Chapter – Aggregate Demand and Related Concept

Q1. What is aggregate demand and components of aggregate demand.

Ans. It refers to total demand of final goods and services which all the sectors of economy are planning to buy at a given level of income during a period of one accounting year.

❖ **<u>COMPONENTS OF AGGREGATE DEMAND</u>;-**

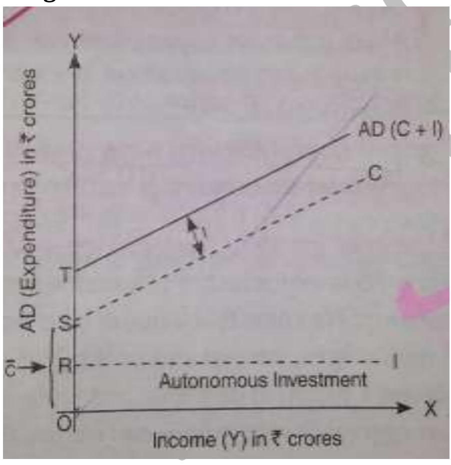
1. **<u>PRIVATE CONSUMPTION EXPENDITURE</u>:-** It refers to the total expenditure incurred by the household on purchase of goods and services during an accounting year. This expenditure is directly influenced by level of disposable income.
2. **<u>INVESTMENT EXPENDITURE</u>:-** It refers to total expenditure incurred by all private firms on capital goods, machinery, building, change in inventory.
3. **<u>GOVT. EXPENDITURE</u>;-** It refers to the total expenditure incurred by the govt. on consumer goods and capital goods to satisfy the common needs of economy.
4. **<u>NET EXPORTS</u>;-** Exports indicate demand of goods produced within the domestic territory of a country by rest of the world.
   Import refers to the demand of residents of a country for the goods that have been produced abroad. The difference between export and import is termed as net exports. (X – M)

Q2. Explain the aggregate demand in two sector model.

Ans.

Income	**Consumption**	**Investment**	**AD (C + I)**
0	40	20	60
100	120	20	140
200	200	20	220
300	280	20	300
400	360	20	380
500	440	20	460
600	520	20	540

Diagram:-



❖ **<u>EXPLANATIONS</u>:-**

1. AD = C + I, AD is assumed to a function of only consumption demand and investment demand.
2. **<u>POSITIVE CONSUMPTION EVEN INCOME LEVEL IS ZERO</u>:-** There is always some minimum level of consumption even when income is 0. It happen because people need basic goods and services to sustain themselves even if income is zero. The positive consumption at zero level of income indicates the level of autonomous consumption.
3. **<u>SLOPE OF CONSUMPTION CURVE</u>:-** The first components of AD that is consumption curve slope upward because consumption increases with increase in income. However proporiate increase in consumption is less than that of income. It happens because after reaching a particular level people start saving a part of their income.

4. **SLOPE OF AUTONOMUS INVESTMENT CURVE;-** It is straight line parallel to the axis. It is assumed to be independent of the level of income. It remain constant.
5. **STARTING POINT OF AD CURVE;-** AD curve start from point T as at zero level of income AD is equal to autonomous consumption + autonomous investment.
6. **SLOPE OF AD CURVE;-** AD curve has a positive slope which indicates that as income increases expenditure also increases.

Q3. What is aggregate supply and its components.

Ans. AS refers to the money value of all final goods and services that all producers are willing to supply in economy in a given time period.

❖ **COMPONENTS OF AS;-**

- AS = C + S aggregate supply and national income are one and some so income is either saved or consumed.

Income	Consumption	Saving	AS = (C + S)
0	40	-40	0
100	120	-20	100
200	200	0	200
300	280	20	300
400	360	40	400
500	440	60	500
600	520	80	600

Diagram:-

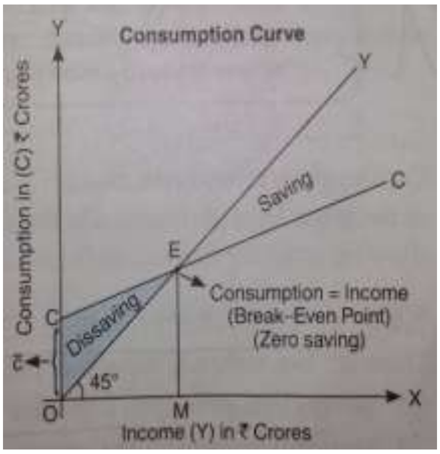
- Income is an x-axis and consumption and saving on y-axis.
- Supply curve is drawn from the origin because at zero level of income aggregate supply is 0.
- As is upward sloping.
- As income increases consumption also increases but not in same proportion.
- AS draw from the origin which make the angle of 45degree.

Q4. What is consumption function or propensity to consume.

Ans. Consumption function refers to functional relationship between consumption and national income.

Income	Consumption
0	40
100	120
200	200
300	280
400	360
500	440
600	520

Diagram:-



1. **<u>STARTING POINT OF CONSUMPTION CURVE</u>;-** Consumption curve start from point C on y-axis. This implies that there is autonomous consumption of OC even when the income is 0.
2. **<u>SLOPE OF CONSUMOPTION CURVE</u>;-** Consumption curve has a TVC slope which indicates that the income increases consumption also increases. However, proportionate rise in consumption is less than proportionate rise in income as part of income is saved.
3. **<u>INCOME IS LESS THAN CONSUMPTION</u>;-** When income is less than consumption, the gap is covered by dissaving C.OE represent dissaving.
4. **<u>BREAK EVEN POINT</u>;-** At point OM level of income and consumption becomes equal to income and saving is 0. The point E is known as breakeven point.
5. **<u>INCOME IS MORE THAN CONSUMPTION</u>;-** At points to the right of E income is more than consumption. Excess of income leads to saving. The gap between the 45degree line and consumption curve after point E represent the saving.

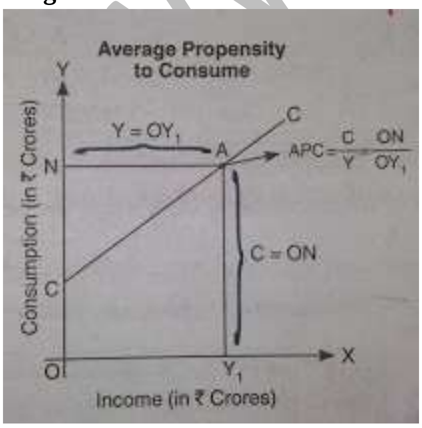
Q5. What are the types propensities to consume?

Ans. <u>AVERAGE PROPENSITY TO CONSUME</u>;- It refers to the ratio of consumption expenditure to the corresponding level of income.

APC = C/Y

Income	Consumption	APC
0	40	-
100	120	1.20 APC < 1
200	200	1 APC = 1
300	280	0.933 APC > 1
400	360	0.90

Diagram:



❖ **<u>EXPLANATION</u>;-**

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1. APC is more than 1 as long as consumption is more than national income that is before the break even point. APC is more than 1.
2. APC = 1 at the breakeven point consumption is equal to income.
3. APC is less than 1 beyond the breakeven point consumption is less than the national income. As a result, APC is smaller than 1.
4. APC falls with increase in income because of income spent on consumption keeps on decreasing and saving short increasing.
5. APC can never be zero. APC can be zero only when consumption become zero. However, consumption is never zero at any level of income even at zero level of income there is autonomous consumption.

MARGINAL PROPENSITY TO CONSUME;- It refers to the ratio of change in consumption expenditure to the change in total income.

$$MPC = \frac{\text{Change in Consumption}}{\text{Change in Income}}$$

Income	Consumption	Change in consumption	Change in income	MPC
0	40	-	-	-
100	120	80	100	0.8
200	200	80	100	0.8
300	280	80	100	0.8
400	360	80	100	0.8

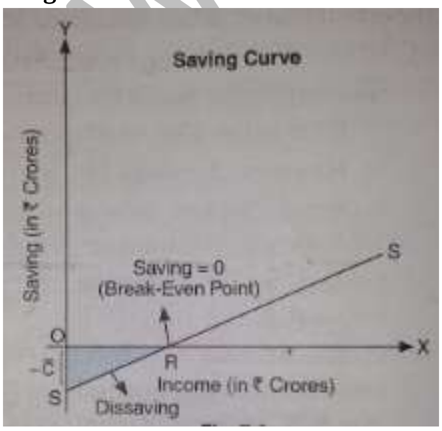
1. Value of MPC varies between o and 1. As income increase either income is spend on consumption or save. If the entire additional income is consumed that is change in saving = 0 than MPC = 1. However, if entire additional income is saved that is change in consumption = 0 than MPC = 0
2. MPC is poor is more than that of rich. It happens because poor people spent on greater percentage of their increase income on consumption. As most of their basic needs remain unsatisfied.
3. MPC falls with successive increase in income. It happens because an economy becomes riches. It has density to consume smaller percentage of increased income as part of the income is saved.

Q6. What is saving function?

Ans. It refers to the functional relationship between saving and national income.

Income	Consumption	Saving
0	40	-40
100	120	-20
200	200	0
300	280	20
400	360	40
500	440	60
600	520	80

Diagram:



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1. **STARTING POINT OF SAVING CURVE;-** Saving starts from the point S on y-axis indicating that there is negative saving when income is zero.
2. **SLOPE OF SAVING CURVE;-** It has the positive slope which indicates the positive relation between saving and income.
3. **BREAKEVEN POINT;-** Saving curve cut the x-axis at point R which is known as breakeven point at this point savings is zero. And consumption = income.
4. **POSITIVE SAVING;-** After breakeven saving is positive as consumption decreases.

Q7. What are the types of propensities to save?

Ans. AVERAGE PROPENSITY TO SAVE:- It refers to the ratio of saving to the corresponding level of income.

APS = Saving / Income

Income	Consumption	Saving
0	40	-40
100	120	-20
200	200	0
300	280	20
400	360	40

- APS can never be 1 or more than 1.
- As saving can never be equal to or more than national income.
- APS can be zero. APS equal to zero. As saving can be zero. It is known as breakeven point.
- APS can be negative or less than one. At income level which are lower than the breakeven point. APS can be negative as there will be dissaving in the economy.
- APS rises with increase in income. This is because the proportion of income save keeps on increasing.

MARGINAL PROPENSITY TO SAVE;- It refers to the ratio of change in saving to change in total income.

MPS = change in saving / change in income

- MPS varies between o and 1. If the entire additional income is saved that is change in consumption = 0 than MPS = 1.
- However, if entire additional income is consumed change in saving = 0 than MPS = 0.

Q8. Explain the relationship between APC and APS?

Ans. Y = C + S

Divide both side by Y

Y/Y = C/Y + S/Y

1 = APC + APS

Q9. Explain the relationship between MPC and MPS.

Ans. We known Change in income = change in consumption + change in saving

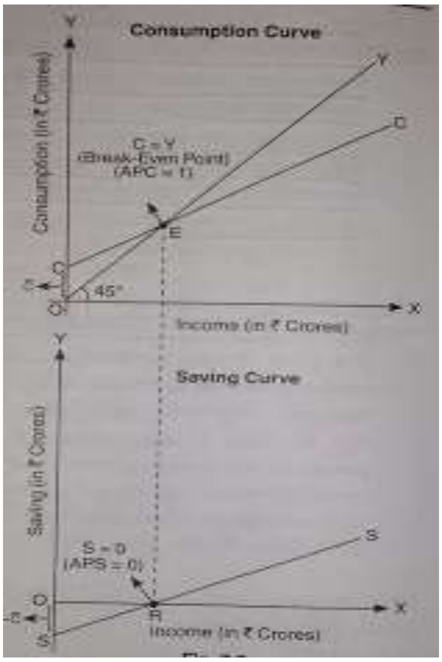
Divide by side by change in income

$$\frac{\Delta Y}{\Delta Y} = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y}$$

1 = MPS + MPC

Q10. Derive saving curve from consumption curve?

Ans. Diagrams:



As seen in the diagram CC is the consumption curve and line 45degree represent the income curve.

1. At zero level of income autonomus consumption C = OC which means savings at zero level of income will be OS (-C). As a result, the saving will start from point S on the negative Y axis.
2. Consumption curve CC intersect income curve at point E this is the breakeven point. At point P consumption = income i.e. APC = 1 and saving is 0. It means saving curve will intersect x-axis at point R. by joining this point S and R. and extending it further we get saving curve SS.

Q11. Desire consumption curve from saving curve?

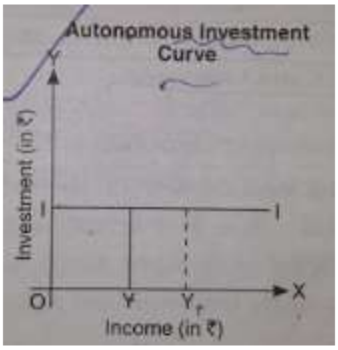
Ans.

1. The starting curve from consumption curve on y-axis will be equal to amount of dissaving at zero level of income.
2. The second point of consumption curve will be determine corresponding to point when saving curve intersect the x-axis.

Q12. What is induce and autonomist investment?

Ans. Induce investment refers to investment which depends on the profit expectation and is directly influence by income.

Diagram:



- Induce investment curve slope upward from left to right indicating as income increases investment also increases.
- **<u>AUTONOMIST INVESTMENT</u>;-** It refers to the investment which is not affected by change in the level of income and is not induced softly by profit motive.
  Diagram:

  The autonomous investment remain constant irrespective in the level of income in the economy.
- They are generate made by the govt. on infrastructural activities.
- **<u>EXANTE SAVINGS</u>;-** It refers to the amount of saving which household plans to0 save at different level of household.
- **<u>EXANTE INVESTMENT</u>;-** It refers to the amount of investment which firm plan to invest at different level of income in the economy.

Q13. What is ex-post saving and investment?
Ans.

- **<u>EX-POST SAVING</u>;-** It refers to actual or realized saving is an economy during the year.
- **<u>EX-POST INVETSMENT</u>:-** It refers to realized in actual investment in an economy during a year.

Q14. Difference between induced investment and autonomous investment.

Ans.

Basis	**Induced investment**	**Autonomous investment**
Motive	It is driven by profit motive, i.e. it depends on profit expectations.	It is done for special welfare and not for profit.
Income elasticity	It is income elastic, i.e. increase in income level raises its level.	It is unaffected by changes in income level.
Investment curve	Its curve slopes upwards as it is income elastic.	Its curve is parallel to X-axis as it is income inelastic.
Sector	It is generally done by the private sector.	It is generally done by the government sector.

Q15. Determinants of investment.

Ans.

1. **<u>MARGINAL EFFICIENCY OF INVESTMENT</u>:-** MEI refers to the expected rate of return from an additional investment. MEI is determined by two factors:

2. **<u>RATE OF INTEREST</u>:-** it refers to cost of borrowing money for financing the investment. There exists an inverse relationship between ROI and the volume of investment. At a high ROI, the investment spending will be less and vice-versa.