# Lesson 8: IS Curve and MP Curve

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## 1 Chapter 9: The IS (Investment and Savings) Curve

The IS Curve shows us the real interest rate (r) that places the goods market (I = S) inro equilibrium for any level of output (Y).

# TODO make IS curves

### 1.1 Consumption (Lesson 5)

$$C = \overline{C} + MPC(Y - \overline{T}) - cr$$

Where c is how responsive consumption is to changes in the real interest rate (r)

#### 1.2 Investment (Lesson 6)

$$I = \overline{I} - dr_i = \overline{I} - d(r + \overline{f})$$

Where  $r_i$  is the real interest rate on investment.

$$r_i = r + \overline{f}$$

 $\overline{f}$  ~ financial frictions (risk)

• cost of borrowing cause by barriers to effectively determine risk

#### 1.3 Government Purchase and Taxes

$$G=\overline{G}$$

$$T=\overline{T}$$

### 1.4 Net Exports

$$NX = \overline{NX} - xr$$

If real interest rate in the US increases, then US investments have greater return, so interanational investors want to invest in the US. This creates a need for the US dollar (demand), the US dollar will become stronger and it costs more to produce in the US and NX will go down. You would also be able to import more.

# 2 Chapter 10: The MP Curve