Macro Economics

GDP

GDP(Gross Domestic product) The Total amount of goods and services produced within an economy in a given year

- Expenditure : This must only include expenditure on goods and services produced within the economy (no imports, and no goods produced in a previous year)
- Income : This must only use income obtained by selling goods and services (no transfer payments)
- Output

GDP composition

To measure the GDP it is simplest to measure the amount spent on goods and services and then subtract the part of that which is spent on goods and services produced outside the economy (imports) or before the given year (invetories). Finaly goods not bought in the bought elsewhere (exports) or stored for the future are added.

- Consumption(C): The goods and services purchased by consumers
- Investment(I): The sum of
  - no-resedential investment: Capital equipment and land bought by firms
  - resedntial investment: Housing bought by consumers
- Goverment spending(G): The amount the goverment spendings buying goods and services from firms and employing workers. (goverment tranfers are not payments for work done and are not included)
- Net exports (X-I): The total amount of exports minus imports.
- Net inventory build up

This brings us to the equation $Z = C + I + G$

GDP and total demand(Z) are used interchangably

Exports and inventories are ignored in the begining part of the course

Consumption

Consumption is a function of disposable income (Y_D)

income minus taxation

$$C(Y_D)$$

Unemployment

Inflation

Philips curve

ISLM model

The ISLM model models the equilibrium for income and interest rates, the quintity of money supplied and consumption.

This is represented by the intersenctoin of the IS curve which shows the resultant intrest rates for all equilibriums between money demand which is a function of income and money supply, and the LM curve which represents all the points of equilibrium (where consumption is equil to output and no inventories are built up or depleted) and consuption (which contains investment which is a function of interest rates)

First model

** Assumption ** The economy is closed and there is no public sector(taxation or gorverment spending)

The IS curve give all points of equilibrium in the financial market

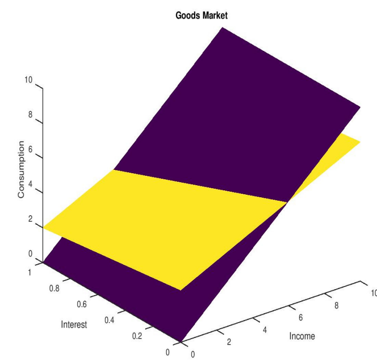

Figure 1: IS

Financial Markets

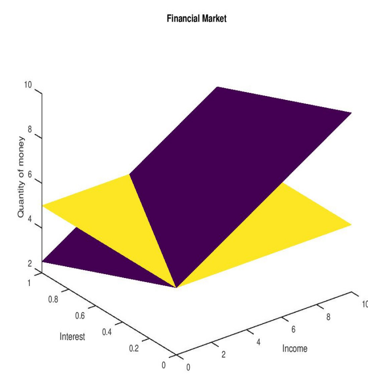

Figure 2: LM

The Demand for money

Is the demand for liquidity and comes from people wanting to make purchases with that money.

Supply of money

The supply of money is modeled as a constant M and supplied by the centerall bank

Monatary policy and open market operations 58

Bonds

Bonds have

- P a face value that they are sold and rebought by the issuer
- i an interest rate paid repesenting the charge per unit currency borrowed paid by the bonds issueur to the bonds owner.

In the market for bonds

- i_e is the equilibrium interest rate for bonds of a ccertain risk.

No bonds will be bought by from sellers selling assets yeilding bellow this interest rate.

This means that the asset must be sold at a maket price P_m such that the interest it yeilds Pi is the equilibrium rate of interest i_e

$$\frac{Pi}{P_m} = i_e$$

This give a counterintuitive result that the market prce and the market interest rates are inversly related. If the interest rate on a bond has increased this would seem to make it more disarable and so increase its prices, but this is not what has happened. Other bonds of similar risk are being sold on the market at higher interest rates, (Or lower costs and set interet) while the bond retains the same interst.

Macro Economic Terms

GDP A monatary measure of the total market value of final goods and services produced in a country in a given period of time.

VAT is included in GDP as a cost of production? This can be calculated in three ways

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* Income to all factors of production for produceing the goods and services
    + Compensation for employees
    + Rent
    + Interest
    + Proprietors income (unincorporated busnessess)
    + Corporate Profits
      - Corporate income taxes ? why not add taxes in general rather than just not deduct them?
      - dividends
      - retained profits
* Output (Value added) measured as value added at all levels of production
* Expenditure on final goods and services produced within a country ^[eports - imports]
  Also includes investment in new capitial equipment and real estate a minus depreciation^[Where is deprec

     This is the same as the expenditure or damand function function

      +  $E = C + I + G +(X - M)$
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GDP Excludes
- Public transfer payments
- Private Trasnfer payments
- Sales of stocks and bonds
- Second hand sales

NI All income earned by domestic-supplied resouces. (Those owned by citizens?)

Calculating NI from GDP

- Subtract Vat from GDP
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GNP The total value of goods and services produced by a countries citizens within a given period of time.

Real GDP Inflation adjusted GDP

Nominal GDP GDP measured in the market prices of the current year.

NDP Includes factor depreciation