

LESSON NOTES

Subject: Economics

Year/Level: 12

Week 19

<b>Strand</b>	3	Macroeconomics
Sub Strand	3.1.4.	Money Supply
Content Learning Outcome	Value money as the medium of exchange.	

Greetings to all...

In the last lessons we looked at the Money Market.

**Lesson Notes** ( Copy notes in your note book)

**Quantity Theory of Money** (Fisher's equation of exchange)



An identity that shows the relationship between nominal GDP, stock of money and velocity of circulation.

(This theory was developed by Irving Fisher)

Quantity theory of money is:

$$MV = PQ$$

Where;

M= Money supply

V= Velocity of circulation

P = price level of goods and services

Q = physical value of goods and services i.e. output Therefore, **PQ represents Nominal GDP.**

Assumptions:

1. Changes in money supply will affect Price level.
2. MV increases then PQ will increase to balance the equation.

### Velocity of circulation



Shows the number of times average dollar spent on goods and services changes in hand i.e. the rate at which the money changes hands at a given period of time.

It is the ratio of nominal GDP to the number of dollars in the money supply.

The faster the dollar changes the hand the higher the velocity.

Example:

Assume Nominal GDP (PQ) is \$4500M while Money supply is 900m, Calculate the velocity of Circulation?

$$MV = PQ$$

$$900V = 4500$$

$$V = 4500/900$$

$$V = 5 \text{ times}$$

### Changes in Velocity

Velocity changes due to a change in economic situation i.e during the times of:

1. **Boom** ( there is high level of economic activity)  
So increase in income will lead to increase in money supply resulting into decrease in velocity of money.
2. **Recession** (there is low level of economic activity)  
So decrease in income will decrease in money supply leading to increase in velocity of circulation.

In this Quantity theory of equation you will be required to calculate for any components and reveal the impact due to any change in situation therefore, you need to know the Quantity Theory to guide in the calculations.

Stay safe.....