

MONEY & BANKING

Money is anything that is generally accepted as a medium of exchange.

Characteristics of Good Money.

1. Acceptability.
Must be acceptable to all market participants, buyers & sellers
2. Divisibility.
It should be possible to obtain smaller units of the medium of exchange.
3. Portability.
The item must be light & the holder should be able to conceal it to maintain confidentiality.
4. Durability.
The item should be durable so that for a span of time, the holder can obtain goods & services
5. Scarcity.
Money should not be too easily available to preserve its value.
6. Cognisibility.
Should be easy to recognize.
7. Homogeneity.
Denominations of similar value should be similar in appearance

1. **Medium of exchange.**
Money is used to eliminate double coincidence of wants.
2. **Unit of account.**
Money is used as an agreed measure of stating price.
3. **Store of value.**
Money is used as an asset to store value.
4. **Standard of deferred payment.**
It is used as a measure for writing contracts where payments & receipts occur in the future.

Demand for Money. / Liquidity Preference.

- This explains why persons prefer to keep part of their wealth in form of money instead of physical & financial assets.
- 1. **Transaction demand.** - This is the demand necessary for financing known, current & future requirements. eg transaction demand to finance domestic needs, food, clothing etc.
- 2. **Pre-cautionary demand.** - This is money held ready to meet ^{un} known but urgent needs in ordinary life. Common examples include, medical or emergency needs.
- 3. **Speculative demand.** - Liquid assets are sometimes demanded due to expected changes in interest rates & expected yields of financial assets like marketable securities. When investors expect a temporary drop in the value of stock, they may sell stock & keep the cash in bank accounts.

QUANTITY THEORY OF MONEY. / FISHER CASH TRANSACTION APPROACH.

- The theory says that a proportionate increase in money supply will cause a proportionate increase in prices.
- If money supply is doubled, prices will also double & if money supply is increase fourfolds prices will also increase fourfolds.
- Fisher used the following equation to explain the theory;

$$* \text{ } \circlearrowleft \text{ } \frac{MV}{T} = P$$

or

$$\circlearrowleft \text{ } \frac{MV}{P} = T$$

• M- money supply

• T- Transaction

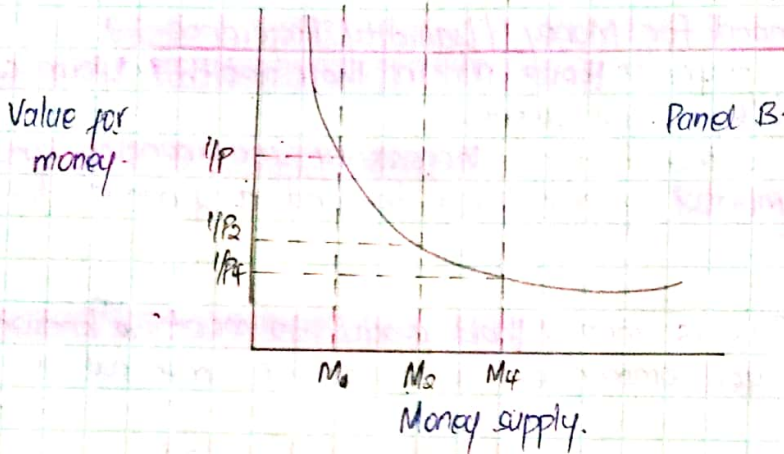
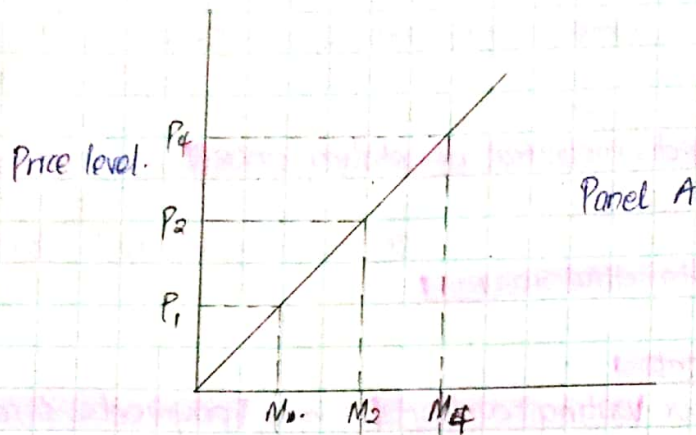
• P- Price level.

v-velocity
Q-quantity of goods

- If P is made the subject of the equation; & v & T remain constant then proportionate changes in money supply will cause proportionate changes in prices.

$$\circlearrowleft \text{ } P = \frac{MV}{T}$$

*



- Starting with panel A, when money supply is at M_1 , prices will be at P_1 . If money supply is increased twofolds to M_2 , prices also increase twofolds to P_2 .
- If money is increased fourfolds to M_4 , prices also increase fourfolds to P_4 .
- Panel B represents the relationship btwn money supply & the value of money. There is an inverse relationship btwn these two.
- An increase in money supply causes a fall in the value of money. When money supply is M_1 , the value of money is $1/P$.
- If the money is increased two times to M_2 , the value of money falls to $1/P_2$ & so forth.

Limitations.

May 2016 sb.

i) Equilibrium level of interest rate.

$$MS = Md (T + S + F)$$

$$600 = 0.25Y + 248 + 200r$$

Money Market / Liquidity Money LM.

Make Y the subject.

$$0.25Y = 600 - 248 + 200r$$

$$\frac{0.25Y}{0.25} = \frac{352 + 200r}{0.25}$$

$$Y = 1408 + 800r \quad \text{LM function.}$$

Commodity Market (Investment Savings) IS

$$Y = C + I$$

$$Y = 204 + 0.7Y + 300 - 100r$$

$$Y - 0.7Y = 504 - 100r$$

$$0.3Y = 504 - 100r$$

$$\frac{0.3Y}{0.3} = \frac{504 - 100r}{0.3}$$

$$Y = 1,680 - 333.33r \text{ - IS Function}$$

$$LM = IS$$

$$1,408 + 800r = 1,680 - 333.33r$$

$$800r + 333.33r = 1,680 - 1,408$$

$$1,133.33r = 272$$

$$1,133.33 \quad 1,133.33$$

$$r = 0.24$$

LM Function

$$Y = 1,408 + 800(0.24)$$

$$Y = 1,600$$

IS function

$$Y = 1,680 - 333.33(0.24)$$

$$Y = 1,600$$

Limitations of the Quantity Theory of Money.

1. It is based on assumption of full employment
2. Assumes changes in supply of money do not affect velocity & transactions which are independent variables. However, in reality, they may not remain constant.
3. There is no direct appropriate relationship between quantity of money & prices.
4. The theory does not explain recession & unemployment.
5. Assumes money is the cause & not the effect.

MONEY SUPPLY.

This refers to the value of all liquid assets in an economy.

M_0 - This is currency in circulation i.e. notes & coins outside of banks i.e. in people's pockets.

2. M_1 - It consists of currency in circulation plus travellers cheques plus demand deposits & other checkable deposits.

3. M_2 - It is M_1 plus savings accounts money markets deposit accounts, small-time deposit & money in mutual funds.

4. M_3 - It is M_2 plus balances in institutions such as pension funds, deposits, & any domestic currency denominated deposit made in a depository institution out of the country.

Determinants of Money Supply.

May 2018 & 2021

1. Velocity of money - speed at which money changes hands/ circulates
2. Monetary policies pursued by the Central Bank.
3. Mode of transaction used in the economy eg whether transactions are cash or credit cards.
4. Price levels in the economy.
5. Volume of notes & currencies issued by the Central Bank.

Determinants of the velocity of Money.

Money supply
Price levels, Transactions

1. Price levels
2. Transactions
3. Money supply
4. Price levels

Determinants of Money Demand.

29/09/2016.

1. Price levels
2. Transactions - Mode of transactions
3. Interest rates.
4. Expectations of the consumer.

Credit Creation.

- This is the ability of the commercial bank to increase money supply by giving loans in excess of the money at their disposal.
- This is made possible through the cash ratio or the reserve ratio.
- The reserve requirement is a legal requirement by the Central Bank that must be satisfied by commercial banks.
- The rules require that a fraction of the bank's total deposits be held as a cash reserve.
- When Central Bank lowers the reserve requirements on deposits, money supply increases.
- Eg, If the cash ratio is $\frac{10}{100}$ & Bank A receives a deposit of sh 100, it will be allowed to lend sh 90 holding sh 10 in a cash reserve.
- The sh 90 loan will result in the creation of a sh 90 demand deposit in the name of the borrower.
- A reserve of $\frac{10}{100}$ allows sh 9 to be held as a reserve & sh 81 to be loaned out & the process continues

$$\star \text{Cash Ratio} = \frac{\text{Cash}}{\text{Deposit}}$$

The cash ratio is the proportion of total bank deposits which the bank needs to keep in cash to meet customer's demand for cash.

The money deposit multiplier (credit multiplier) = $\frac{1}{\text{cash ratio}}$

Limitation / Factors Influencing Credit Creation:

- Volume of cash.**
 - The volume of cash circulating in the economy will determine the level of additional cash deposits into the bank.
 - The greater the volume of cash in circulation, the greater the amount customers will deposit into the bank & the greater the bank's potential to create deposits.
- Demand for cash.**
 - Public demand for cash determines the cash ratio in an economy.
 - Where large proportions of transactions require cash, the banks would have a higher cash ratio.
- Demand for loans**
 - Credit created is only effective if it is extended to an applicant.
- Bank policy.**
 - The attitude of the management towards risk of the bank would affect credit creation.
 - If a bank is less strict in processing & approving loan applications, more credit will be created.
- Monetary policy.** instruments used by CBK to fight inflation & stabilize currency.
 - These are instruments used by the Central Bank to fight inflation & stabilize the currency.
 - The Central Bank supervises commercial banks hence it affects how much credit it can create.

Functions of Commercial Banks.

1. Advice customers.
2. Accept deposits for safe keeping.
3. Facilitate investments by providing stock brokerage services to investors.
4. Facilitate trade & exchange by issuing cheques & letters of credit.
5. Advance loans to customers.
6. Offer trustee services.

Functions of the Central Bank. CBK.

1. CBK has statutory monopoly in issue of coins & notes. It also replaces worn out notes.
2. **Banker to Commercial Banks.**
 - It is the commercial bank of commercial banks & other banking institutions.
 - All commercial banks must maintain an a/c with the CBK.

It is also a lender of the last resort to commercial banks in case of urgent cash requirements.

3. **Clearing house.**

CBK makes arrangements for banks to exchange cheques drawn against each other.

4. **Banker to Govt.**

Provides banking services to ministries. All ministries have an a/c with CBK.

5. **Control of foreign currency transactions.**

May 2015 sc.

i) LM function.

$$M_s = M_d (T + P + S)$$

$$M_s = 0.4Y + 20 - 10r$$

$$M_s = 0.4Y + 20 - 10r$$

$$\frac{0.4Y}{0.4} = \frac{20 - 10r}{0.4}$$

$$Y = 50r - 25$$

$$M_s = M_d (T + P + S)$$

$$1,200 = 0.4Y + 20 - 10r$$

$$1,200 - 20 = 0.4Y - 10r$$

$$1,180 = 0.4Y - 10r$$

$$\frac{0.4Y}{0.4} = \frac{10r + 1,180}{0.4}$$

$$Y = 25r + 2,950$$

ii) IS function.

$$Y = C + I$$

$$Y = 300 + 0.6Y + 1,800 - 10r$$

$$Y = 2,100 + 0.6Y - 10r$$

$$Y - 0.6Y = 2,100 - 10r$$

$$\frac{0.4Y}{0.4} = \frac{2,100 - 10r}{0.4}$$

$$Y = 5,250 - 25r$$

LM

iii) Equilibrium level of interest rate.

$$LM = IS$$

$$25r + 2,950 = 5,250 - 25r$$

$$25r + 25r = 5,250 - 2,950$$

$$\frac{50r}{50} = \frac{2,300}{50}$$

$$r = 4\%.$$

iv) Equilibrium level of national income.

Instruments of Monetary Policy.

Monetary policy refers to the actions taken by the CBK to stimulate economic growth (ie reduce unemployment); combat inflation & stabilize the exchange rates. The following instruments are used:

1. **Open Market Operations (OMO)** sale-decrease, purchase-increase
This refers to CBK purchase or sale of government treasury bonds. When CBK sells the bond in the Open Market, it results into a decrease in money supply.
When CBK purchases the bond in the open market, it will result to increase in money supply.

2. **Minimum Reserves.** - lowers R.R, M.S increases - increases R.R, M.S decreases
When CBK lowers the reserve requirements on deposits, money supply increases.
When CBK increases the reserve requirements on deposits, money supply decreases.

Commercial Banks are required to maintain a fraction of their deposits as a reserve in a deposit in the CBK.

3. **Discount rates. (CBK Rates)** lowers bank rates & discount rates, expansion in M.S & low interest; increases bank rates & discount rates, reduced M.S & high interest
The bank rate is the interest rate operating btwn the CBK & commercial bank.

CBK charges interest on advances made to commercial banks at the bank rate.

CBK pays commercial banks interest on deposits at this rate.

When CBK lowers its target bank rates & discount rates it signals an expansion in money supply & lower overall interest rates.

When CBK raises its target bank rates & discount rates it signals reduced money supply & higher overall interest rates.

4. **Selective control.**

Specific instructions can be issued by CBK into direct credit.

Usually the CBK sets out guidelines as to what proportion of total loans should be committed to particular sectors of the economy.

5. **Persuasion.**

The CBK persuades bank managers to recognize their role in the economy & to be socially responsible in exercising their duties.

Fiscal policy instruments

1. Taxation

2. Govt Expenditure

3. Public borrowing/loans

5-10MB
x444#

Application of Monetary Policies in Developing Countries.

The monetary policies are not effective in developing countries. This is because of the following reasons;

1. **Open Market Operations.**
 - This instrument is only effective and applicable where there is a large properly developed capital market.
 - In developing countries, the capital market if it exists is very small.
2. **Discount rates.**
 - This mechanism works where there is a wide range of financial assets in the money markets.
 - Where financial instruments are few as in a developing economy, the effect of changes in the prime rates will be limited.
 - Where public spending constitute proportionally large shares of G.D.P, discount rates will be less effective.
 - Public investments are not affected by the level of interest rates. Still, local investors demand for loans is likely to be interest inelastic in a developing economy where the main concern is opportunity to secure credit rather than the cost of borrowing.
3. **Minimum reserves.**
 - These are not effective since the banking sector is dominated by branches of foreign banks.
 - The minimum reserves & liquidity rates may be circumvented by transfer of liquidity by the parent bank to local branches.
4. **Selective control.**
 - The weakness of this instrument is that it is more allocative as a tool & less of a control.
5. **Persuasion.**
 - This instrument only operates on the basis of trust.
 - Financial institutions would have to rise above the narrow objective of profit maximisation & security of shareholders' assets.

NON-BANKING FINANCIAL INSTITUTIONS:

NBFI May 2016 CE

1. SACCOS - Savings And Credit Co-Operative Societies.
2. Micro-Finance Institutions.
3. Building society.
4. Insurance companies.
5. Hire purchase firms.
6. Stock brokerage firms.
7. Forex bureaux.
8. Mortgage firms.

Functions of NBF1

1. Advance credit to customers.
2. Give advice to customers.
3. Help mobilize savings.
4. Facilitate investments.
5. Facilitates trade & business.

* Differences Btwn Commercial Banks & NBF1

Commercial Banks

1. Regulated by the CBK
2. One can open 3 accounts; Savings a/c
Current a/c
Fixed deposit a/c
3. They issue ATM cards
4. Issue cheque books to customers
5. Issue debit & credit cards to customers

NBF1

- Regulated by other agencies ISA
- Do not offer current a/c
 - They offer Savings & Fixed deposit a/c
 - Do not issue ATM cards
 - Do not issue cheque book to customers
 - Do not issue credit & debit cards to customers.

Nov 2016 (2a ii)

Near Money - Assets with very high level of liquidity eg marketable securities.

Money substitutes - Items that can be used in place of money eg cheques credit cards

Narrow money M_1 - Currency in circulation plus travellers cheques plus demand deposits & any other checkable deposits.

Broad money M_2 - It is M_1 plus savings a/c, money markets, deposit a/c, small time deposit & money in mutual funds.