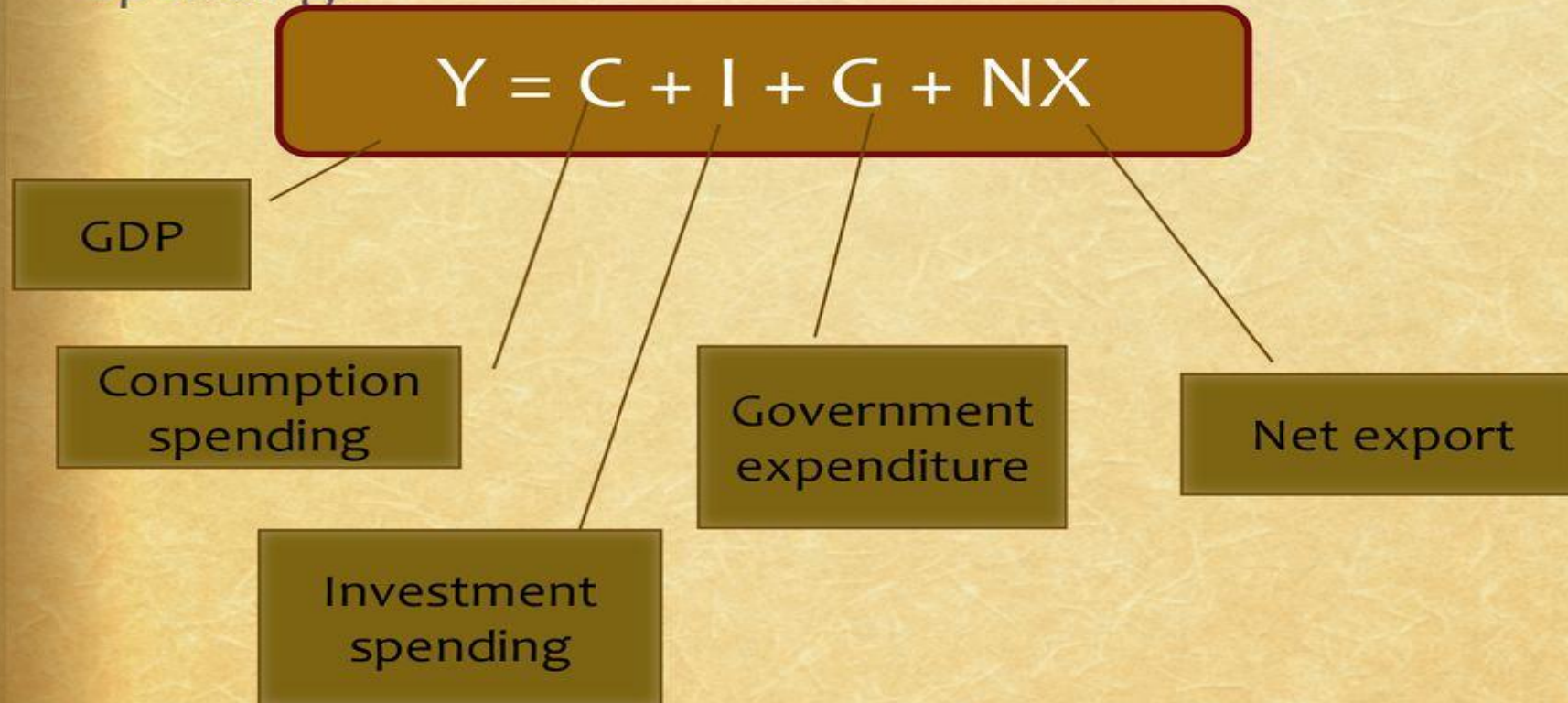# Components of Expenditure

Components of Expenditure

- GDP has been divided to four broad categories of spending:

$$Y = C + I + G + NX$$

GDP

Consumption spending

Investment spending

Government expenditure

Net export

Consumption

- explain a positive relationship between disposable income and

  consumption, Whenever income increases consumption will increase,

  but the increase in consumption is less than the increase in income.

Consumption

- LEARNING OBJECTIVE
- To understand the basic of consumption.
- To understand the different types of

consumption.
- To understand the equation of consumption.

Keynesian theory of income

• Simple economy model- two sector model

((consumption sector and investment sector)

• Closed economy model- three sector model

(consumption sector , investment sector and government sector)

• Open economy model- four sector model

(consumption sector , investment sector and government sector and foreign sector)

Consumption function

• The amount of money people spend out of national income on the purchase of goods and services for the direct satisfaction of their wants is called aggregate consumption expenditure or consumption.

• Example: Total income of economy- 5000 cr.

• people spend -4000 cr. on goods and service

Consumption Function

- The most important function of consumption is income .

- It means consumption is a function of determined by income.

Relationship between consumption and income

$C = f(Y)$

Where,

 C= consumption

f= function

Y= income

- Relationship between consumption function and income is a positive relationship

$C = a + bY_d$

a = Minimum consumption

b = MPC = $\Delta C / \Delta Y$

Y_d = disposable income

Marginal Propensity to Consume (MPC)

• The ratio of change in consumption to change in income is known as

marginal propensity to consume, change (Δ) in the income is denoted

as ΔY (read as delta Y) and change in consumption as ΔC. Hence

$Y = \Delta C / \Delta Y$

Marginal Propensity to Save (Mps)

- The ratio of change in save to change in income is known as marginal

  propensity to save, change (Δ) in the income is denoted as ΔY (read as delta

  Y) and change in save as ΔS . Hence

  $Y= \Delta S/ \Delta Y$

  MPS+MPC=1   Rule 1

- The relationship between saving function and income is a positive

  relationship

From Consumption Function C= a+ bY prove that

MPC = Δ C/ ΔY

C= a+ bY   (1)

we have to add ΔC and ΔY to both sides of the equation

C+Δ C = a+ bY+ ΔY   (2)

we have to take (b) a common factor

C+Δ C = a+ b(Y+ ΔY)   (3)

C+Δ C = a + bY +bΔY   (4)   As   C= a+ bY

C+Δ C = C+bΔY

Δ C = bΔY

b =MPC = Δ C/ ΔY

Saving

- explain a positive relationship between disposable income and saving, Whenever income increases savings will increase, but the increase in saving is less than the increase in income.

- Saving Function

$$S= -a+ bYd$$

Average propensity to consume (APC) and Average propensity to save (APS)

- **APC**

- measures the percentage of income that is spent rather than saved.

- The ratio of consumption to disposable income

- **APS**

- The ratio of save to disposable income

- Refers to the proportion of income that is saved rather than spent on current goods and services

- **APS+APC= 1   Rule   2**

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  If you have this Data   C and Y
1- calculate all of

(a -Δ C- ΔY- Mpc -Mps–byd- S- Ecy– Apc- Aps)

2- write consumption function

3- write saving function

4- Explain the result

C	Yd	a	Δ C	ΔY	Mpc	Apc	byd	Ecy	S	Mps	Aps
90	0	90	80	120	2/3	-	-	-	-90	0.33	-
170	120	90	80	120	2/3	1.42	80	0.47	-50	0.33	-0.42
250	240	90	80	120	2/3	1.04	160	0.64	-10	0.33	0.04
330	360	90	80	120	2/3	0.92	240	0.73	30	0.33	0.08
410	480	90	80	120	2/3	0.85	320	0.79	70	0.33	0.15
490	600	90	80	120	2/3	0.82	400	0.82	110	0.33	0.18
570	720	90	80	120	2/3	0.79	480	0.85	150	0.33	0.21
650	840	90	80	120	2/3	0.77	560	0.87	190	0.33	0.23

- Δ C change in consumption
- ΔY change in disposable income
- MPC $= \Delta$ C$/ \Delta$Y $= b$
- APC$=$ C/Yd
- bYd$=$ b*Yd
- Ecy$=$ Mpc/Apc
- S$=$ C-Yd
- MPS$=$ 1-MPC
- APC$=$ 1- APS

- consumption function

C= a+ bYd

C= 90+ 2/3Yd   Or C= 90+ 0.67 Yd

That's mean if income increase about one unite the consumption will increase around 0.67 Rail

- saving function

- S= -a+ bYd

- S= -90+ 1/3 Yd   Or S= -90+ 0.33 Yd

- That's mean if income increase about one unite the save will increase around 0.33 Rail

$$MPs = 1/3$$
$$MPC = 2/3$$
$$MPS + MPC = 1$$
$$1/3 + 2/3 = 1$$