CHAPTER – 5

THE GOVERNMENT: BUDGET AND THE ECONOMY

EXERCISES

Question 1: Explain why public goods must be provided by the government.

Answer:

Public goods are the goods like roads, parks, police services, defence services, Railway, etc. These goods are collectively consumed by one and all people in the society. These Goods are produced and provided with welfare motive, which is the main objective of Government production.

So the public goods must be provided by the government due to following reasons –

•The benefits of public goods can be easily enjoyed by everyone.

•The consumption by one individual should not affect the consumption of another individual.

Therefore, providing public goods is responsibility of government due to non-rivalry and non-excludable reasons.

Question 2: Distinguish between revenue expenditure and capital expenditure.

Answer:

Revenue Expenditure	Capital Expenditure
Revenue expenditure is the expenditure which is financed out of revenue receipts.	Capital expenditure is the expenditure which is financed out of borrowings from public and foreign governments.

It is such expenditures of government which does not result in creation of an asset or in reduction of any liability.	This expenditure of government results in creation of assets or reduction in liabilities.
It is short period expenditure.	It is generally long period expenditure.
It is recurring in nature.	It is non-recurring in nature.
The examples of revenue expenditure are expenditure on interest, pension, salary, etc.	The example of capital expenditures are expenditure on roads, bridges, Metro project, etc.

Question 3: 'The fiscal deficit gives the borrowing requirement of the government'. Elucidate.

Answer:

Fiscal deficit is the excess of total expenditure over total receipt. So the fiscal deficit estimates the borrowing requirements of the government from all the sources during the financial year. It is an estimate of borrowings by the government.

The greater will be the fiscal deficit the more will be the borrowings by the government. Higher borrowings imply a higher burden of repayment of loan and of interest on future generation.

Fiscal Deficit = Total expenditure - Total receipts (excluding borrowings)

Question 4: Give the relationship between the revenue deficit and the fiscal deficit.

Answer:

Revenue deficit is the excess of revenue expenditure over revenue receipts whereas fiscal deficit is excess of total expenditure over total receipts (excluding borrowings). Fiscal deficit is a wider phenomenon than revenue receipts. If capital expenditure is greater than non-debt capital receipts, then there is physical deficit even if there is no revenue deficit.

Question 5: Suppose that for a particular economy, investment is equal to 200, government purchases are 150, net taxes (that is lump-sum taxes minus transfers) is 100 and consumption is given by C = 100 + 0.75Y (a) What is the level of equilibrium income? (b) Calculate the value of the government expenditure multiplier and the tax multiplier. (c) If government expenditure increases by 200, find the change in equilibrium income.

Answer:

Given is –

I = 200

G = 150

T = 100

C = 100 + 0.75 Y

So, C (Autonomous consumption) = 100

And, MPC (c) = 0.75

(a) What is the level of equilibrium income?

Level of equilibrium income = 1/(1-c) [C - cT + I + G]

= 1/ (1 – 0.75) [100+ (0.75 × 100) + 200 + 150]

= 1/0.25 [375]

= 1500

(b) Calculate the value of the government expenditure multiplier and the tax multiplier.

Government expenditure multiplier $\Delta Y/ \Delta G = 1/1\text{-}c$

$= 1/ 1\text{-} 0.75$

$= 1/0.25$

$= 4$

Tax multiplier $\Delta Y/ \Delta T = -c/1\text{-}c$

$= -0.75/0.25$

$= - 3$

(c) If government expenditure increases by 200, find the change in equilibrium income.

New level of equilibrium income = $1/(1\text{-}c)\ [C - cT + I + G + \Delta G]$, Where $\Delta G = 200$

= 2300

Change in equilibrium income = 2300 – 1500 = 800

Question 6: Consider an economy described by the following functions: C = 20 + 0.80Y, I = 30, G = 50, TR = 100 (a) Find the equilibrium level of income and the autonomous expenditure multiplier in the model. (b) If government expenditure increases by 30, what is the impact on equilibrium income? (c) If a lump-sum tax of 30 is added to pay for the increase in government purchases, how will equilibrium income change?

Answer:

Given is

C = 20 + 0.80 Y (C = 20 & MPC = 0.8)

I = 30

c = 0.80

G = 50

TR = 100

(a) Equilibrium level of income = 1/(1-c) [C + cTR + I + G]

= 1/ (1 – 0.8) [20 + (0.8 X 100) + 30 + 50]

= 900

Autonomous expenditure multiplier = 1/1-c

= 1/1-0.8

= 5

(b) If government expenditure increases by 30, what is the impact on equilibrium income?

New level of equilibrium income = 1/(1-c) [C + cTR + I + G + ΔG], Where ΔG = 30

= 1050

Change in equilibrium income = 1050 – 900 = 150

c) Tax multiplier $\Delta Y / \Delta T = -c/1-c$

= -0.8/0.2

= - 4

$\Delta Y / \Delta T = -4$

$\Delta Y = -4 \times \Delta T$

$= -4 \times 30$

= - 120

Y = 900 – 120 = 780

Question 7: In the above question, calculate the effect on output of a 10 per cent increase in transfers, and a 10 per cent increase in lump-sum taxes. Compare the effects of the two.

Answer:

Given is

$C = 20 + 0.80\,Y$ ($C = 20$ & $MPC = 0.8$)

$I = 30$

$c = 0.80$

$G = 50$

$TR = 100$

$\Delta TR = 10$

(a) Equilibrium level of income = $1/(1\text{-}c)\,[C + cTR + I + G + c\Delta TR]$

$= 1/\,(1 - 0.8)\,[20 + (0.8 \text{ X } 100) + 30 + 50 + (0.8 \text{ x } 10)]$

$= 940$

$\Delta Y = 940 - 900 = 40$

Change in income due to change in tax

$\Delta Y = \text{-}c/1\text{-}c \text{ X } \Delta T = -\,40$

Therefore, increase in 10% in transfer will raise the income by 40% and increase in 10 % in tax will decrease the income by 40%

Question 8: We suppose that $C = 70 + 0.70Y\,D$, $I = 90$, $G = 100$, $T = 0.10Y$ (a) Find the equilibrium income. (b) What are tax revenues at equilibrium income? Does the government have a balanced budget?

Answer:

Given is

$C = 70 + 0.70\ YD$

$I = 90$

$G = 100$

$T = 0.10Y$

$Y = C + I + G$

(a) Find the equilibrium income

$Y = 70 + 0.70YD + 90 + 100$

$Y = 0.70YD + 260$

$Y = 260 + 0.70\ (Y - T)$

$Y = 260 + 0.70Y - 0.70T$

$Y = 260 + 0.70Y - 0.70 \times 0.10\ Y$

$Y = 260 + 0.63Y$

$Y - 0.63Y = 260$

$Y = 260/0.37$

$Y = 702.7$

(b) What are tax revenues at equilibrium income? Does the government have a balanced budget?

$T = 0.10Y$

$= 0.10 \times 702.7$

$= 70.27$

This shows that Govt Expenditure is more than tax revenue, so it is not a balanced budget but a deficit budget

Question 9: Suppose marginal propensity to consume is 0.75 and there is a 20 per cent proportional income tax. Find the change in equilibrium income for the following

(a) Government purchases increase by 20 (b) Transfers decrease by 20.

Answer:

Given is

$c = 0.75$

$t = 0.20$

(a) Change in equilibrium income if Government purchases increase by 20

$\Delta Y = [1/1- \{c\ (1-t)\}]\ X\ \Delta G$, where ΔG is 20

$= [1/1 - \{0.75X0.80\}]\ X\ 20$

$= 50$

(b) Change in equilibrium income if transfers increase by 20

$\Delta Y = (c/1-c)\ X\ \Delta T$

$= (0.75/1-0.75)\ X\ 20$

$= 60$

Question 10: Explain why the tax multiplier is smaller in absolute value than the government expenditure multiplier.

Answer:

The tax multiplier is smaller in absolute value than the government expenditure multiplier because the government expenditure affects the total expenditure and taxes through the multiplier.

The tax multiplier also influences the disposable income which affects the overall consumption level.

Let us explain it with the help of an example -

Suppose MPC (c) is 0.60

Government expenditure multiplier = 1/1-c

= 1/1-0.6

= 2.5

Tax multiplier = - c/1-c

= - 0.6 /1-0.6

= - 1.5

This shows that government expenditure multiplier is more than the tax multiplier.

Question 11: Explain the relation between government deficit and government debt.

Answer:

In order to meet the government deficit, the government relies upon borrowings, which creates government debt. So the concept of deficit and debt are closely related. Deficit is a flow which adds to the stock of debt.

Question 12: Does public debt impose a burden? Explain.

Answer:

Public debt or government debt is the amount that the Central Government owes. This may be in form of borrowings from bank, public financial institutions, or from other internal and external sources.

The public debt definitely imposes a burden on the economy which is being discussed below –

a) To repay the debt, the government imposes higher tax or get the money printed, which adversely affects the productivity and investment.

b) The burden of debt is transferred to future generation which negatively affects the welfare of younger generation.

c) The government increases the rate of interest on bonds and securities to attract more investment due to which a major part of saving of citizens goes in the hands of government, which lower the private investment.

d) The wealth of the country is drained out in repayment of loan taken from foreign countries and institutions.

Question 13: Are fiscal deficits inflationary?

Answer:

Fiscal deficit turns out to be inflationary in the government finances it by way of deficit financing. Deficit financing means that the government borrows from Reserve Bank of India. The government issues treasury bills against which the RBI gives cash to government and this increases money supply in the economy. Increase in money supply leads to increase in the general price level and a persistent increase in price level over a period of time. This increase culminates into an inflationary spiral, which is a wage price spiral. It means wages catching prices and prices catching wages in turn. It affects the process of growth of economy and raises the cost push inflation.

Therefore, the physical deficit should be carefully managed in an economy. If it is managed by increasing production it may not be inflationary.

Question 14: Discuss the issue of deficit reduction.

Answer:

The Government of India has been trying to reduce its deficit by

•Increase in taxes

•Reduction in its expenditure and

•Increase in its receipts through the sale of shares in Public Sector Units

However, these steps could result in deficit reduction, but the activities of government should be more efficient through proper planning of program along with better administration and implementation.

The alternative way of deficit reduction can be to change the scope of government by withdrawing it from some of the areas which were under its purview.

In discharging its fiscal responsibilities, the government has to pursue prudent fiscal policy which is conducive to bring a high rate of economic growth in the economy.