19	2.4	1.17
1993-94	6.76	3.67	2.64
1994-95	5.52	2.97	1.3
1995-96	4.91	2.42	0.83
1996-97	4.7	2.3	0.51
1997-98	5.66	2.95	1.48
1998-99	6.29	3.71	1.97
1999-00	5.18	3.34	0.72
2000-01	5.46	3.91	0.9
2001-02	5.98	4.25	1.42
2002-03	5.72	4.25	1.08

Source: Select Fiscal Indicators of the Central Government, (As percentage of GDP), Handbook of Statistics on Indian Economy 2014-15, Reserve Bank of India.

Notes: 1. Data for 2014-15 are revised estimates and 2015-16 are budget estimates.

2. Negative (-) sign indicates surplus.

Figure 4.8 Trends of Deficits of the Central Government as % of GDP (1990-91 to 2002-03)



Source: Researcher's own compilation based on Table 4.4

The revenue deficit also experienced a positive impact courtesy the revised tax structure and controlled subsidy expenditure. As percentage of GDP the revenue deficit fell from 3.17% in 1990-91 to 2.3% in 1996-97. Falling capital requirements and rising capital flows caused the gap between fiscal and revenue deficits to narrow down, it reduced from 4.44 percentage points in 1990-91 to 2.4 percentage points in 1996-97.

As seen, from the high 7% in the latter end of 1980s the fiscal deficit measure reduced to 5.4% in 1991-92 and the downward trend continued up to 1996-97 when the fiscal deficit stood at 4.7% of GDP. Since 1997-98, fiscal deficit had again started increasing. It stood at 5.5% in 2000-01 (Table 4.4 and Figure 4.8).

The period from 1996-97 to 2002-03 was characterized by large rise in public debt involving large interest payments year on year which led to the diversion of resources from investment to debt servicing.

Reviewing the Indian growth scenario World Bank Study, 2004 concludes "Interest payments consumed less than 20% of total revenues in the pre-crisis period, compared with over 30% during the Ninth Plan period (1997-2002). Revenue deficits doubled from less than 3% in the second half of the 1980s to 6% during the Ninth Plan period and beyond representing deterioration in the fiscal stance with spending on social and physical infrastructure crowded out by rising interest and other current payments."

Fall out of the Asian crisis of 1996-97 which gridlocked cheaper money from external sources, the high and rising fiscal deficits during the period from 1996-97 to 2002-03 which resulted in larger government borrowings from the market. The government incessantly tapped the markets for borrowings and this left very little funds available for the private sector investment. This is often referred to as the 'crowing-out' effect and was one of the major reasons for slowdown in economic growth.

Now the economy was literally strapped for fresh investment, on one hand the government vide its economic policy had taken the stance of reducing the role of public sector and encourage private sector and on the other hand the private sector was not able to access the resource pool as the government was utilising most of resources for funding the revenue deficits. Moreover, given the high deficits the government could not afford to undertake investments on its own. The focus at that time was to reduce the fiscal deficit and not increase it. As the interest burden rose the primary deficit as percentage of GDP fell from 1.48% in 1997-98 to 1.08% in 2002-03. The revenue deficit over the same period rose from 2.95% in 1997-98 to 4.25% in 2002-03 (Table 4.4 and Figure 4.8).

To summarize the fiscal deficit situation from 1980 to 2002; Indian economy faced with the problem of large fiscal deficit and its monetization spilled over to external sector in the late 1980s and early 1990s. The large borrowings of the government led to such a precarious situation that government was unable to pay even for three weeks of imports resulting in economic crisis of 1991. Consequently, Economic reforms were introduced in 1991 and fiscal consolidation emerged as one of the key areas of reforms. After a good starting the early nineties, the fiscal consolidation faltered after 1997-98. The fiscal deficit started rising after 1997-98. The Government introduced Fiscal Responsibility and Budget Management (FRBM) Act, 2003 to check the deteriorating fiscal situations.

4.5.3 Post Fiscal Responsibility and Budget Management (FRBM) Act, 2003 till 2015-16

Fiscal Responsibility and Budget Management (FRBM) bill introduced in Parliament in December 2000 in order to restore fiscal discipline. The bill was referred to the Parliamentary Standing Committee on Finance, which suggested some changes in the original draft. On the recommendation of the Standing Committee, necessary amendments were made in the FRBM Bill April 2003 and after being passed by both the Houses of Parliament, it received the assent of the President on August 26, 2003. The Fiscal Responsibility and Budget Management (FRBM) Act, 2003, was brought into force on July 5, 2004.

FRBM Act gave a medium term target for balancing current revenues and expenditures and set overall limits to the fiscal deficit at 3% of GDP to be achieved according to a phased deficit reduction roadmap. The FRBM Act enhanced budgetary transparency by requiring the government to place before the Parliament on an annual basis reports related to its economic assessments, taxation and expenditure strategy and three-year rolling targets for the revenue and fiscal balance. It also required quarterly progress reviews to be placed in Parliament.

The Act aimed at reducing the gross fiscal deficit by 0.5% of GDP in each financial year beginning on April 1, 2000. As a result of the efforts taken, fiscal deficit as a proportion of GDP started declining.

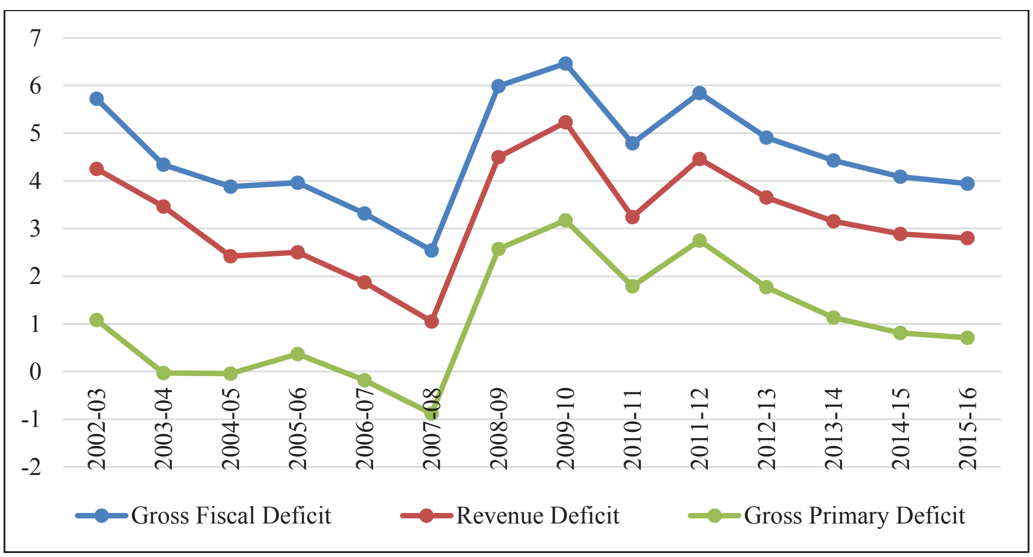
Table. 4.5 Deficits of the Central Government as Percentage of GDP (2002-03 to 2015-16)

Years	Gross Fiscal Deficit	Revenue Deficit	Gross Primary Deficit
2002-03	5.72	4.25	1.08
2003-04	4.34	3.46	-0.03
2004-05	3.88	2.42	-0.04
2005-06	3.96	2.5	0.37
2006-07	3.32	1.87	-0.18
2007-08	2.54	1.05	-0.88
2008-09	5.99	4.5	2.57
2009-10	6.46	5.23	3.17
2010-11	4.79	3.24	1.79
2011-12	5.84	4.46	2.75
2012-13	4.91	3.65	1.77
2013-14	4.43	3.15	1.13
2014-15	4.09	2.89	0.81
2015-16	3.94	2.8	0.71

Source: Select Fiscal Indicators of the Central Government, (As percentage of GDP), Handbook of Statistics on Indian Economy 2014-15, Reserve Bank of India.

Notes: 1. Data for 2014-15 are revised estimates and 2015-16 are budget estimates.
2. Negative (-) sign indicates surplus.

Figure 4.9 Trends of Deficits of the Central Government as Percentage of GDP (2002-03 to 2015-16)



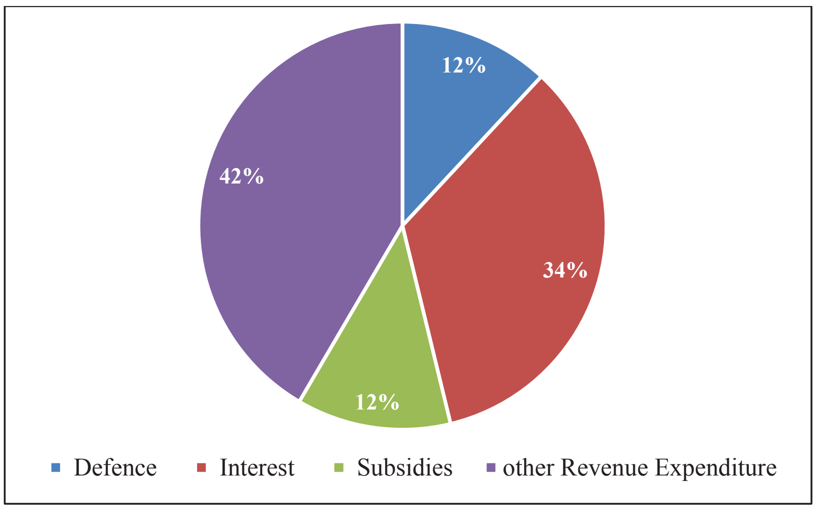
Source: Researcher's own compilation based on Table 4.5

As Table 4.5 and Figure 4.9 depicted that during 2003-04, fiscal deficit was 4.34%, which declined to 3.32% and 2.54% in 2006-07 and 2007-08 respectively.

Consequently the revenue deficit also declined 3.46% in 2003-04 to 1.05% in 2007-08. The primary deficit remained negative over the same period.

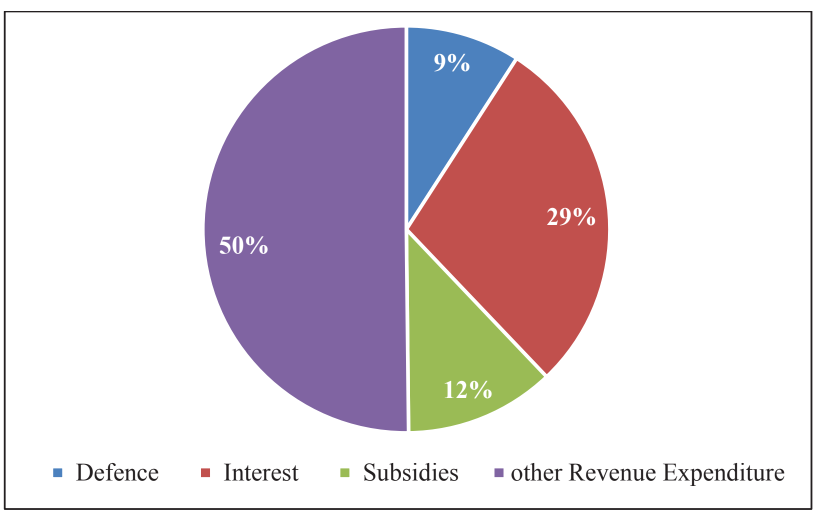
The sub-prime crisis that emanated from the United States (US) led to liquidity and solvency problems all around the world. While India, like other developing countries, did not have direct exposure to the crisis, the effects have been felt through credit, exports, and exchange rate channels. India's engagement with the global economy has deepened since the 1990s, making it vulnerable to global financial and economic crisis.

Figure 4.10(a) Percentage Composition of Revenue Expenditure of Central Government (2003-04)



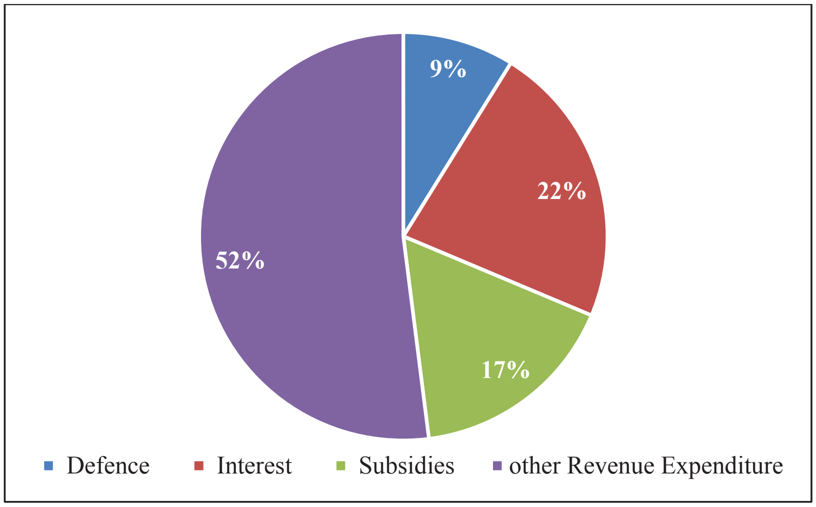
Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.10(b) Percentage Composition of Revenue Expenditure of Central Government (2007-08)



Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.10(c) Percentage Composition of Revenue Expenditure of Central Government (2010-11)



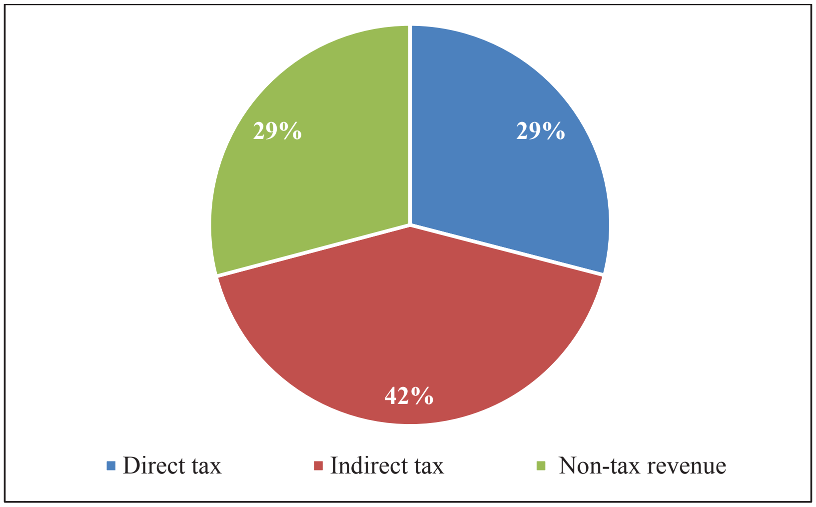
Source: Researcher's own calculation by using database from Major Heads of Expenditure of the Central Government, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

The fiscal consolidation objectives of bringing down the share of interest expense in the revenue expenditure did achieve the desired results, with interest outlay as share of revenue expenditure reducing from 34% in 2003-04 to 29% in 2007-08 and further to 22% in 2010-11. The substantial decrease in 2010-11 is also attributable to the rise in other revenue expenditure during the subprime crisis (Figure 4.10(a) and (b) and (c)).

Between 2007 and 2009 the Central government had already scheduled to launch a few expansionary schemes which would lead to increase in demand viz. rural farm loan waiver scheme, the expansion of social security schemes under the National Rural Employment Guarantee Act (NREGA) and the implementation of revised salaries and compensations for the central public servants as per the recommendations of the Sixth Pay Commission and somewhat the General elections in 2008 also had a positive impact on boosting demand.

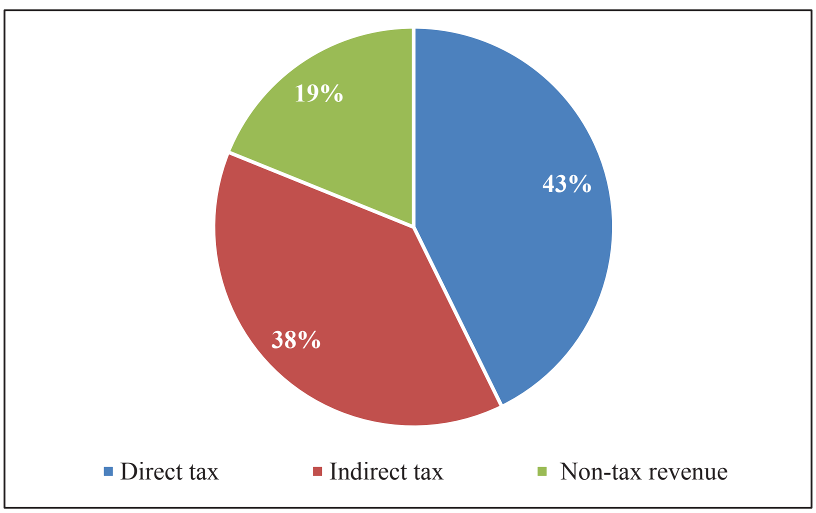
In addition to the above as the crisis unfolded, "the government activated a series of stimulus packages central excise duty cut of 4 percent, ramping up additional plan expenditure of about Rs. 200 billion, further state government borrowings for planned expenditure amounting to around Rs. 300 billion, interest subsidies for export finance to support certain export oriented industries, a further 2% reduction of central excise duties and service tax for export industries (that is a total 6% central excise reduction)" (De, 2012, p. 21).

Figure 4.11(a) Percentage Composition of Revenue Receipts of Central Government (2003-04)



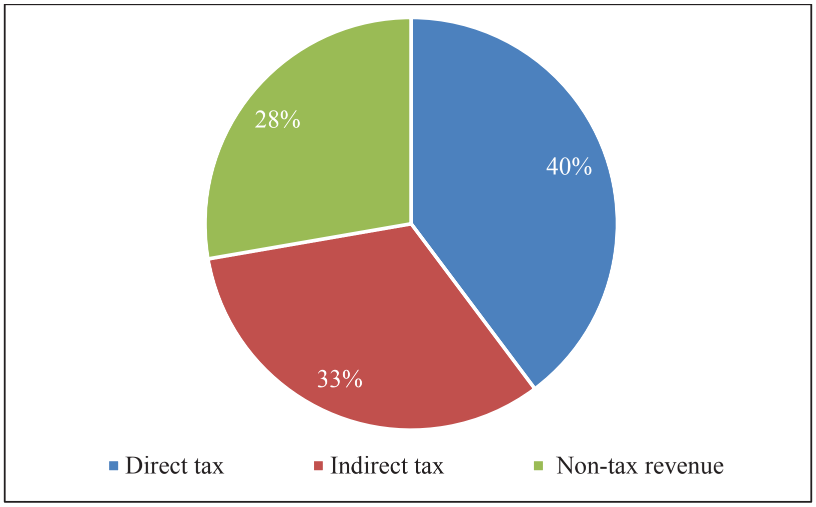
Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.11(b) Percentage Composition of Revenue Receipts of Central Government (2007-08)



Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Figure 4.11(c) Percentage Composition of Revenue Receipts of Central Government (2010-11)



Source: Researcher's own calculation by using database from Central Government Receipts -Major Components, Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India
Notes: Total may not add up to 100 due to rounding of differences.

The series of tax reforms undertaken by the government towards increasing the share of direct taxes have yielded results, the share of direct taxes in the total revenue expenditure has increased from 29% in 2003-04 to 43% in 2007-08 (Figure 4.11(a) and 4.11(b)), this share dropped to 40% in 2010-11 (Figure 4.11(c)) owing to the unanticipated non-tax revenue from spectrum auction.

The macroeconomic environment has been under stress since 2008-09 when the global economic and financial crisis unfolded, necessitating rapid calibration of policies. Fiscal expansion that followed in 2008-09 and 2009-10 did yield macroeconomic dividends in the form of a sharp recovery in 2009-10. In course of 2010-11 the non-tax revenues from auction of telecom spectrum (3G and broadband) resulted in higher than anticipated receipts. The continuance of the expansion well into 2010-11 had macroeconomic implications of higher inflation, which necessitated a tightening of monetary policy and gradually led to a slowdown in investments and GDP growth that resulted in a feedback loop to public finances through lower revenues. The fiscal deficit of 4.91 % in 2012-13 was achieved by counter balancing the decline in tax revenue, mainly on account of economic slowdown, with higher expenditure rationalization and compression. Outlining the roadmap for fiscal consolidation, Finance Minister, Arun Jaitley said, "For the year 2015-16, the government would meet the fiscal deficit of 3.9

percent of gross domestic product, and reduce it further to 3.5 percent in the next year (2016-17)" (Budget, Indian Express, 2016).

4.5.4 Statistical Analysis of Gross Fiscal Deficit

Table 4.6 shows the major components of Gross Fiscal Deficit as percentage of GDP.

Table 4.6 GFD, RD and CE as Percentage of GDP

Years	GFD	RD	CE
1980-81	5.55	1.36	5.59
1981-82	4.93	0.22	5.61
1982-83	5.40	0.67	6.13
1983-84	5.69	1.11	5.80
1984-85	6.79	1.65	6.21
1985-86	7.55	2.03	6.47
1986-87	8.13	2.40	6.81
1987-88	7.34	2.48	6.00
1988-89	7.08	2.41	5.72
1989-90	7.10	2.37	5.72
1990-91	7.61	3.17	5.42
1991-92	5.39	2.41	4.32
1992-93	5.19	2.40	3.86
1993-94	6.76	3.67	3.78
1994-95	5.52	2.97	3.69
1995-96	4.91	2.42	3.13
1996-97	4.70	2.30	2.96
1997-98	5.66	2.95	3.29
1998-99	6.29	3.71	3.49
1999-00	5.18	3.34	2.42
2000-01	5.46	3.91	2.19
2001-02	5.98	4.25	2.58
2002-03	5.72	4.25	2.94
2003-04	4.34	3.46	3.84
2004-05	3.88	2.42	3.50
2005-06	3.96	2.50	1.80
2006-07	3.32	1.87	1.60
2007-08	2.54	1.05	2.37
2008-09	5.99	4.50	1.60
2009-10	6.46	5.23	1.74
2010-11	4.79	3.24	2.01
2011-12	5.84	4.46	1.80
2012-13	4.91	3.65	1.67
2013-14	4.43	3.15	1.65

Source: Handbook of Statistics on Indian Economy, 2014-15, Reserve Bank of India

Notes: GFD – Gross Fiscal Deficit, GDP – Gross Domestic Product, RD – Revenue Deficit, CE – Consumption Expenditure

Table 4.7 Statistics Summary of GFD, RD and CE as Percentage of GDP (1980-81 to 2013-14)

Statistics	GFD as % of GDP	RD as % of GDP	CE as % of GDP
Mean	5.60	2.76	3.76
Median	5.54	2.49	3.50
Mode	4.91	2.40	5.72
High	8.13	5.23	6.81
Low	2.54	0.22	1.60
Quartile 1	4.88	2.23	2.15
Quartile 3	6.54	3.66	5.64

Source: Researcher's own calculation based on Table 4.6.

Table 4.7 shows that for the period 1980-81 to 2013-14

- The average GFD as percentage of GDP was 5.60%, with high being 8.13% (1986-87) and low being 2.54% (2007-08).
- The average RD as percentage of GDP was 2.76% with high being 5.23% (2009-10) and low being 0.22% (1981-82).
- The average CE as percentage of GDP was 3.76% with high being 6.81% (1986-87) and low being 1.60% (2006-07 and 2008-09).

Carrying out the regression analysis with GFD as the dependent variable and RD and CE as the independent variables for the period 1980-81 to 2015-16.

From the Table 4.8, we observed that the combined coefficient of correlation of the two independent variables is almost 1 i.e. there is a very high or perfect correlation of RD, and CE with GFD.

Further, in the terms of coefficient of determination which describes the extent of variation on the independent variable that is explained by the dependent variable is also very high at almost 1. This reaffirms the fact that among the four components of GFD i.e. RD, CE, Recovery of Loans and Disinvestment Receipts the two components i.e., RD and CE sufficiently explain most of variation in GFD and thus can be regarded as the major factors.

In terms of a linear equation, the GFD could be expressed as follows:

$$\mathbf{GFD = 57.25 + 1.13\,(RD) + 0.44\,(CE)} \qquad \mathbf{(4.1)}$$

This equation also indicates that most of the variance of the GFD is a result of the movement of the RD. With a 95% confidence level the coefficient of RD is in the range of 1.06 to 1.20 i.e. very high positive coefficient and for CE is in the range of 0.28 to 0.59 indicating that the coefficient is positive but has relatively lesser effect when compared to RD.

Table 4.8 Regression Analysis

	Revenue Deficit	Capital Expenditure
Coefficient	1.13	0.44
Lower 95%	1.06	0.28
Higher 95%	1.20	0.59
Coefficient of Correlation	0.9982	
Coefficient of Determination	0.9964	
Intercept	57.25	
Lower 95%	-4.60	
Higher 95%	119.10	

Source: Researcher's own calculation based on Table A-12.

4.6 FINANCING OF CENTRE'S FISCAL DEFICIT

More often than not, contemporary Indian economy is witnessing the terms 'budget' and 'fiscal deficit' being mentioned in the same breath almost like siamese twins, in other words each time that there is a mention of 'budget', there is also a reference made to 'fiscal deficit'. In fact, the term 'fiscal deficit' has gained significance to the extent that it is now considered as a barometer of the stability of the economy.

In addition to the understanding the concept of fiscal deficits, its components and trends in the context of Indian economy the next big question for any economy is "How to fund this excess of expenditure over receipts?" In the following section we will look at the ways of financing the deficit and its trend in the context of Indian economy.

When the government proposes a budget wherein the expenditures are greater than the receipts it is conscious of the fact that it would have to bridge this gap and arrange for financing. So it accordingly works out mechanism that can withstand the burden of deficit. A deficit is not a good situation to be and thus any of the methods that a government adopts will have its fair share of shortcomings and side-effects. What a government chooses depends upon the economy's current state and the relative strength of impacts that the financing methods are expected to have. The two main sources of financing the deficit are:

1). Borrowings

Fiscal deficit may be financed through internal and/or external borrowings. Internal sources refer to borrowing from within the economy and external borrowing refer to across the border funding. Internally the government may borrow from the Central Bank or from the public. External borrowing is availed on the basis of sovereign credit or sovereign guarantee and thus is also referred to as the sovereign debt. Government may enter in to bilateral arrangement with other nations to avail debt or from international financial institutions such as the IMF, Word Bank, foreign banks etc.

In both the cases i.e. internal or external borrowing government may choose to borrow for long-term or for short-term depending upon its requirement and market conditions. However, excessive of borrowings could have the following negative effects for the economy.

Firstly, high borrowing could lead to rise in the real interest rates and could also block the funds available to the private sector to tap, resulting in the "crowing-out" of private investment.

Secondly, external debt has significant impact on the foreign currency reserves, at the time of availing the loan the foreign exchange may rise albeit for short-term but at the time of repayment the country will influence the forex reserves and in turn the balance of payments.

Thirdly, excessive government borrowing implies high debt servicing which compels the government to cut down expenditure on important developmental sectors like education, health and infrastructure. Since large portion of the government's funds are now being directed towards payment of interest on the debt, the long term development of both physical and human capital is affected, which further affects the economic growth. To offset the impacts on economic growth and private investments, the government may ensure that as far as possible public investments are in productive areas and that it should be complemented by private investments. Fiscal deficit if undertaken for the benefit of the nation i.e. for human capital and creating infrastructure will impact differently than if it's undertaken for wasteful revenue expenditure or subsidies. Thus government can allay the fears of high fiscal deficit by ensuring that it is invested in the right direction.

2). Printing of New Currency

Another method of raising finance is by printing new currency. This printing of money to raise revenue by the government is also called seignior-age. Under seignior-age the revenue raised is the face value of the currency less the cost of printing.

According to Keynes, the effect that seignior-age will have on the economy depends upon the current state of the economy. He postulates that when economy is experiencing depression i.e. when there is unemployment and production is below installed capacity, increase in money supply would raise output, employment and income. However when and economy is at full employment level with no spare productive capacity, an increase in money supply would lead to more money chasing fewer goods and consequently result in inflation.

While borrowing and printing of currency are broadly the two methods of financing the fiscal deficit, the instruments that are issued may differ from one economy to the other. We shall now visit the instruments used by the Indian central government.

4.6.1 Fiscal Deficit Financing Instruments in India

There are two instruments in India of financing fiscal deficit external and internal financing.

4.6.1.1 Internal Borrowing

Internal Borrowing of the central government is divided under three main heads namely; market borrowings, drawdown of cash balances and other borrowings.

4.6.1.1.1 Market Borrowings

The government issues 364 treasury bills to meet short-term cash requirements and issues dated securities are issued to mobilize longer term resources needed to finance the fiscal deficit. Both of these issued through auctions. Treasury bills or T-bills, are zero coupon securities and pay no interest. They are issued at a discount and redeemed at the face value on maturity. Dated Government securities are commonly referred to as market loans are long term securities and carry either a fixed or floating coupon (interest rate) which is paid on the face value, payable at fixed time periods (usually half-yearly). These are issued for a maximum tenor of 30 years. Issuance of securities is planned and conducted keeping in view the debt management objective of cost efficiency, prudent levels of risk and market development. Assessment of the market structure and market appetite for various maturities of debt influence and facilitate scheduling of debt issue.

4.6.1.1.2 Drawdown of Cash Balances

The government maintains it cash balances with the central bank i.e. RBI. In order to fund its cash requirements the government draws upon its balances which is akin to dissaving.

4.6.1.1.3 Other Borrowings

It comprise small savings, state provident fund, special deposits, reserve funds, treasury bills excluding 364-day treasury bills, etc. The government under the small savings schemes and provident funds receive credits, part of which is used for interest payment and principal repayment. The net changes in these funds is also a source of financing for the government. T-bills are generally used to correct short-term mismatches and changes in balance of those also a financing source.

4.6.1.2 External Borrowings

While a large part of India's fund requirement is met from internal sources a small of the deficit is financed through external borrowings, most of which is denominated in US Dollars. The major sources of external finance are through multilateral agencies and those availed on bilateral basis. The Department of Economic Affairs (DEA) under the Ministry of Finance has been mandated to access, negotiate and coordinate foreign loans/ credits/ grants for the economic and social development of the country. In term of the multilateral agencies the World Bank and the Asian Development Bank are leading multilateral institutions for availing external assistance by India.

The World Bank which is specialised agency of the United Nations is among the world's leading development institutions with a mission to fight poverty and improve living standards for people in the developing world by promoting sustainable development through loans, guarantees, risk management products, and (non-lending) analytic and advisory services. The World Bank concentrates its efforts on reaching the Millennium Development Goals aimed at sustainable poverty reduction. As a group the World Bank comprises of International Bank of Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA) and . International Centre for Settlement of Investment Disputes (ICSID).

Asian Development Bank (ADB) was setup in1966 with India as one of the founding members. The bank is committed to support the developing member countries (DMCs) in the Asia Pacific Region. ADB extends direct financial support in the form of loans and equity investments to achieve its objectives, it also provides technical assistance for developmental projects and other advisory services, guarantees, grants and policy dialogues.

On the bilateral side, India has availed loans from Japan, Germany, France, Italy, Switzerland, USA and Russian Federation most of which are also for specific developmental projects.

4.6.2 Trends of Modes of Financing Fiscal Deficit in India

Like trends of fiscal deficit, we have also divided the trend of financing fiscal deficit into three parts for better understanding namely, Era of Pre Liberalization, 1980-81 to 1990-91, Post Liberalisation and till FRBM Act (1990-91 to 2002-03) and Post FRBM Act, 2003 till 2015-16.

4.6.2.1 Era of Pre Liberalisation, 1980-81 to 1990-91

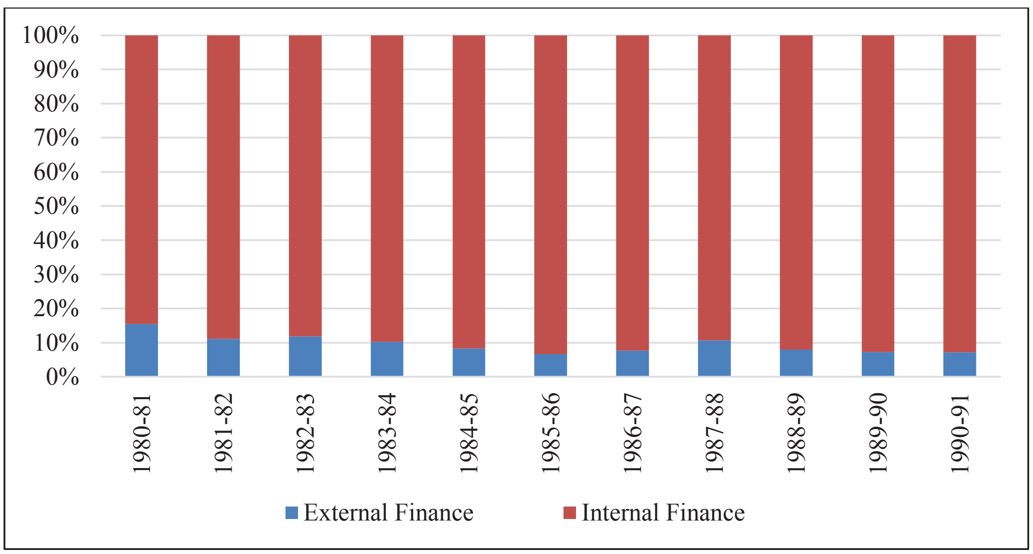
Save the unexpected rise 1986-87 the period of 1980's saw steady decline in the reliance on external finance for funding the deficit. The share of external finance was 15.44% in 1980-81 which declined to 7.13% in 1990-91 before experiencing a spike of 10.70% in 1986-87. Consequently over the same period the proportion of internal finance rose from 84.56% in 1980-81 to 92.87% in 1990-91 (Table 4.9 and Figure 4.12).

Table 4.9 Percentage Share of Internal and External Finance in Total Financing of GFD (1980-81 to 1990-91)

Year	External Finance	Internal Finance
1980-81	15.44%	84.56%
1981-82	11.12%	88.88%
1982-83	11.84%	88.16%
1983-84	10.27%	89.73%
1984-85	8.34%	91.66%
1985-86	6.63%	93.37%
1986-87	7.68%	92.32%
1987-88	10.70%	89.30%
1988-89	7.96%	92.04%
1989-90	7.28%	92.72%
1990-91	7.13%	92.87%

Source: Researcher's own calculation based on Table A-13.

Figure 4.12 Percentage Share of Internal and External Finance in Total Financing of GFD (1980-81 to 1990-91)



Source: Researcher's own compilation based on Table 4.9.

Table 4.10 and Figure 4.13 show that among the internal sources of financing the deficit, the broader trend noticed was the decline in the market borrowings, reduced reliance on drawdown of cash balances and a rise in the other borrowings. Market borrowings contributed to 38% of the internal financing in 1980-81 and declined to 19% in 1990-91. The cash balances drawn held a ratio of 35% in 1980-81 and 27% in

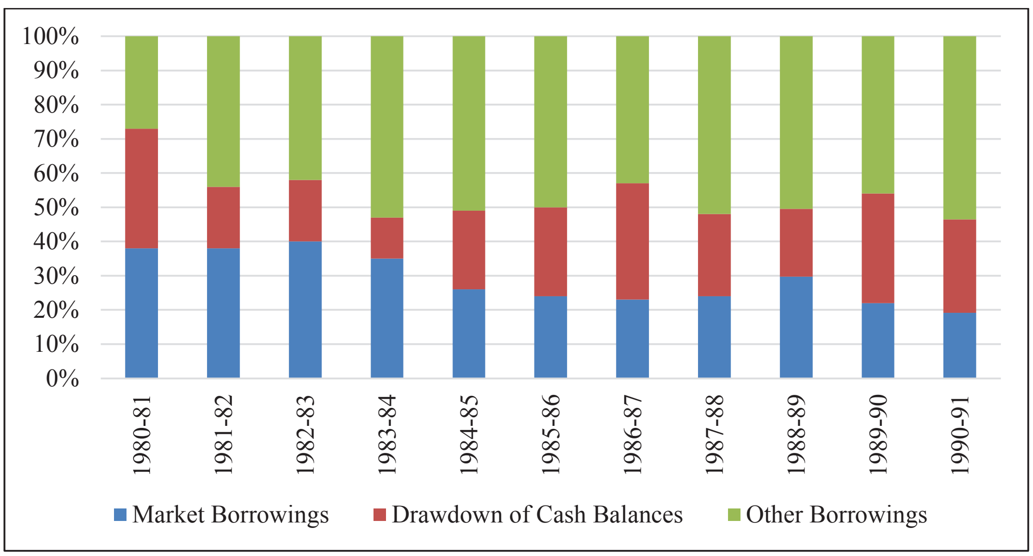
1990-91 to the overall internal sources of financing. Other borrowings stood at 27% in 1980-81 and rose to 53% in 1990-91.

Table 4.10 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (1980-81 to 1990-91)

Year	Market Borrowings	Drawdown of Cash Balances	Other Borrowings
1980-81	38%	35%	27%
1981-82	38%	18%	44%
1982-83	40%	18%	42%
1983-84	35%	12%	53%
1984-85	26%	23%	51%
1985-86	24%	26%	50%
1986-87	23%	34%	43%
1987-88	24%	24%	52%
1988-89	30%	20%	51%
1989-90	22%	32%	46%
1990-91	19%	27%	53%

Source: Researcher's own calculation based on Table A-13.

Figure 4.13 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (1980-81 to 1990-91)



Source: Researcher's own compilation based on Table 4.10.

4.6.2.2 Post Liberalisation, 1990-91 till FRBM Act, 2002-03

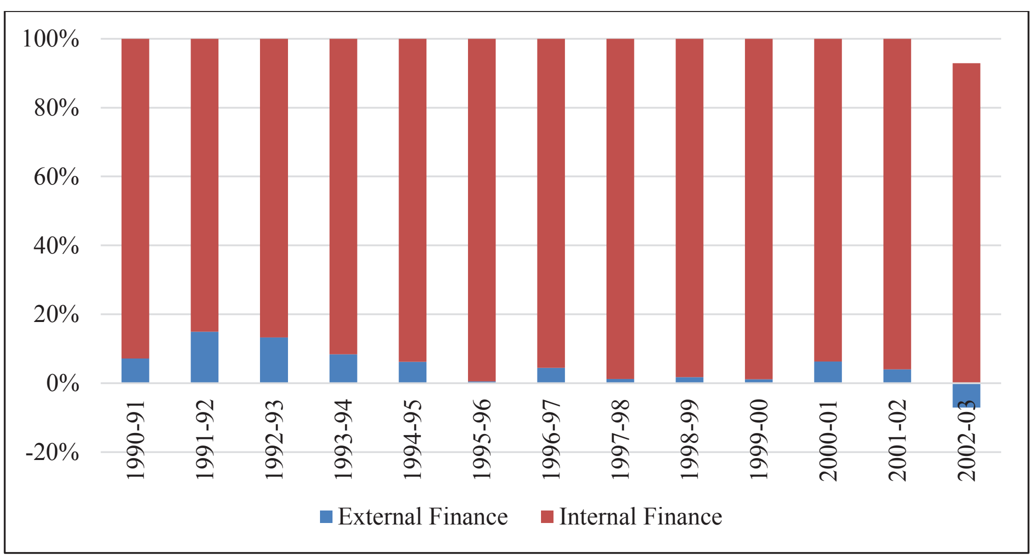
Table 4.11 and Figure 4.14 depict that the fallout of the 1991 crisis where in the Indian Rupee was deliberately devalued had the nation reduce its dependence on external financing. The depreciation in the foreign exchange rates led to external financing contributing to -8.23% in 2002-03 from 14.92% in 1991-92. Correspondingly, the internal finance rose from 85.08% in 1991-92 to 108.23% in 2002-03.

Table 4.11 Percentage Share of Internal and External Finance in Total Financing of GFD (1990-91 to 2002-03)

Year	External Finance	Internal Finance
1990-91	7.13%	92.87%
1991-92	14.92%	85.08%
1992-93	13.24%	86.76%
1993-94	8.42%	91.58%
1994-95	6.21%	93.79%
1995-96	0.53%	99.47%
1996-97	4.48%	95.52%
1997-98	1.23%	98.77%
1998-99	1.69%	98.31%
1999-00	1.13%	98.87%
2000-01	6.32%	93.68%
2001-02	3.97%	96.03%
2002-03	-8.23%	108.23%

Source: Researcher's own calculation based on Table A-13.

Figure 4.14 Percentage Share of Internal and External Finance in Total Financing of GFD (1990-91 to 2002-03)



Source: Researcher's own compilation based on Table 4.11.

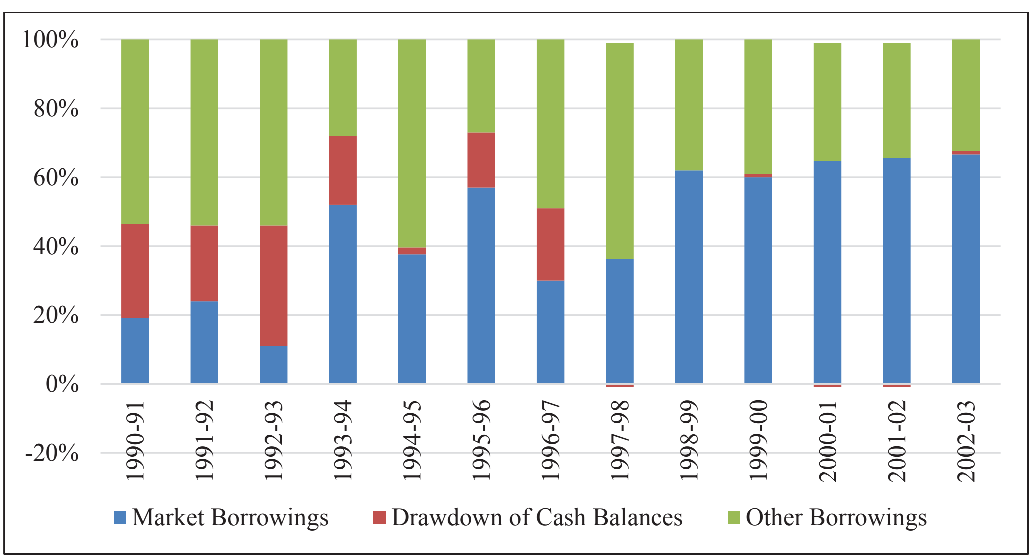
Post the introduction of the new economic policy the economy witnessed higher reliance of market borrowings, lower proportion of cash balance being drawn and lower proportion of other borrowings in the overall internal financing. The share of market borrowings in internal financing rose from 24% to 66% over 1991-92 to 2002-03. For the same period the share of drawdown of cash balances and other borrowings in total internal finance declined from 22% and 54% in 1991-92 to 1% and 32% in 2002-03 respectively (Table 4.12 and Figure 4.15).

Table 4.12 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (1990-91 to 2002-03)

Year	Market Borrowings	Drawdown of Cash Balances	Other Borrowings
1990-91	19%	27%	53%
1991-92	24%	22%	54%
1992-93	11%	35%	54%
1993-94	52%	20%	28%
1994-95	38%	2%	61%
1995-96	57%	16%	27%
1996-97	30%	21%	49%
1997-98	37%	-1%	64%
1998-99	62%	0%	38%
1999-00	60%	1%	39%
2000-01	66%	-1%	35%
2001-02	67%	-1%	34%
2002-03	66%	1%	32%

Source: Researcher's own calculation based on Table A-13.

Figure 4.15 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (1990-91 to 2002-03)



Source: Researcher's own compilation based on Table 4.12.

4.6.3.3 Post Fiscal Responsibility and Budget Management (FRBM) Act, 2003 till 2015-16

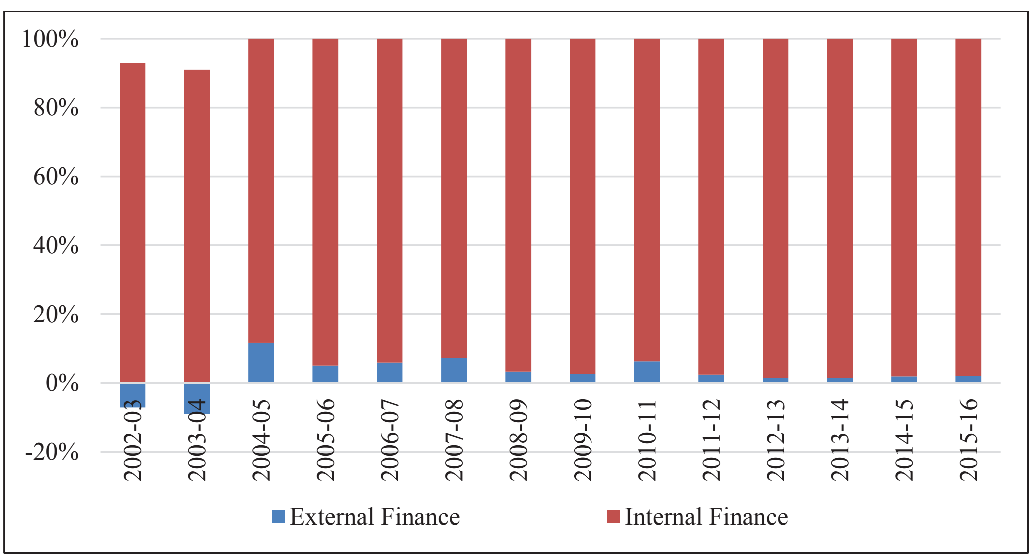
With the introduction of FRBM Act, the period from 2004-05 saw higher levels of financing being arranged from internal sources i.e. 88.27% and 98.11% in 2004-05 and 2014-15 respectively. The share of external financing was 11.73% in 2004-05 which rose to 1.89% in 2014-15 (Table 4.13 and Figure 4.16).

Table 4.13 Percentage Share of Internal and External Finance in Total Financing of GFD (2002-03 to 2015-16)

Year	External Finance	Internal Finance
2002-03	-8.23%	108.23%
2003-04	-10.94%	110.94%
2004-05	11.73%	88.27%
2005-06	5.10%	94.90%
2006-07	5.94%	94.06%
2007-08	7.34%	92.66%
2008-09	3.27%	96.73%
2009-10	2.64%	97.36%
2010-11	6.31%	93.69%
2011-12	2.41%	97.59%
2012-13	1.47%	98.53%
2013-14	1.45%	98.55%
2014-15	1.89%	98.11%
2015-16	2.01%	97.99%

Source: Researcher's own calculation based on Table A-13.

Figure 4.16 Percentage Share of Internal and External Finance in Total Financing of GFD (2002-03 to 2015-16)



Source: Researcher's own compilation based on Table 4.13.

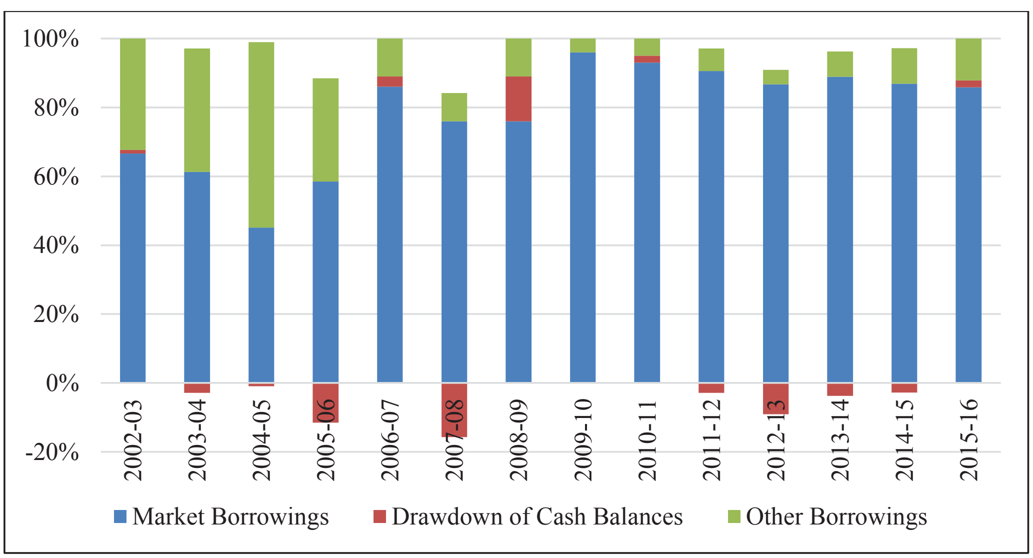
One of the objectives as part of the internal financing has been to reduce the rollover risk associated with short term borrowings and thus the share of market borrowings rose from 46% in 2004-05 to 93% in 2014-15. The support from cash balances drawn as proportion of internal financing dropped from -1% in 2004-05 to -3% in 2014-15 and other borrowing decreased from 55% to 11% (Table 4.14 and Figure 4.17).

Table 4.14 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (2002-03 to 2015-16)

Year	Market Borrowings	Drawdown of Cash Balances	Other Borrowings
2002-03	66%	1%	32%
2003-04	65%	-3%	38%
2004-05	46%	-1%	55%
2005-06	76%	-15%	39%
2006-07	86%	3%	11%
2007-08	111%	-23%	12%
2008-09	76%	13%	11%
2009-10	97%	0%	4%
2010-11	93%	2%	5%
2011-12	96%	-3%	7%
2012-13	105%	-11%	5%
2013-14	96%	-4%	8%
2014-15	93%	-3%	11%
2015-16	85%	2%	12%

Source: Researcher's own calculation based on Table A-13.

Figure 4.17 Percentage Share of the Components of Internal Financing in Total Internal Financing of GFD (2002-03 to 2015-16)



Source: Researcher's own compilation based on Table 4.14.

4.7 CONCLUSION

This chapter visited the meaning, concept, components of fiscal deficit and its trend in the context of Indian economy. Further, the study underlined the contrasting views on the effects of deficit on economy that were put forward by different schools of thought. The neo-classical ones considered it to have negative effect, Keynesians said the effect was positive and the Ricardians had a neutral view.

In India the concept of fiscal deficit was first introduced in 1991 and was defined as the sum of revenue deficit, capital expenditure less recovery of loans and other receipts. Since then fiscal deficit has been a closely tracked parameter to measure the health of the Indian economy.

This chapter also traced the major changes in the India's fiscal policy since 1980-81 through the country's balance of payments crisis of 1991, the post economic liberalisation and high growth period, the introduction of FRBM Act in 2003, adjustment to the global financial crisis of 2008 and the recent post-crisis changes to return to a path of fiscal consolidation. The period to 1991 saw large fiscal deficit and its monetization spill over to the external sector, pushed by the Gulf-war the balance of payments situation turned precarious and led to the introduction of new economic policy. Post 1991 period had private sector share the burden of long term development and contribute to capital receipts in the form of disinvestment. This coupled with tax reforms had the fiscal deficit in control until 1996-97. Later, the Asian crisis of 1996-97 led it to move higher and fiscal deficit reached unjustified levels by 2003. As a pragmatic solution to the problem FRBM Act of 2003 was introduced which set out a phased reduction roadmap, this put the Indian economy on the right track however was faced with a hiccup in the form of 2008 global credit crisis. India weathered the storm of the credit crisis well and then resumed the task of lowering the fiscal deficit through tax reforms and fiscal consolidation. These efforts bore fruits and have ensured fiscal deficit reach more comfortable levels.

The economic events also had effect on the financing methods, over time the focus has been on reducing the reliance on external financing and among the internal financing to raise funds for longer term to avoid roll-over risk.