Consumption

The Fisherian Model

Irving Fisher

Irving Fisher (2)

Some Assumptions

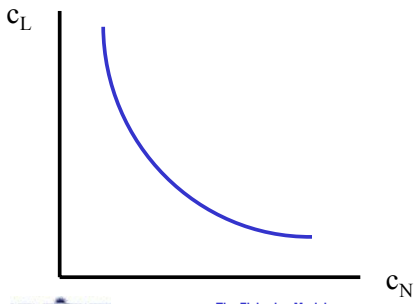
- People live for two time periods
  - Now and Later
- Income is y_N and y_L.
- The discount rate is r
- Everything is certain

The Key Insight

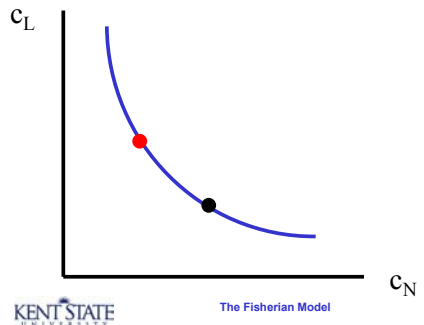
- People make decisions about consumption over their life cycle
- They have a preference function

$$U(c_N, c_L)$$

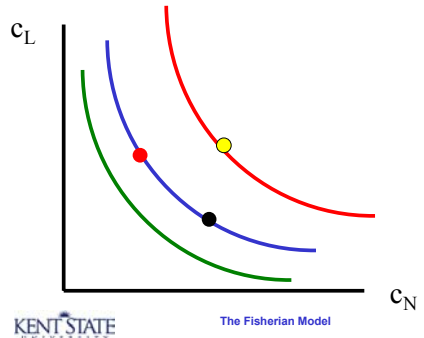
Indifference Curves



Indifference Curves



Indifference Curves



The Budget Constraint

- The basic budget reality

$$c_L = y_L + (y_N - c_N)(1+r)$$

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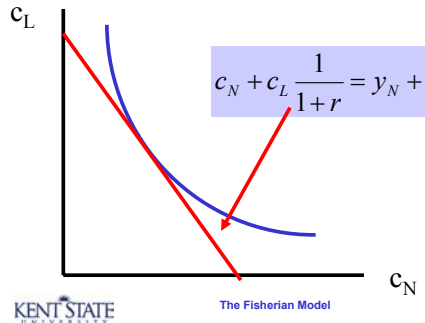
- The basic budget reality

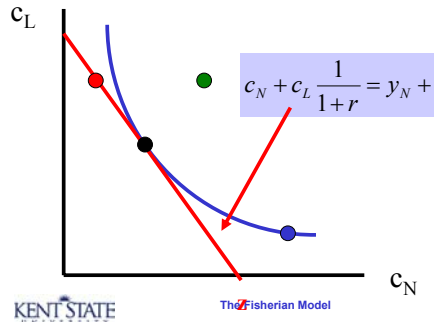
$$c_L = y_L + (y_N - c_N)(1+r)$$

$$c_N + c_L \frac{1}{1+r} = y_N + y_L \frac{1}{1+r}$$

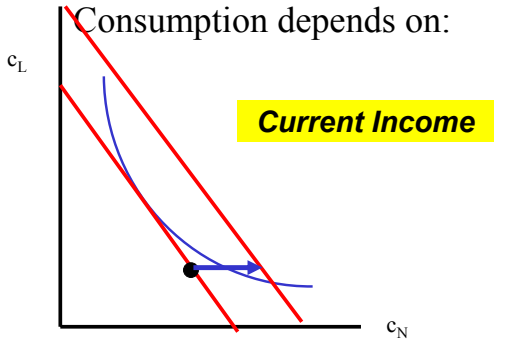
Maximizing Utility



Maximizing Utility

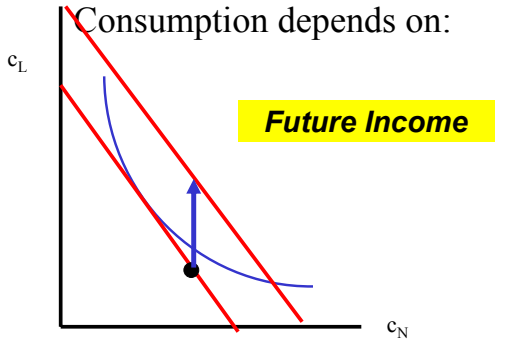


Consumption depends on:



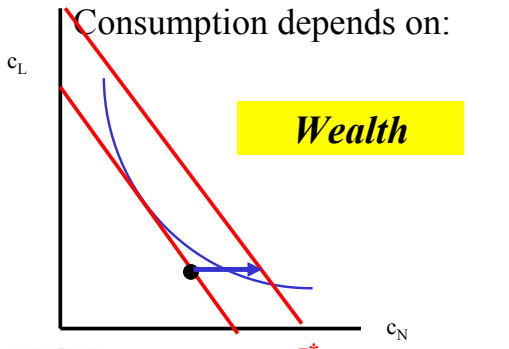
Current Income

Consumption depends on:



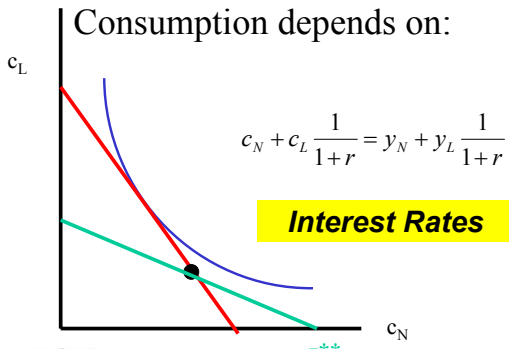
Future Income

Consumption depends on:



Wealth

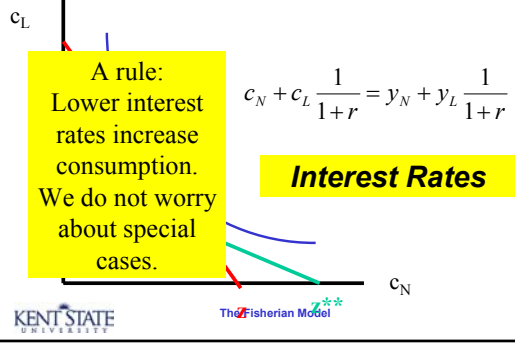
Consumption depends on:



$$c_N + c_L \frac{1}{1+r} = y_N + y_L \frac{1}{1+r}$$

Interest Rates

Consumption depends on:



A rule: Lower interest rates increase consumption. We do not worry about special cases.

$$c_N + c_L \frac{1}{1+r} = y_N + y_L \frac{1}{1+r}$$

Interest Rates

Consumption rises with

- Increases in income
  - Current income
  - *Expected* future income

Consumption rises with

- Increases in income
- Lower interest rates

Consumption rises with

- Increases in income
- Lower interest rates
- Increased Wealth.
  - Stock Market
  - Housing
  - Lottery Tickets
  - Inheritances

Consumption ~~rises~~ **falls** with

- **Decreases** ~~Increases~~ in income
- **Higher** ~~Lower~~ interest rates
- **Decreased** ~~Increased~~ Wealth.

Extensions

- This is a pretty simple model. More complicated versions come to the same conclusions
- You tell me how much math and complications you can tolerate, and I can add it.

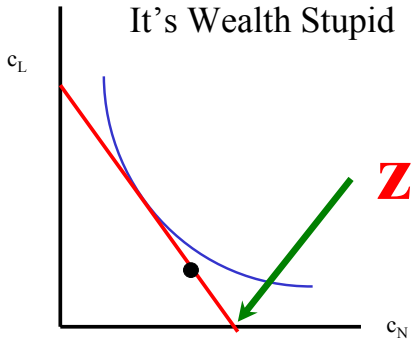
Uncertainty

- There is uncertainty about
  - Future income
  - Life Expectancy
  - Interest Rates

Other Issues

- Governmental Decisions
  - Taxes
  - Programs (social security)
- People make decisions as families

It's Wealth Stupid



End