

UNIT IV

CONSUMPTION FUNCTION

Introduction

This chapter is deals with the various factors which determine the levels of national income and employment. As we have seen, given the aggregate supply, the level of income or employment is determined by the level of aggregate demand; the greater the aggregate demand, the greater the level of income and employment and vice versa. Keynes was not interested in the factors determining the aggregate supply since he was concerned with the short run and the existing productive capacity. Aggregate demand consists of two parts-consumption demand and investment demand. In this chapter we will explain the consumption demand and the factors on which it depends and how it changes over a period of time. Consumption demand depends upon the level of income and the propensity to consume. We shall explain below the meaning of the consumption function and the factors on which it depends.

The distinction between consumption and consumption function will make the meaning of consumption function clear. Consumption means the amount spent on consumption at a given level of income, but consumption function or propensity to consume means the whole of the schedule showing consumption expenditure at various levels of income. It means how consumption expenditure increases as income increases. The consumption function or propensity to consume, therefore, indicates a functional relationship between two aggregates, viz., total consumption expenditure and the gross national income. It is a schedule that expresses relationship between consumption and disposable income.

Propensity to Consume

Propensity to Consume means the relationship between income and consumption, i.e. propensity consume is also called “consumption function”. Aggregate consumption depends on consumption function (or) propensity to consume.

Consumption means the amount spent on consumption at a given level of income. The factors influenced consumption are ;

- (a) the real income of the individual,
- (b) his past savings
- (c) Rate of interest consumption function (or) propensity to consume means how consumption expenditure increases as income increases.

Consumption demand depends on income and propensity to consume. Propensity to consume depends on various factors such as price level, interest rate, stock of wealth and other subjective factors.

Average and Marginal Propensity to Consume:

There are two important concepts of propensity to consume (1) Average propensity to consume and (2) marginal Propensity to consume

Average Propensity to Consume

The average propensity to consume is a relationship between total consumption and total income in a given period of time. Therefore, average propensity to consume is calculated by dividing the amount of consumption by the total income.

$APC = \frac{C}{Y}$, where Y

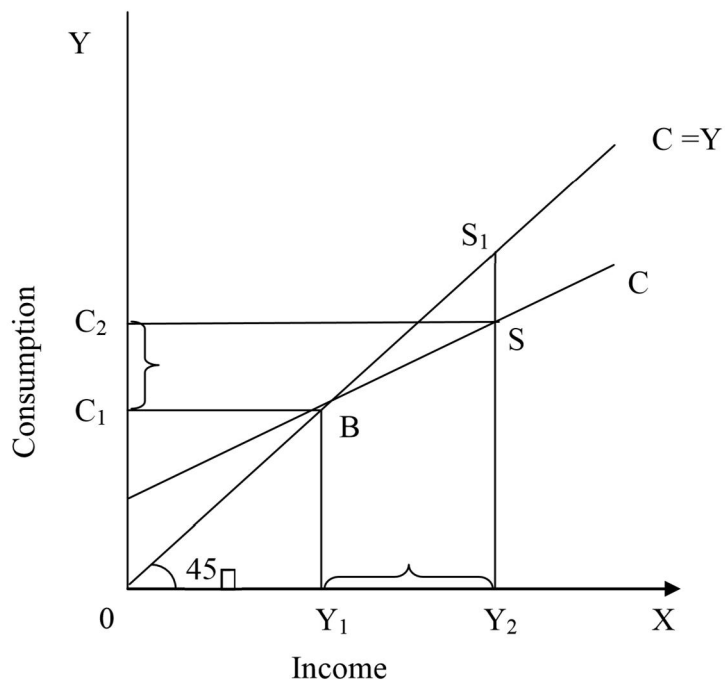
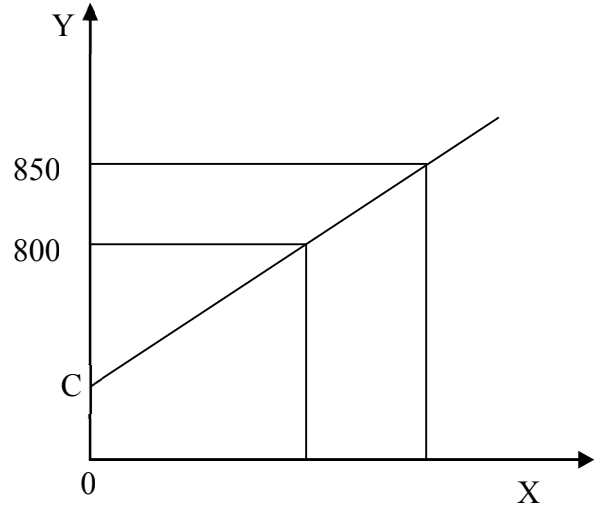
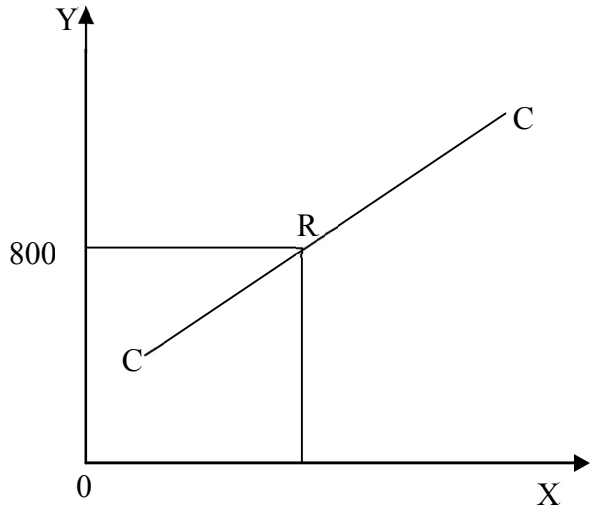
APC stands for average propensity to consume C for amount of consumption, and Y for the level of income.

Average propensity consume is the ratio of consumption to income.

For example.

Consumption (C)

$$\text{Income (Y)} = \frac{800}{1000} = \frac{8}{10} = 0.8$$



Marginal Propensity to Consume

The marginal propensity to consume measures the incremental change in consumption as a result of a given increment in income-is how much consumed and how much saved. Marginal propensity to consume is the ratio of change in consumption of the change in income. Thus:

$$MPC = \frac{\Delta C}{\Delta Y}$$

Where, MPC stands for marginal propensity to consume ΔC for change in consumption, and ΔY for change in income.

For example, the table 7.1 shows that the marginal propensity to consume at various levels of income. In this schedule when income rises from Rs. 1000/- crores to Rs. 1100/- crores, the consumption increases from Rs. 950 crores to Rs. 1040 crores. Here the increment in consumption is Rs. 90/- crores. Therefore marginal propensity to

consume which is $\frac{\Delta C}{\Delta Y}$ is here equal to $\frac{90}{100}$ or 0.9.

Concept of Consumption Function

As the demand for a good depends upon its price, similarly consumption of a community depends upon the level of income. In other words, consumption is a function of income. The consumption function relates the amount of consumption to the level of income. When the income of a community rises, consumption also rises. How much consumption rises in response to a given increase in income depends upon the propensity to consume or consumption function. It should be borne in mind that the consumption function or the propensity to consume is the whole schedule which describes the amounts of consumption at various levels of income. We give below such a schedule of consumption function.

Consumption function should be carefully distinguished from the amount of consumption. By consumption function is meant the whole schedule which shows consumption at various levels of income, whereas amount of consumption means the amount consumed at a specific level of income. The schedule described above reflects

the propensity to consume of a community i.e., it indicates how the consumption changes in response to the change in income. In the above schedule it will be seen that at the level of income equal to Rs. 1200 crores, the amount of consumption is Rs. 900 crores. As the national income increases to Rs. 1500 crores, the consumption rises to Rs. 1125 crores. Thus, with the given propensity to consume or consumption function, amount of consumption is different at different levels of income.

Consumption Function Schedule

Income (Rs. In crores)	Consumption (Rs. In crores)	Average Propensity to consume		Marginal propensity to consume	
Y	C		$\frac{C}{Y}$		$\frac{C}{Y}$
1000	750	750 1000	0.75	-	
1100	825	825	0.75	75	.75
		1100		100	
1200	900	900	0.75	75	.75
		1200		100	
1300	975	975	0.75	75	.75
		1300		100	
1400	1050	1050	0.75	75	.75
		1400		100	
1500	1125	1125	0.75	75	.75
		1500		100	
1600	1200	1200	0.75	75	.75
		1600		100	

The above schedule of consumption function reveals an important fact that when income rises, consumption also rises but not as much as the increase in income.

This fact about consumption function was emphasized by Keynes, who first of all evolved the concept of consumption function. The reason why consumption rises less than increases in income is that a part of increment in income is saved. Therefore, we see that when income increases from Rs. 1000 crores to Rs. 1100 crores, the amount of consumption rises from Rs. 750 crores to 825 crores. Thus, with the increase in income by Rs. 100 crores, consumption rises by Rs. 75 crores; the remaining Rs. 25 crores is saved. Similarly, when income rises from Rs. 1100 crores to Rs. 1200 crores, the amount of consumption increases from Rs. 825 crores to Rs. 900 crores. Here also, as a result of increase in income by Rs. 100, the amount of consumption has risen by Rs. 75 crores and the remaining Rs. 25 crores has been saved. The same applies to further increases in income and consumption. We shall see later that Keynes based his theory of multiplier on the proposition that consumption increases less than income and his theory of multiplier occupies an important place in macroeconomics.

Factors affecting Consumption Function

The factors that determine consumption function are of two types, (a) Objective factors; (b) Subjective factors.

Objective Factors

1. Distribution of Income

This is an important factor determining the propensities to consume. Normally the average and marginal propensities to consume of the poor people are higher than those of the rich. This is because the poor have a lot of unsatisfied wants and are likely to spend every additional unit of money that they obtained in satisfying their wants. In contrast, the rich have a high standard of living and relatively less urgent wants remain to be satisfied. Additional income in their case is more likely to be saved. Hence, the more equal the consume.

2. Fiscal Policy

The Fiscal Policy of the government is related to taxation. Expenditure and public debt affects the propensity to consume. A reduction in taxation will leave more post – tax incomes with people which would tend to increase their expenditure on consumption. In

contrast, an increase in taxation will decrease consumption. A highly progressive tax system decreases inequalities in the distribution of income which increases the propensity to consume.

3. Financial Policies of Corporations

If corporations and companies retain more reserves and distribute lesser profits in the form of dividends, the disposable incomes of the share holders will be smaller.

In contrast if more profits are distributed more will be spent on consumption.

4. Change in Expectations

If the consumers expect a shortage or rise in prices of certain goods they may rush to purchase such goods in excess of their current needs. This would raise the consumption function. On the other hand, if the people expect a decline in price they would tend to postpone purchases of such goods which would lower the consumption function.

The consumption of a person is also influenced by expectation as to what his income will be in the future. If he expects an increase in income in future he will tend to consume more.

5. Windfall Gains or Losses

Sudden and unexpected gains and losses in income affect consumption function. It is believed that the beneficiaries of windfall gains increase their consumption above the normal level.

6. Liquid Assets

Changes in liquid assets of people affect their consumption with an increase in their liquid assets, the people have a tendency to increase their consumption.

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5. Selling Effort

Given the level of income an increase in selling effort may increase the total volume of consumer's expenditure. But this factor has not been given much attention in the theory of aggregate demand.

6. Relative prices

There is a tendency among economists to ignore the effect of changes in relative prices on the aggregate demand. But in fact changes in relative prices can affect aggregate consumer demand.

7. Volume of Wealth

The larger the wealth possessed by a person, the lower would be its marginal utility to him and as such the weaker would be the desire to add to future wealth by reducing current consumption.

8. Demographic Factors

Even at a given level of income the consumption expenditure may differ from family to family. Such differences in consumption can be explained by demographic factors which include size of the family, place of residence, occupation. Other things remaining unchanged the large sized families would spend more. Families with children of college

age would spend more than those with children of primary school age further the urban families have tendency to spend more than the rural families.

9. Terms of Consumer Credit

The terms of consumer credit exert an important influence on consumer purchases of durables. In recent years there has been considerable increase in the volume of purchases of consumer durables financed by consumer credit. It is generally recognized that the interest rate paid on installment credit is not of so much importance.

10. Permanent Income

A family's expenditure on consumption is determined not by its current income but by its permanent income.

11. Consumer Durables

The short run instability of consumption expenditure in relation to income is considerably concentrated in the area of consumer durables. The logic of the consumption function suggests that it is the current services rendered by durable goods which are desired in an amount related to current income. The purchase of durables are considerably influenced by the size of the existing stock of durable goods possessed by the consumers.

Subjective Factors

Keynes mentions the following important motives of a subjective nature which lead people to refrain from spending.

1. To build up reserve against unforeseen circumstances.
2. To provide for an anticipated future relation between income and the needs of the individual different from that which exists in the present.
3. A larger real consumption at a later date is preferred to a smaller immediate consumption.
4. To enjoy a gradually increasing expenditure.
5. To enjoy a sense of independence and the power to do things.
6. To carry out speculative projects.
7. To bequeath a fortune.
8. To satisfy a pure miserliness.

The above motives are called by Keynes as the motives of precaution, foresight, calculation, improvement, independence, enterprises, pride and avarice and the corresponding motives to consumption are called enjoyment, short sightedness, generosity, miscalculation, ostentation, and extravagance.

In addition, Keynes gave the motives of enterprise, liquidity improvement and financial precedence whereby firms and corporations save, thus reducing consumption expenditure. But these psychological characteristic of human nature do not undergo much change in a short period. Therefore Dillard concluded that although the propensity to consumer is stable in the short period it is not absolutely rigid. Subjective factors can bring shifts in consumption function effectively.

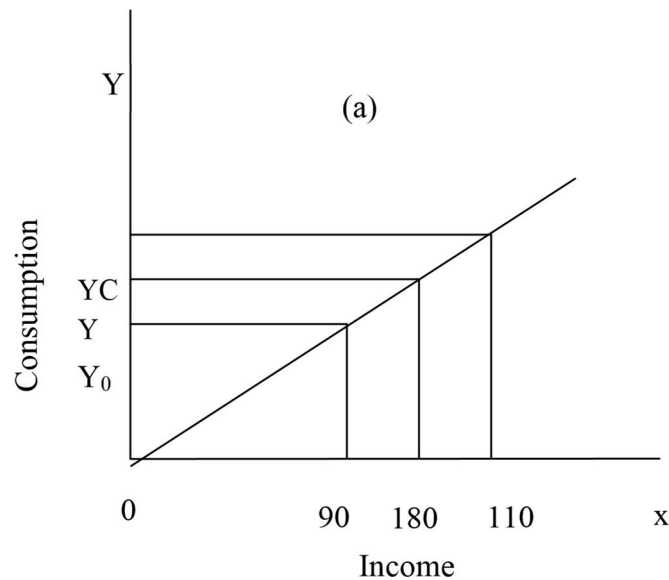
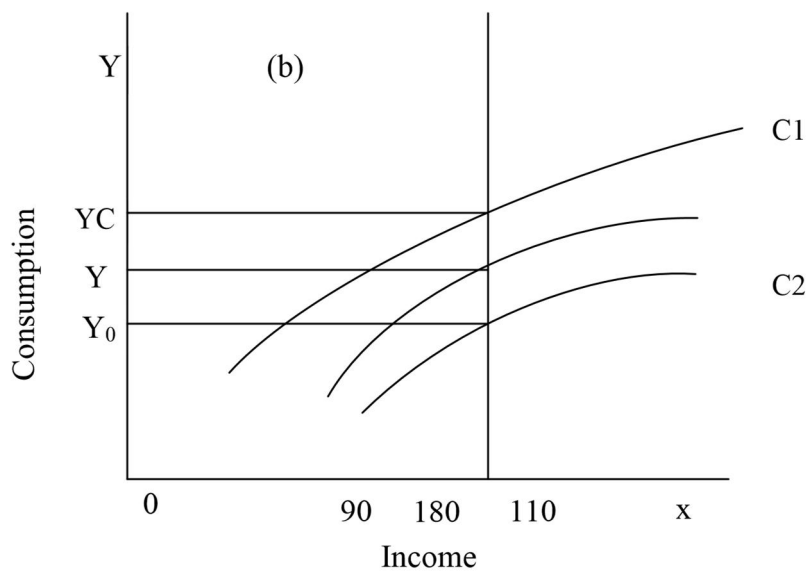


Fig. 11. A



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The text expressed the consumption demand depends upon the level of income and the propensity to consume. Consumption function or propensity to consume means the whole of the expenditure at various levels of income. It means how consumption expenditure increases as income increases. The consumption function or propensity to consume, therefore, indicates a functional relationship between two aggregates, viz., total consumption expenditure and the gross national income. It is a schedule that expresses relationship between consumption and disposable income.

