CHAPTER VI

CONCLUSION

The headline numbers of GDP growth rate and the fiscal deficit are often used to denote the economic performance and the economic stability respectively. With most of growth rate for economies coming of private consumption expenditure a pertinent question is what happens if government decides to increase its deficit, what is the implication on private consumption?

Over the years there has been extensive debate on how the fiscal deficits impact private consumption. Broadly there are three approaches on the relationship between fiscal deficit and private consumption that researches have attempted to empirically prove or disprove.

The first one is the Keynesian effect. According to Keynes the current consumption is a function of current disposable income, where disposable income is the present income less taxes. As an extension of this theory Keynes also propounded that an expansionary fiscal policy would lead to a virtuous cycle with higher disposable income leading to higher consumption, there by resulting in higher output for the economy. Keynes conceptualised this framework and referred to it as the multiplier effect, which stated that *ceteris paribus* an increase in government spending and/or a decrease in taxes would lead a more than proportionate change in output. This is also referred to as the Keynesian effect on fiscal policy. This advocacy of Keynes was met with criticism, wherein researchers argued that rise in government spending would lead to crowding-out of the private consumption and may not lead to an increase in output.

The second theory that has been the focus of economists is Irving Fisher's intertemporal choice, which describes how people make choices about what to consume and in what quantity at varied points of time wherein the choices at one point of time affect the possibilities at other points at time. A change in fiscal policy would affect household's current choices and future choices available. A related study is Milton Friedman's "The Permanent Income Hypothesis" (1957) wherein Friedman's opines that the current consumption is determined by the present value of the future income. A change in fiscal policy will have households anticipate future fiscal action and adjust the current consumption accordingly. In his opinion the current consumption would depend on current income, future income, and present level of taxes and future tax levels.

Lately the argument and debate have been centered on the validity of Ricardian Equivalence Approach. In his approach David Ricardo has argued that under certain conditions, private consumption is not affected by the manner in which the government chooses to finance its deficit. To put differently, given the public expenditure, the level of private consumption will not be affected by the fiscal deficit (Islam and Wetzel, 1991, p. 83).

Researchers have studied the applicability of the theories propounded by neo-classical economists, J.M. Keynes, David Ricardo and others. Analysis has also been conducted to identify the impact of other parameters like government spending, interest rates on private consumption. Broadly there are three approaches on the relationship between fiscal deficit and private consumption that researches have attempted to empirically prove or disprove.

Hence studies are yet to emerge on the effects of fiscal deficit on private consumption behaviour in India. Looking at the significance of domestic consumption in India's growth process, this seems to be an important area of research. The present study therefore, intended to fill this gap. The objective of this study is to examine the linkage between fiscal deficit and private consumption behaviour.

A summary of the major findings is contained in section 6.1. Policy implications are presented in section 6.2 and section 8.3 discusses the direction for future research.

6.1 MAJOR FINDINGS OF THE STUDY

Private Final Consumption Expenditure

- Private Final Consumption Expenditure is the key component of Gross Domestic Product. Though the proportion of PFCE in the GDP of India has been declining and reduced from 79% in 1980-81 to 58% in 2014-15 still is the key component.
- Over the last four decades there has been a consistent increase in the private final consumption expenditure on non-food items and decline in the proportion of expenditure on food items. This is reflective of the changing lifestyles towards better living standards with comforts.

• The contribution of non-food items in total private final consumption expenditure was 39% in 19972-73 (27th round) which rose to 45% in 1993-94 (50th round) to 64% in 2011-12 (68th round). For the same period the contribution of food item was 61%, then declined to 55% and then 36%.

Trends in the Food Items: Urban and Rural

There has been a decrease in the proportion of expenditure on food items in the past four decades in both urban and rural areas, however the expenditure on food continues to remain higher in rural areas (48.6% in 2011-12) as compared to urban areas (38.5% in 2011-12).

Cereals and Substitute

- In both urban and rural areas, the percentage share of cereal and substitute in total food consumption expenditure has declined from 37% and 57% in 1980-81 to 19% and 25% in 2011-12 respectively.
- The average amount of cereals consumed per person per month has been declining steadily over the past two or three decades in both urban and rural areas from 10.6 kg and 13.4 kg in 1993-94 to 9.28 kg and 11.22 kg in 2011-12.
- Rice and wheat are the most significant food items in the composition of cereals in both urban and rural India. In 2011-12, the per capita quantity consumed of rice and wheat were 4.49 kg and 4.01 kg in urban India and 5.98 kg and 4.29 kg in rural India respectively.

Pulses and Products

- There was no significant change in the percentage share of pulses and products in total food consumption expenditure in both urban and rural sectors. In urban sector the share of pulses and products was 5% in 1972-73 and in 2011-12 also. Similarly in rural sector it was 6% for the same period.
- In both urban and rural areas the highest expenditure on pulses was incurred on arhar, followed by moong for urban areas and masur for rural areas.
- The per capita quantity consumed of arhar in urban and rural areas were 0.3 kg and 0.21 kg in 2011-12 respectively.

• Moong per capita quantity consumed in urban India was 0.12 kg and masur in rural India was 0.11 kg in 2011-12.

Milk and Milk Products

- The share of milk and milk products in total food consumption expenditure has increased from 14% in 1972-73 to 20% in 2011-12 in urban areas and 10% in 1972-73 to 19% in 2011-12 in rural areas.
- The per capita consumption of milk and milk products in the last two decades in both urban and rural areas has increased steadily from 4.89 litres and 3.94 litres in 1993-94 to 5.42 litres and 4.33 litres in 2011-12 respectively.

Edible Oil

- There was no significant change in the percentage share of edible oil in total food consumption expenditure in urban area, it was 8% in 1972-73 and has decreased to 7% in 2011-12. Whereas in rural area there was a slight increase in the consumption of edible oil from 5% to 8% for the same period.
- The per capita monthly consumption of edible oil has shown a steady upward trend both in rural and urban households. The per capita monthly consumption has risen from 0.56 kg in 1993-94 to 0.85 kg in 2011-12 in urban area and from 0.37 kg to 0.67 kg in rural areas for the same period. The urban per capita consumption was observed to higher than the rural for all the periods over the last two decades.

Fruits and Nuts

- The share of fruits and nuts have increased in total food consumption expenditure from 3% in 1972-73 to 6% in 2011-12 in urban areas and 2% in 1972-73 to 4% in 2011-12 in rural areas.
- The consumption of fruits is much higher in urban areas as compared to rural areas. There is a general increase in per capita consumption of fruits and nuts from 1993-94 to 2011-12.
- Banana and coconut are the highest consumed fruits in both urban and rural areas.

- In urban areas the per capita quantity consumed of bananas were 4.48 in 1993-94 which has increased to 6.69 in 2011-12. Similarly in rural areas was increased from 2.2 to 4.18 for the same period.
- The per capita quantity of coconut consumed in urban area was 0.46 in 1992-93 which has increased to 0.61 in 2011-12 and in rural area, it has increased from 0.32 in 1993-94 to 0.49 in 2011-12.

Meat, Egg and Fish

- The share of meat, egg, fish in the total food expenditure has increased in rural areas from 3% in 1972-73 to 7% in 2011-12 respectively. In urban area there was a slight increase in the share from 5% in 1972-73 to 7% in 2011-12.
- Eggs and Fish are the highest consumed products both in urban and rural sector.
- In urban sector and rural sector the per capita quantity consumed of eggs were 1.48 and 0.64 in 1993-94, which has increased to 3.18 and 1.94 in 2011-12 respectively. The per capita quantity consumed of fish in urban area was 0.2 kg in 1993-94 and has increased to 0.252 kg in 2011-12 and in rural area has increased from 0.18 kg to 0.266 kg for the same time span.

Vegetables

- Like meat, egg and fish, the share of vegetables in the total food expenditure have increased in rural areas from and 5% in 1972-73 to 10% in 2011-12 respectively while in urban area the share has increased from 7% in 1972-73 to 10% in 1993-94 and then slightly declined in 2011-12 to 9%.
- Potato and onion are the highest consumed vegetables in both urban and rural sector.
- The per capita quantity consumed of potato and onion in urban India has increased from 1.08 kg and 0.56 kg in 1993-94 to 1.61 kg and 0.95 kg in 2011-12 and in rural India also it has increased from 1.24 kg and 0.46 kg in 1993-94 to 1.97 kg to 0.84 kg in 2011-12.

Sugar, Salt and Spices and Beverages

- The share of beverages in total food consumption expenditure has increased from 12% in 1972-73 to 18% in 2011-12 in urban areas and 3% in 1972-73 to 12% in 2011-12 in rural areas.
- In urban areas the percentage share of sugar has decreased from 6% in 1972-73 to 3% in 2011-12 whereas in rural areas there was no significant change in the share of sugar.
- There was no significant change in the share of salt and spices in both urban and rural areas.

Trends in the Non-Food Items: Urban and Rural

- There has been an increase in the proportion of expenditure on non-food items in the last four decades in both urban and rural areas.
- The proportion of expenditure on non-food items in rural areas has increased from 27.1% in 1972-73 (27th round) to 36.8% in 1993-94 (50th round) and further rose to 51.4% in 2011-12 (68th round) in rural areas. In urban India, the proportion of expenditure on non-food items has increased from 35.5% to 45.3% and further to 61.5% for the same period.
- The share of miscellaneous goods and services in total non-food consumption expenditure has increased significantly in both urban and rural areas from 54% and 32% in 1972-73 to 65% and 51% in 2011-12 respectively.
- There is an increasing trend in the share of durable goods in both urban and rural areas from 6% and 8% in 1972-73 to 10% and 12% in 2011-12 respectively.
- The share of fuel and light, clothing and footwear and pan and tobacco and intoxicants in total non-food consumption expenditure have decreased in both the urban and rural areas. In urban areas fuel and light, clothing and footwear and pan and tobacco and intoxicants have decreased from 16%, 16% and 8% in 1972-73 to 12%, 11% and 2% in 2011-12 respectively. In rural areas, the share of fuel and light, clothing and footwear and pan and tobacco and intoxicants have decreased from 21%, 28% and 11% in 1972-73 to 18%, 15% and 5% in 2011-12 respectively.

Interstate Differences in Urban and Rural Areas (68th Round, 2011-12)

In both urban and rural areas, the states that have overall high per-capita consumption expenditure are also the ones that high in ranking in terms of food and non-food expenditure.

- In urban area, the top five states in terms of per-capita monthly expenditure are Haryana, Kerala, Himachal Pradesh, Maharashtra and Goa and in rural areas the top five states are Kerala, Goa, Punjab, Haryana and Nagaland. The common states which are in both are Haryana, Kerala and Goa.
- The bottom five states in in terms of per-capita monthly expenditure in urban area are Manipur, Bihar, Chhattisgarh, Odisha and Jharkhand and in rural area, the bottom five are Madhya Pradesh, Bihar, Chhattisgarh, Jharkhand and Odisha. The common states are Bihar, Chhattisgarh, Odisha and Jharkhand.
- In urban area, the top five states with respect to per-capita food consumption are the same as overall level and in terms of the bottom five states we have Madhya Pradesh in place of Jharkhand. Whereas in rural area, the top five states with respect to per-capita food consumptions are the same as overall level and in terms of the bottom five states we have Uttar Pradesh in place of Bihar.
- Regarding non-food consumption the top-four states are the same as overall followed by Karnataka in the urban area and the bottom five states are again the same with the exception of Tripura replacing Chhattisgarh. Whereas in rural area in the top five the only change from the overall ranking is the inclusion of Himachal Pradesh in place of Nagaland. The bottom five states are again the same with the exception of Assam replacing Madhya Pradesh.

Consumption expenditure is higher in urban area vs. the rural areas.

• The consumption expenditure is higher in urban area ranging from Rs. 1482.63 to Rs. 3817.33 vs. the rural areas ranging from Rs. 1002.6 to Rs. 2668.7.

There are fewer states being above the all-India average in urban areas than rural areas.

• In urban area, there are nine states which are above the all-India average and nineteen states that are below, whereas, in rural area there are nineteen states which are above and nine are below in 2011-12.

Further findings show that non-food consumption expenditure carries higher weightage in urban areas as compared to rural areas.

- In urban areas the all-India monthly per capita average expenditure was Rs. 2629.65, out of which all-India non-food average expenditure was Rs. 1508.78 and all-India food average expenditure was Rs. 1120.88.
- In rural areas the all-India monthly per capita average expenditure was Rs. 1430, out of which all-India non-food average expenditure was Rs. 673.47 and all-India food average expenditure was Rs. 756.49.

Monthly Per Capita Expenditure: Food and Non-food Items for both Urban and Rural Area (68th Round, 2011-12)

The basic food basket in India like cereals, pulses, edible oil and vegetables exhibited that as income rises the MPCE drops.

- MPCE for cereals has declined as income rises for both urban and rural areas, MPCE in rural areas is higher than urban areas for all deciles. In both urban and rural areas as the MPCE level increases the share of cereals (including cereal substitutes) in total consumer expenditure declined steadily from 15.50% to 2.94% in urban area and 19% to 5.81% in rural area.
- In both urban and rural areas as the MPCE level increases the share of pulses in total consumer expenditure declined from 3.82% to 0.91% in urban area and 3.98% to 1.78% in rural area.
- Edible oil consumption saw a declining trend as income rose both in urban as well as rural areas. The share of edible oil starts with roughly 5% for both urban and rural areas and afterwards declined as one moves towards higher MPCE level to 1.27% in urban area and 2.40% in rural area.
- The share of vegetables in total consumer expenditure declines with the rise in MPCE level in both urban and rural areas from 8.44% to 2.41% in urban India and 9.78% to 4.18% in rural India.

Slightly more expensive food items like milk and milk products and eggs, fish and meat witnessed that MPCE rises as income rises and then falls in the higher deciles.

- The MPCE pattern for milk and milk products and egg, fish and meat are quite similar i.e. there is inverted u-shaped pattern depicting that as the income rises the consumption expenditure rises however after a point it begins to decline.
- The share of milk and milk products in total consumption in urban area was 6.20% for the bottom decile class and after that flattens around 8-8.35% for the middle MPCE class and then falls as MPCE level increases and reaches 4.92% for the highest decile class. There was an upward trend in the share of rural consumption expenditure for milk and milk products till 9th decile from 4.16% to 9.55%. For the last decile the consumption falls to 8.10%.
- In urban India the share of egg, fish and meat in total consumption initially increased till 4th decile from 3.99% to 4.97% but after that it decreased from 4.97% to 2.32%. Whereas in rural India it has increased from 3.02% to 4.62% from bottom decile class to the top decile class.

The most expensive category that is fruits and nuts displayed that as income rises the MPCE also rises.

• The share of fruits and nuts in total consumer expenditure rose with the rise in MPCE level in both urban and rural sectors. In urban sector the share was 1.80% for the bottom decile class which increased to 3.45% as one moves towards the top decile class. In rural sector MPCE rose from 1.01% for the bottom decile to 3.50% for the top decile class.

Essentials like fuel and lighting and clothing and footwear showed a declining MPCE with rising income classes.

• In both rural and urban areas, there was a declining trend in the percentage share of fuel and lighting in total expenditure. The share falls from 10.91% to 4.58% in urban area and 11.80% to 5.29% in rural area as one moves towards higher MPCE class.

The semi-luxury and luxury category like durable goods and miscellaneous goods and services showed increasing MPCE with rising income.

- In both urban and rural India, durable goods show a rising consumption trend with increase in income. Till 9th decile class, both the graphs rise in a largely linear manner ranging between 2% and 5% and then spike up in the last decile to around 10% in both urban and rural areas.
- The share of miscellaneous goods and services in total expenditure rises steadily with rise in MPCE class from 18.59% to 47.95% in urban India and 14.72% to 33.14% in rural India.

Trends of Fiscal Deficit in India

Era of Pre-Liberalisation (1980-81 to 1990-91)

- The fiscal deficit of the Central Government rose sharply from the period 1980-81 to 1990-91, 5.55% of GDP in 1980-81 to 8.13% in 1986-87 and stood at 7.61% of GDP in 1990-91 due to unchecked growth of non-planned revenue expenditure particularly on interest payments and subsidies rose sharply during 1980s. The contribution of interest payments and subsidies as percentage of the revenue expenditure rose from 32% to 46% for the same period.
- The revenue deficit as percentage of GDP increased from 1.36% in 1980-81 to 2.48% in 1987-88 to and to 3.17% in 1990-91 because of higher interest payments. Government taking the responsibility of building the capital intensive projects led to increase in the gap between the fiscal and revenue deficit which stood at 4.19 percentage points in 1980-81 and rose to 4.44 percentage points in 1990-91.
- The primary deficit as a percentage of the GDP did not go up significantly on account of debt servicing. It changed from 3.81% in 1980-81 to 3.95% by 1990-91.

Post Liberalisation till FRBM Act (1990-91 to 2002-03)

• 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. To reduce the deficit efforts were made to reduce the share of subsidies in the revenue expenditure and to increase the share of direct taxes in revenue receipts

- 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.
- Together with reforms in tax structure which focused on increasing the share of direct taxes, the results effects were as follows 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.

Faced with the economic crisis stemming from the Balance of Payments crisis the government brought in the New Economic Policy in 1991, which focus of Liberalisation, Privatisation and Globalisation. It had the following medium term impacts.

- Primary deficit as percentage of GDP fell from 3.95% in 1990-91 to 0.51% in 1996-97 as liberalisation ensured that government was no more the only entity which could undertake capital investment, further the capital receipts from privatisation helped ease the pressure on the finances. 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.
- The revenue deficit also experienced a positive impact courtesy the revived tax structure and controlled subsidy expenditure. As percentage of GDP the revenue deficit fell from 3.17 percent in 1990-91 to 2.3 percent 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.

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, had the following effects:

• During 1997-2002 the country received very little of investments, there was a decline in public investment not only because a good deal of borrowing by the government was used to meet revenue deficit but also because of change in

economic policy which aimed at reducing the role of public sector. Besides, public sector investment could not be raised also because of the fiscal policy stance of reducing fiscal deficit as recommended by IMF, World Bank and economists associated with these institutions.

• 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.

Post FRBM Act, 2003 till 2014-15

- The FRBM Act was brought into force on July 5, 2004. As a result of the efforts taken, fiscal deficit as a proportion of GDP started declining. During 2003-04, it was 4.3%, which declined to 3.3% and 2.5% in 2006-07 and 2007-08 respectively. The primary deficit remained negative over the same period.
- The sub-prime crisis emanating from the United States led to the fiscal deficit as percentage of GDP rising from 2.54% in 2007-08 to 5.99% in 2008-09, however the same was moderated to 3.94% by 2015-16.
- 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.
- 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 this share dropped to 40% in 2010-11 owing to the unanticipated non-tax revenue from spectrum auction.

Statistical Analysis of Gross Fiscal Deficit (1980-81 to 2013-14)

- The average Gross Fiscal Deficit as percentage of GDP was 5.60%, with high being 8.13% (1986-87) and low being 2.54% (2007-08).
- The average Revenue Deficit as percentage of GDP was 2.76% with high being 5.23% (2009-10) and low being 0.22% (1981-82).

- The average Capital Expenditure as percentage of GDP was 3.76% with high being 6.81% (1986-87) and low being 1.60% (2006-07 and 2008-09).
- For the period 1980-81 to 2015-16, the study has carried out regression analysis by taking GFD as dependent variable and revenue deficit as a percentage of GDP and capital expenditure as a percentage of GDP as independent variables. The result indicated that 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.

Financing of Fiscal Deficit in India

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

- The period shows steady decline in the share of 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. For the same period the proportion of internal finance rose from 84.56% in 1980-81 to 92.87% in 1990-91.
- 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.

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

- 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.
- 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

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.
- 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%.

Effects of Fiscal Deficit on Private Consumption Behaviour in India

To capture the effect of fiscal deficit on private consumption behaviour in long run and short run, the study used Vector Error Correction Model. Fiscal deficit is not the only factor which affect private consumption. So to make the study more comprehensive we have incorporated other variables also. They are disposable income, government consumption, foreign savings, base money, real rate of interest and domestic credit to private sector. The study has also integrated three dummy variables D_1 (Liberalisation

1991), D_2 (FRBM Act, 2003) and D_3 (Financial Crisis, 2008) to show structural breaks. The findings of the study are as follows.

Effect of Independent Variables on Private Consumption in the Long run

- In the long run fiscal deficit (FD) has positive impact on private consumption, a unit increase in FD leads to 2.50 units increase in private consumption.
- The impact of disposable income (YD) is positive on private consumption, a unit increase in YD leads to 2.03 unit increase in PC.
- The impact of foreign savings (FS) is also positive, a unit increase in FS leads to 1.92 units increase in PC.
- Government consumption (GC) has a negative impact in the long run, a unit increase in GC leads to 5.25 units decrease in PC.
- The impact of base money (BM) on private consumption is negative, a unit increase in BM leads to 0.81 units decrease in PC.
- The effect of disposable income, government consumption, fiscal deficit, foreign savings and base money are significant on private consumption in the long run.

Effect of Independent Variables on Private Consumption in the Short run

- The coefficient of ECM is -0.084 indicating that any short term fluctuations between variables will give rise to a stable long run relationship between the variables.
- In the short run, the effect of disposable income, government consumption, fiscal deficit, foreign savings, base money, domestic credit to private sector, real rate of interest and dummy variables (D₁, D₂, D₃) on private consumption are not significant.
- In short run, the adjustments on effect of disposable income, YD (-0.307), Foreign savings, FS (-0.005) and base money, BM (-0.345) on private consumption, PC is diminishing or negative.
- The adjustments on effect of government consumption, GC (0.204) and fiscal deficit, FD (0.146) on private consumption, PC is amplifying or positive.

- The exogenous variables, domestic credit to private sector (DCP) and real rate of interest (R) both have positive impact on private consumption.
- The impact of dummy variables D₁ (Liberalisation 1991), D₂ (Fiscal Responsibility and Budget Management Act, 2003 (FRBM)) and D₃ (Financial Crisis 2008) on private consumption are positive, negative and positive respectively.

Impulse Response

- A unit impulse in PC would have a positive effect on itself, the effect would increase as we move from period 1 to 4 and then stabilise going forward.
- The positive impact of the fiscal deficit (FD), disposable income (YD), foreign savings (FS) and the negative impact of government consumption (GC) and base money (BM) discovered under the VAR model of the private consumption expenditure is confirmed in the impulse response function.
- In response to an impulse from YD and FD, PC would rise up to period 4 and then would have constant effect up to the 10 years, however in terms of significance of impact a unit shock in YD will lead to higher impact vis-à-vis a unit shock in FD.
- In terms of the impact from FS impulse PC would rise from period 1 to 3 and then remain almost constant.
- It's seen that a unit shock in GC and BM would have negative influence on PC. For both the negative effect would increase up to 5 years and steady. In terms of the quantum of impact impulse in GC will bring about a higher negative impact on PC than would be brought about by a BM impulse.

Variance Decomposition

• The result of the variance decomposition estimates of private consumption indicates that changes in private consumption explain about 55.44% of changes in private consumption in the 10th period and thus has a significant impact of itself. This is followed by disposable income explaining 21.99% of changes in private consumption in the 10th period. GC by government consumption which explains about 8.34% changes in private consumption during the same period.

• Relatively smaller impact, about 5.61%, 4.32% and 4.31% of the future changes in private consumption are attributable to changes in base money, foreign savings and fiscal deficit respectively.

6.2 POLICY IMPLICATIONS

This study finds that fiscal deficit and private consumption have a positive relationship both in long run and short run and theoretically supports the fact that Fiscal Deficit may be considered to have expansionary effect on demand provided that there are no constraints on the supply side. Policy makers may also consider incurring deficit to raise aggregate demand, this may act as a mechanism to cure recession.

Further, findings indicate that part of the fiscal deficit is self-financed through a mechanism of increased receipt from consumption taxes. Thus the government may take this into consideration while budgeting for the sources of financing the deficit.

This is further substantiated by two facts. Firstly, over time there has been growing shift in private consumption expenditure from traditional food items to non-food items, and within the non-food items the miscellaneous goods and services (like education, medical, conveyance, consumer services, rent, etc.) category is a significant portion. Secondly, it is observed that the government has been widening the tax net with inclusion of many of the services under service tax. Thus part of the fiscal deficit incurred by the government comes back to it in the form of revenue receipts through consumption taxes.

6.3 SCOPE OF FUTURE RESEARCH

This study makes an attempt to look into the long and short run relationship of fiscal deficit on private consumption behaviour in India. There is scope for further research to assess the effects of different components of fiscal deficit on private consumption. Studies may also be conducted to analyse the effect of fiscal policy or fiscal deficit on Private Investment in times of recession or depression. Further since fiscal deficit is mostly financed through borrowings and thereby affects interest rates, an in depth study on the effect of interest rates on private consumption may be looked at. Also this study has been conducted

for the centre, studies on similar lines could be done at state level or for individual states/UTs.