PRINCIPLES OF ECONOMICS

AEM 102 / AEFM DEPARTMENT

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CONSUMPTION

DISCUSSION CONTENTS

- Consumption
- Consumption Function
- Average and Marginal Propensity to Consume
- Average and Marginal Propensity to Save

SUNNYWISE

What is consumption ?

- Consumption is the amount a consumer spends on the purchase of goods and services.

- Consumer spending could be **Autonomous** (spending that is not related to income received) or **Induced** (spending resulting from increase in income).

- Consumption/spending is **not a function of income received**, but a **function of the amount available for spending.**

Consumption contd.

- Consumption is impossible without one earning income either through employment or transfers from businesses or government.

- Although, personal income is the most important variable of consumption, it is also affected by personal income taxes which actually reduces the actual amount available for spending (disposable income).

- The relationship between consumption and disposable income however is not a perfectly linear one thus showing that other variables influence the consumers decision to consume.

DISPOSABLE INCOME, PERSONAL INCOME,TRANSFER PAYMENT

- Disposable income: This is calculated by deducting taxes from personal income.
- **Disposable income** = Personal income – Taxes

- **Personal income:** This is the current income of households or persons from all sources which include receipts of such as transfer payments from which no productive services are made by recipients.

- **Transfer payment:** Money given by the government to its citizens. Examples include social security, unemployment compensation and welfare.
- **Saving** = Disposable income - Consumption

DETERMINANTS OF CONSUMPTION

- personal income
- income taxes
- consumer expectations
- consumer indebtedness
- wealth
- the price level

THE CONSUMPTION FUNCTION

- The consumption function depicts the relationship between Consumption(C) and Disposable Income(Y_d) i.e: $C = f\ (Y_d)$, *Ceteris paribus*.

- It is usually expressed as a positive and linear relationship when all other non-income determinants of consumption are held constant.

- The consumption function shifts when the non-income determinants change.

TABLE 1: HYPOTHETICAL CONSUMPTION FUNCTION FOR AN ECONOMY.

Disposable Income (Y_d) (Billion Naira)	Consumption (C) (Billion Naira)	Savings ($S = Y_d - C$)
500	500	0
550	540	10
600	580	20
650	620	30
700	660	40
750	700	50
800	740	60

EXPLANATION OF THE TABLE

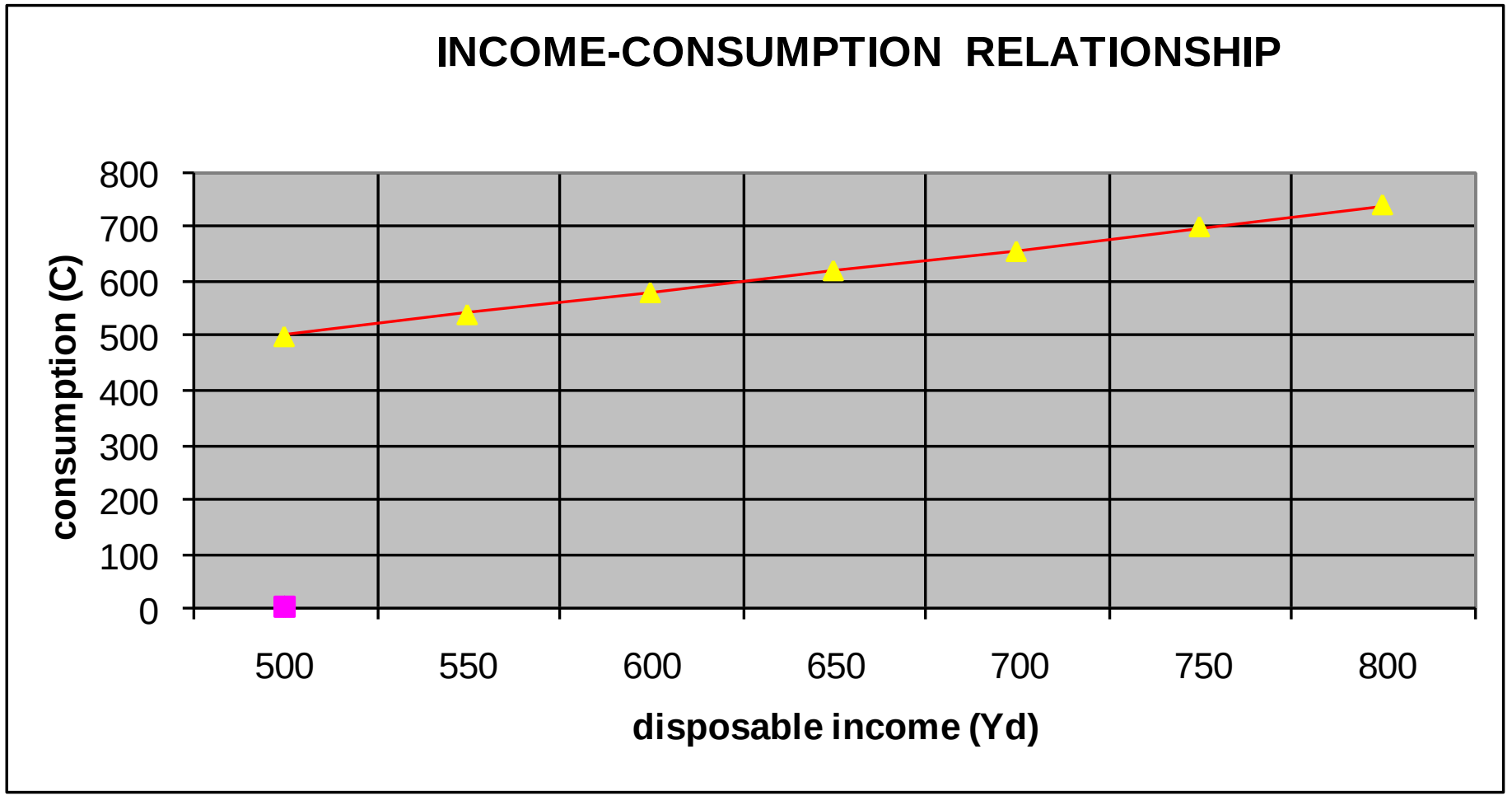
- The table can also be presented in a graphical form with consumption on the vertical axis and disposable income on the horizontal axis.

- The values of consumer saving (column 3) in table 1 is obtained by subtracting consumption from disposable income.

- The table initially shows that the consumer spends all his disposable income, but as his disposable income increases he saves more.

SUNNYWISE

GRAPHICAL ILLUSTRATION



THE AVERAGE AND MARGINAL PROPENSITY TO CONSUME AND SAVE

The ratios are used to express the relationship between Consumption , Savings and Disposable income. They include:

- **Average Propensity to Consume (APC):** This is the ratio of consumption to disposable income at a specific level of income.

$$APC = C/Y_d$$

- **Marginal Propensity to Consume (MPC):** This is the ratio of the change in consumption relative to the change in disposable income.

$$MPC = \Delta C/\Delta Y_d$$

AVERAGE AND MARGINAL PROPENSITY TO SAVE

Average Propensity to Save (APS): This is the ratio of saving to disposable income.

$$APS = S/Y_d$$

Marginal Propensity to Save (MPS): This is the ratio of the change in saving relative to the change in disposable income.

$$MPS = \Delta S/\Delta Y_d$$

APC + APS = 1; **APC** = 1- APS ; **APS** = 1- APC

MPC + MPS = 1; **MPC** = 1 –MPS; **MPS** = 1 - MPC

TABLE 2: RATIOS COMPUTED FROM THE HYPOTHETICAL EXAMPLE IN TABLE 1

APC (C/Y_d)	APS	Y_d	C	MPC ($\Delta C/\Delta Y_d$)	MPS
500/500 = 1.0	0	500	500	-	-
540/550 = 0.98	0.02	550	540	40/50 = 0.80	0.20
580/600 = 0.97	0.03	600	580	40/50 = 0.80	0.20
620/650 = 0.95	0.05	650	620	40/50 = 0.80	0.20
660/700 = 0.94	0.06	700	660	40/50 = 0.80	0.20
700/750 = 0.93	0.07	750	700	40/50 = 0.80	0.20
740/800 = 0.92	0.08	800	740	40/50 = 0.80	0.20

EXPLANATION ON TABLE 2

- From Table 2, the APC decreases from 1.0 to 0.92 as disposable income increases from N500b to N800b

- APS increases from 0 to 0.08. Consumers are not saving at disposable income level of N500b but they save 8% of the income at income level of N800b.

- The MPC is constant throughout at 0.8, that is 80% of each increase in disposable income is consumed while the MPS is 0.2 (1- 0.8).

- Note also from Table that APC + APS = 1 and MPC + MPS = 1

PRACTICE QUESTIONS

- 1.What is the relationship between consumption, saving and disposable income?
- 2. Find savings when disposable income is $10,000; $12,000 and $14,000 and consumption is fixed at $10,000.
- 3. Suppose the economy's consumption function is specified by the equation C = $50 + 0.80$Y_{d.}$ Find consumption when disposable income is $400, $500 and $600.
- 4. Differentiate between autonomous and induced consumption.
- 5. What does marginal propensity to consume (MPC) and marginal propensity to save (MPS) measure?

PRACTICE QUESTIONS CONTD.

6. An increase in consumer confidence shifts the consumption function upward (True/ False)

7. Disposable income is the only variable that determines consumption (True/False).

8. A change in disposable income causes an equal change in consumption (True/False).

9. The APC is constant along a linear consumption line (True/False).

10. What is saving function?