AP Macroeconomics
The Loanable Funds Market
Loanable Funds Market

- The market where savers and borrowers exchange funds ($Q_{LF}$) at the real rate of interest ($r\%$).

- The demand for loanable funds, or borrowing comes from households, firms, government and the foreign sector. The demand for loanable funds is in fact the supply of bonds.

- The supply of loanable funds, or savings comes from households, firms, government and the foreign sector. The supply of loanable funds is also the demand for bonds.
Loanable Funds Market in Equilibrium

$S_{LF} \& D_{Bonds}$

$D_{LF} \& S_{Bonds}$
Changes in the Demand for Loanable Funds

- Remember that demand for loanable funds = borrowing (i.e. supplying bonds)
- More borrowing = more demand for loanable funds (→)
- Less borrowing = less demand for loanable funds (←)
- Examples
  - Government deficit spending = more borrowing = more demand for loanable funds
    \[ \therefore D_{LF} \rightarrow \therefore r\%\uparrow \]
  - Less investment demand = less borrowing = less demand for loanable funds
    \[ \therefore D_{LF} \leftarrow \therefore r\%\downarrow \]
Increase in the Demand for Loanable Funds

\[ D_{LF} \rightarrow \therefore r\% \uparrow \text{ & } Q_{LF} \uparrow \]
Decrease in the Demand for Loanable Funds
Changes in the Supply of Loanable Funds

- Remember that supply of loanable funds = saving (i.e. demand for bonds)
- More saving = more supply of loanable funds (→)
- Less saving = less supply of loanable funds (←)
- Examples
  - Government budget surplus = more saving
    = more supply of loanable funds
    \[\therefore S_{LF} \rightarrow \therefore r\% \downarrow\]
  - Decrease in consumers’ MPS = less saving
    = less supply of loanable funds
    \[\therefore S_{LF} \leftarrow \therefore r\% \uparrow\]
Increase in the Supply of Loanable Funds

\[ S_{LF} \rightarrow .: r\% \downarrow \& Q_{LF} \uparrow \]
Decrease in the Supply of Loanable Funds

$S_{LF} \leftarrow \because r\% \uparrow \& Q_{LF} \downarrow$
Final thoughts on Loanable Funds

- Loanable funds market determines the real interest rate (r%).
- Loanable funds market relates saving and borrowing.
- Changes in saving and borrowing create changes in loanable funds and therefore the r% changes.
- When government does fiscal policy it will affect the loanable funds market.
- Changes in the real interest rate (r%) will affect Gross Private Investment
Q’s from the AP Exam

• 2008 - (d) Using a correctly labeled graph of the loanable funds market, show the impact of the increased government spending on the real interest rate in the economy.

• (e) How will the real interest rate change in part (d) affect the growth rate of the United States economy? Explain.
Answer
(d) 2 points:
• One point is earned for a correctly labeled graph of the loanable funds market.
• One point is earned for showing a rightward shift of the demand curve and showing a higher real interest rate. (A leftward shift of the supply curve showing a higher interest rate is also accepted.)

(e) 2 points:
• One point is earned for stating that the growth rate will fall.
• One point is earned for explaining that investment spending decreases and, as a result, capital formation will decrease.
Investment Demand

- As RIR changes, the quantity of Investment demanded changes.

- Other determinants shift the ID curve:
  - costs of capital
  - business taxes
  - Technology
  - expectations
Money Market

- **MS** – affected by actions of the Federal Reserve
- **MD** –
  - Transaction demand determined by GDP
  - Asset demand determined by NIR
Loanable Funds Market

- **Supply of Loanable Funds:**
  - personal savings and financial capital from abroad

- **Demand for Loanable Funds:**
  - firms demand for funds for capital and interest sensitive consumption
Effect of Expansionary Fiscal Policy on Loanable Funds & Investment

$G \uparrow$ and/or $T \downarrow$: Government deficit spends $\rightarrow D_{LF} \rightarrow r\% \uparrow \rightarrow I_G \downarrow$

(Crowding-Out Effect)
Loanable Funds Market Graph
(Long-Term Interest Rates)

What changes Supply:
1. Increase in Household savings
2. Increase in Gov’t savings
3. Increase in Business savings
4. Increase in Foreigners’ savings

What changes Demand:
1. Increase in Household borrowing
2. Increase in business Investment
3. Increase in Foreign borrowing
4. Increase in Government borrowing (When the gov’t has a budget deficit!) = (the crowding-out effect)