BRYANT COLLEGE  
Department of Economics

ECO114: Macroeconomic Principles  
Class Outline V:  
Money: Define and Demand

I. WHAT IS MONEY?

A. Definition: Money is any instrument which performs three functions:

1. Medium of Exchange

2. Unit of Account

3. Store of Value

B. Forms of Money

1. High-Powered Money or $M_1$
   a. performs all three functions completely
   b. two major components
      i. currency (coins and bills)
      ii. demand deposits ("transaction accounts")
   c. lately also includes travelers' checks, money orders, debit cards, et alia

2. Near Money or $M_2$ and $M_3$
   a. perform only one or two of the functions, or perform them poorly or incompletely
   b. e.g., time deposits and charge accounts

C. Why Does Money Have Value?

1. not intrinsically

2. not "backed" by precious metal

3. "Money is accepted because people accept it."
II. DEMAND FOR MONEY

A. Classical Theory of Money

1. Recall their focus on markets

2. Three relevant assumptions
   a. real vs. money parts of the economy  
   b. always operate at Full Employment (YFE)
   c. people wish to hold money only to support their transactions

3. Transactions Demand for Money
   a. \( M_d = \gamma P T \)
   b. \( T \) is assumed constant at \( YFE \)
   c. \( P \) can vary
   d. \( PT \) is related to GDP, but larger  

4. Equilibrium: \( M_s = M_d \)
   a. \( M_s \) is exogenously determined according to Classical theorists  
   b. so in equilibrium, \( M_d \) must adapt such that ultimately \( M_s = \gamma P T \)

5. But if the economy is not in equilibrium:
   a. If, for example, \( M_s > \gamma P T \)  
      i. households thus have more money than they want to hold
      ii. so they would spend the excess money, buying goods and services
      iii. in terms of our Income Determination Model
         1) C and/or I would shift upward
         2) thus AE would shift upward
         3) and, by the multiplier, \( Yc \) would increase
         4) but the Classical economists assumed that the economy was always at \( YFE \)
         5) \( \rightarrow \) Inflationary Gap, with rising prices
   iv. in terms of Aggregate Demand and Aggregate Supply
      1) increased spending shifts AD to the right
      2) but the economy was in the Classical [vertical] range of the AS
      3) \( \rightarrow \) prices will rise
   v. in terms of the Money Market itself
      1) \( M_s > \gamma P T \)
         a) \( M_s \) is exogenously determined, and cannot adjust
         b) so \( \gamma P T \) which represents behavior and therefore can adjust, must increase to become equal to \( M_s \)
      2) but \( \gamma \) is assumed to be constant
      3) and \( T \) is constant because of \( YFE \)
      4) so \( P \) must bear the full adjustment, and rise
   vi. graphically
      b. reverse if \( M_s < \gamma P T \)  

6. This is often called the QUANTITY THEORY OF MONEY
B. Modern variant of the [Classical] Quantity Theory
   1. based on criticism of the Classical Quantity Theory model
      a. usually $Y < Y_{FE}$
      b. prices rise more frequently than fall
   2. “9 O’clock” model
      a. still based on the Transactions Demand
      b. retain constant $\gamma$
      c. but allow T to vary in a somewhat bizarre way
         i. only one of T and P can vary at a time
         ii. if $Y < Y_{FE}$, T obviously can vary, but P remains constant
         iii. if $Y = Y_{FE}$, T will be constant, P can rise but P can never fall
   3. comments
      a. graphically: “Magic Corner”
      b. prices are “sticky downward”
      c. now there is a link between money and the real economy
      d. sometimes express in terms of velocity: $MV = PT$ or $MV = PQ$

C. Further Variant: Phillips’ Curve
   1. respond to criticism of the “9 O’clock” model
      a. P and T can and do vary simultaneously
      b. prices can fall, and occasionally do
   2. graphically
   3. no more magic corner: tradeoff between unemployment and inflation; “stagflation”
   4. relation to the intermediate range of the Aggregate Supply curve

D. Other theories of the Demand for Money
   1. based on additional motives for holding money
      a. so far, only the Transactions Demand for money
      b. add two so-called “Asset Demands” for money
         i. **Precautionary** Demand for Money
         ii. **Speculative** Demand for Money
   2. Precautionary Demand
      a. uncertainty re timing of income and expenditures
      b. “rainy day”
         i. emergencies
         ii. special opportunities
      c. depends on opportunity cost of holding assets as money
      d. depends on average level of purchases
   3. Speculative Demand
      a. portfolio choice
      b. relative attractiveness of money and other assets
         i. based on interest rates
         ii. inverse relation between interest rate and the price of a bond
   4. **Liquidity Preference** as Demand for Money