
WELCOME

QUANTITY THEORY OF MONEY- TOBIN'S PORTFOLIO BALANCE APPROACH

MANAGERIAL ECONOMICS

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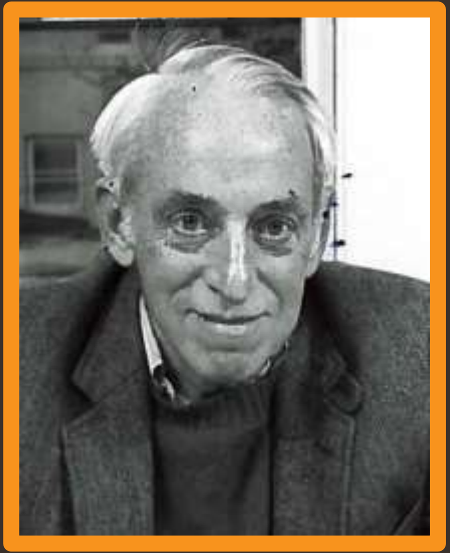
INTRODUCTION

- The demand for money theory is the main element of the monetary economics theory and an essential part in the macroeconomic theory.
- In economics, demand of money is the desired holding of financial assets in the form of money: that is, cash or bank deposits rather than investments. It can refer to the demand for money narrowly defined as M1 (non-interest-bearing holdings), or for money in the broader sense of M2 or M3.
- Theories of the demand for money that emphasize the role of money as a store of value are called *asset* or *portfolio theories*.
- These theories stress that people hold money as part of their portfolio of assets and predict that the demand for money depends on the return and risk offered by money and by other assets that people can hold instead of money.

- M0 and M1, also called narrow money, normally include coins & notes in circulation & other money equivalents that are easily convertible into cash.
- M2 includes M1 + ST time deposits in banks & 24-hour money market funds.
- M3 includes M2 + LT time deposits & money market funds with more than 24-hour maturity.

JAMES TOBIN

- James Tobin was an American economist.
- He was born in 1918 in Champaign, USA.
- He was one of the leading representatives of current neo-Keynesianism.
- He was awarded the Nobel Prize for economics in 1981 for his portfolio theory, for analysis of the ways by which changes in financial markets (i.e. on the money and financial markets) influence real markets, in which entities take decisions on consumption, production and investment.
- He died on 12 march 2002 at the age of 84



KEYNES DEMAND FOR MONEY

- The main drawback of Keynes' speculative demand for money is that it visualises that people hold their assets in either all money or all bonds.
- This gave rise to portfolio approach to demand for money put forward by Tobin, Baumol and Freidman.
- The portfolio of wealth consists of money, interest-bearing bonds, shares, physical assets etc.
- According to Keynes' theory, demand for money for transaction purposes is insensitive to interest rate.
- Tobin show that money held for transaction purposes is interest elastic.

TOBIN'S PORTFOLIO BALANCE APPROACH

- In his important contribution explained that rational behaviour on the part of the individuals is that they should keep a portfolio of assets which consists of both bonds and money.
  - *Idle cash is safe (no risk), but earns zero income or interest.*
  - *Bonds earn interest, but they are risky.*
- In his analysis he makes a valid assumption that people prefer more wealth to less.
- Individuals diversify their portfolio by holding a balanced combination of safe and risky assets.
- Depends on the individual's attitude to Risk.

TOBIN'S PORTFOLIO BALANCE APPROACH

- According to Tobin, individual's behaviour shows "Risk Aversion."
- They prefer less risk to more risk at a given rate of return.
- Individuals are uncertain about future rate of interest.
- Tobin argues that a risk averter will not opt for risky assets with all risky bonds or a greater proportion of them.

TOBIN'S PORTFOLIO BALANCE APPROACH

- But holding cash is unproductive, as it earns no income.
- So they have to choose a combination or portfolio of assets
  - *some less risky (safe) but less productive.*
  - *some more risky but more productive.*
- The portfolio of assets depends on the nature of the individual.

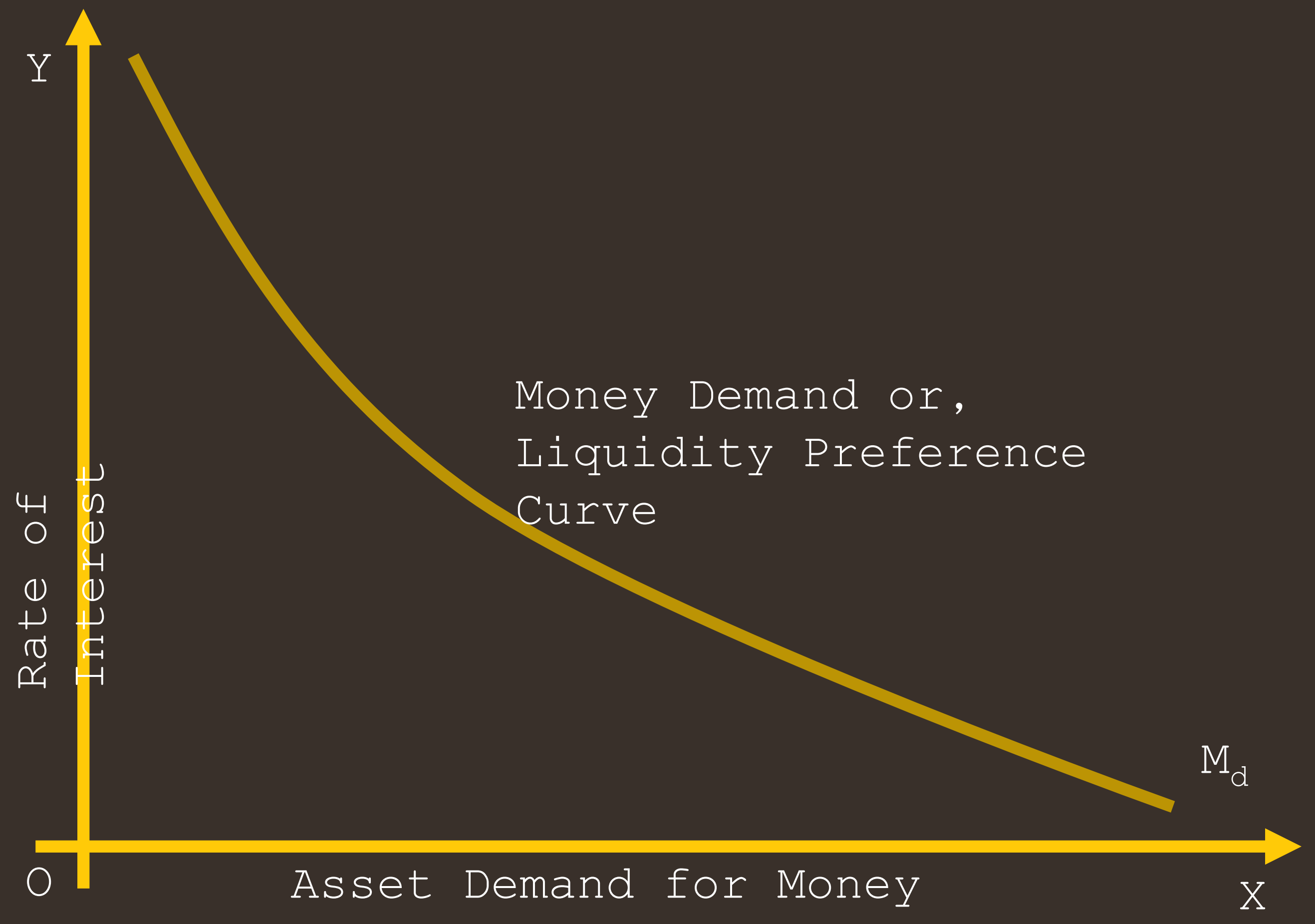
Tobin‘s Liquidity Preference Function

- Liquidity preference function depicting relationship between rate of interest and demand for money.
- At a higher rate of interest, individual demand for holding money (i.e., liquidity) will be less and therefore they will hold more bonds in their portfolio.
- On the other hand, at a lower rate of interest they will hold more money and less bonds in their portfolio.

Tobin's Liquidity Preference Function

- Like Keynes, Tobin shows the Liquidity Preference is inversely related to rate of interest.
- When *i* is high, people change their portfolio to bonds, and hold less cash
- When *i* is low, they prefer to hold cash, and reduce the number of bonds.
- Thus the Asset Demand for Money is inversely related to the rate of interest.

Tobin's Liquidity Preference Curve



The money demand function may be expressed as:

$$(M/P)_d = f(r_s, r_b, \pi^e, W)$$

- r_s = The expected real return on stock.
- r_b = The expected real return on bonds
- π^e = The expected inflation rate.
- W = Real wealth.

Contd.

- An increase in r_s or r_b reduces money demand, because other assets become more attractive.
- An increase in π^e also reduces money demand, because money becomes less attractive.
- An increase in W raises money demand, because higher wealth means a larger portfolio.
- It is against this backdrop that the portfolio theory of money demand.

Contd.

- Stocks and bonds are alternatives to money.
- An increase in i makes money less attractive, reduces desired money holdings.
- The real return to holding money is $-\pi^e$
- An increase in π^e is decrease in real return to holding money, and cause a decrease in desired money balances.
- And finally, an increase in wealth causes an increase in the demand for all assets.

CONCLUSION

- In economics, demand of money is the desired holding of financial assets in the form of money.
- The Portfolio Demand for Money is that, Money is just one of many financial instruments that we can hold in our investment portfolios.
- In this approach, the demand for money is viewed as a joint demand for all liquid assets. Holding of money is preferred by the people because it enables them to maintain cash disbursements and carry on transactions when there is lack of synchronisation between timings or receipts of income and payments.

REFERENCE

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- Tobin's Portfolio Balance Approach (With Diagram), Demand for Money - *www.economicsdiscussion.net/money/demand-for-money/tobins-portfolio-balance-approach-with-diagram-demand-for-money/16079*


THANK YOU