

Determinates of interest rate

chapter 2

بنیادی و General interest rate سبب اختلاف قیمت ال

How to Price a financial instrument? ch 2, 3

Debt
 $P_0 = \frac{Par}{(1+r)^n}$

security
 $P_0 = \frac{Div}{(k-g)}$ Indirect effect

$k = R_f + \beta(R_m - R_f)$

Required Rate of Return Negative relationship with Price

Any change in R_f effect k and the Price of equity instrument

R_f is a Component for all financial securities

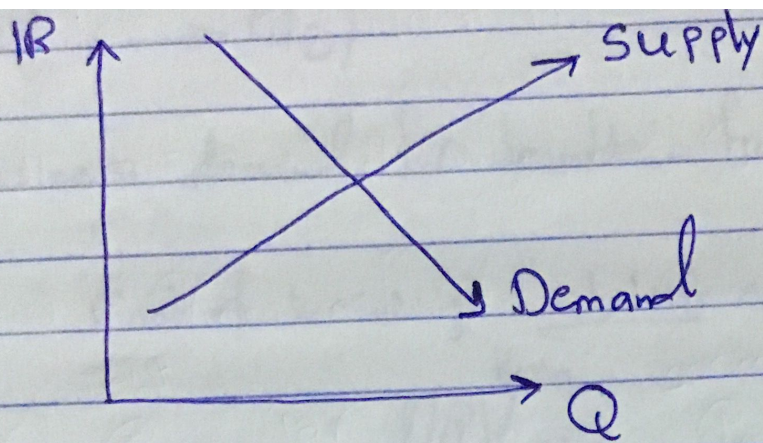
The interaction between all money supplied and money demanded. Determines the interest rate.

Household, business, Gov.

supplier & Demander
 سبب اختلاف قیمت ال

// , // , // , International, Logistics

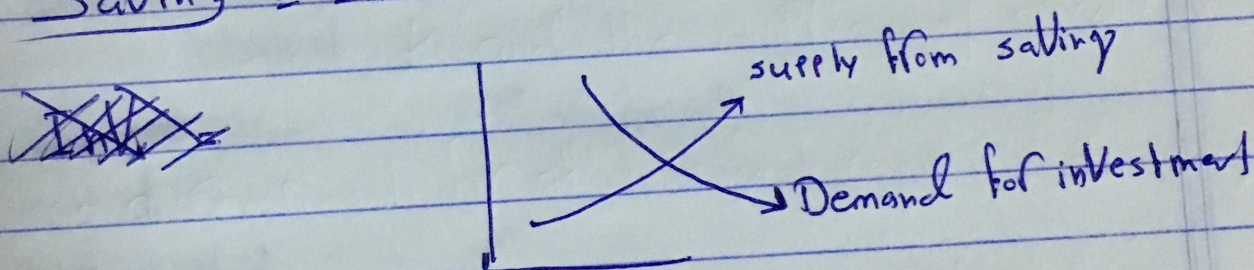
supplier & Demander



~~$i \uparrow \rightarrow H_2$~~ $i \uparrow \rightarrow H_2 \downarrow$

classical theory :- supply, saving, Demand for investment

Demand for investment $\rightarrow$ supply ^{from} saving
 التقاطع هو $\text{Saving} = \text{Income} - \text{expenditure}$



New classical theory :- loanable fund theory

أموال قابلة
للاقتراض

* یہ تاہم کثرت عیت، سیارۂ مستورات .

مَنْهَا أَقْرَبُ أَنْ أَقْبِيَهُ مِنْ شَخْصٍ فَلَسَادُ هَذَا الدِّينِ

بجب ان اقتطع جزء من انتاجه

$i \downarrow \rightarrow Q_D \uparrow$

Business demand for loanable funds :-

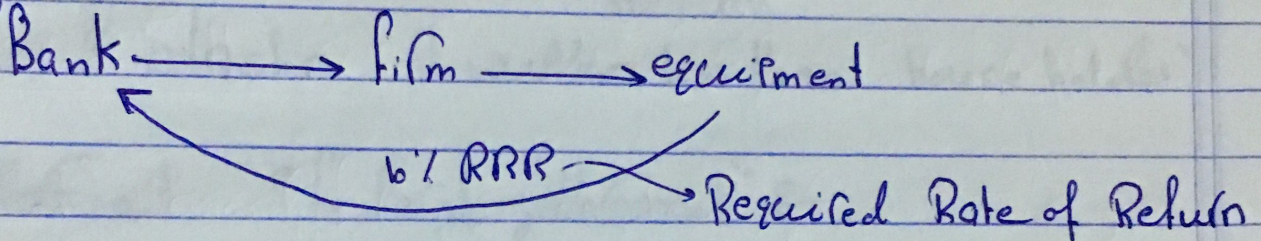
Cost of borrowing = at least equal Required Rate of Return

Then

$NPV = 0 \rightarrow I.I = \sum P.V \text{ of } I's$

$NPV > 0 \rightarrow \text{Added Value}$

Cost of borrowing 10%



• general level of interest

eg:- 48 Corporation

Government



إقتلاف الن في

general level of interest

وتكيب الن هو

equilibrium between money demand and supply.

1. House hold

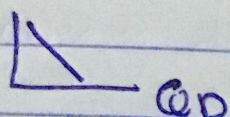
2. business

3. Government

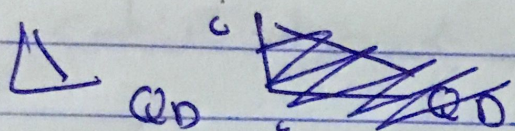
4. foreign demand

أغراض شخصية

House hold demand → Elastic
 العلاقة عكسية و Q_D يتغير
 $i \uparrow \rightarrow Q_D$



business demand → Depends on investment available opportunities
 $i \uparrow \rightarrow Q_D \downarrow$

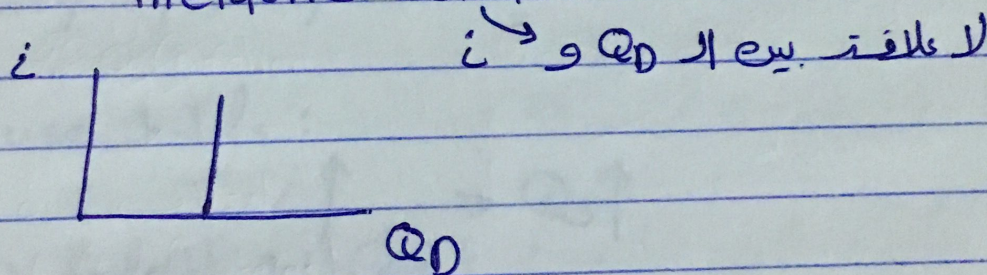


بداً و Rate of Return
 إذا أمضى أو قرض أم لا

"elastic However less than house holder"

Government "federal government"

+) it needs loans to cover high expenditures
 "inelastic Demand"

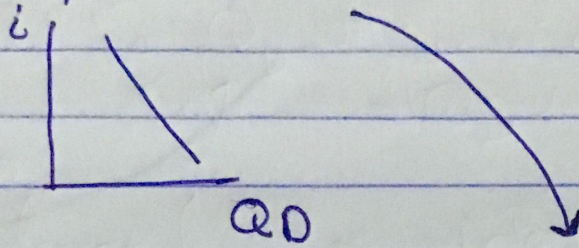


Foreign Demand

Demand on a security is based on the i of the country's interest "investor's interest"

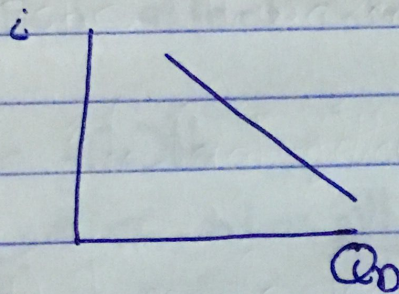
بريطانيا	usa	مكة العبد
"بالتقريب"		لايف
4.5%	4%	uk
8%	4%	usa

Municipality Government Demand



بسبب وجود التزامات يجب ان تغطي
لا اعطي الا شئ من الاموال في

Aggregate Demand



inverse relationship
"Downward sloping"

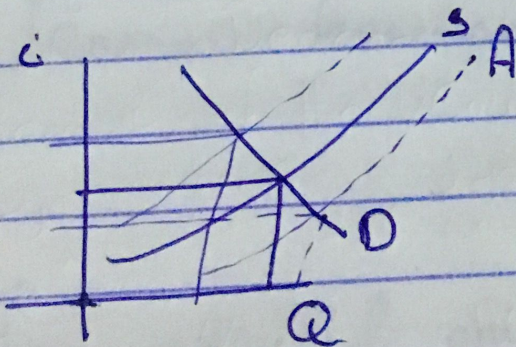
Supply of money

1. House holds :

$i \uparrow \rightarrow Q_s \uparrow$

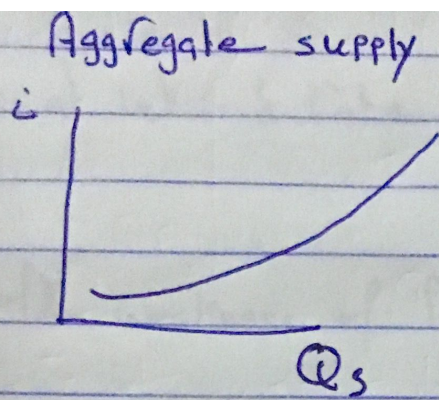
2) Federal government

Open market operations :-



(A) شراء اسهم سوف
تزيد الاموال في السوق
lower i

(B) بيع سندات
Higher i



* عن طريق التأثير في الطلب يؤثر في من خلال shifting

Factors that affect interest rate

1. Economic growth

التمدد يتأثر بالفرص الاقتصادية هو business

economic growth

Eg → To borrow for investment opportunity
 يزيد الطلب
 "shifting Demand Curve to the right"

* لا يمكن زيادة العرض في وقت شراء محدود

Economic recession → Demand ينخفض
 "shift demand Curve to the left"

توقع في المستقبل
 Inflation expected one in the future or
inflation deflation

Demand increases
 supply Decreases
~~inflation~~ i increase

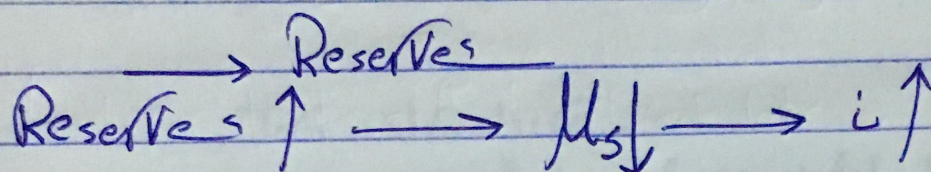
العرض
 ينخفض

Nominal interest rate = $r^* + \text{Inflation}$ "Fisher equation"

↓
in term of Purchasing Power

one of the weakness of Fisher equation that inflation is fully anticipated

3. Monetary Policy سياسة النقود



4. Government Deficit

اربعه اقسام
Demand (الطلب)
(+) Expenditures (النفقات)
(+) Interest (الفائدة)

Forecasting interest rate

2.4.2020

1. Forecasting for demand and supply

Chapter 3 Risk structure of i

↓
2 issues, same maturity, Different i

- 1) Liquidity
- 2) Credit Risk
- 3) Tax rate
- 4) ~~Maturity~~ Maturity