

Notes for 129 Growth over the long term (09-01-08)

1) Sokoloff and Engerman

- a. What explains the distribution of economic success around 1750
 - i. What is the evidence for this?
 - ii.
- b. Is there are a reason why large differences in output per person would persist
- c. What explains why the Northern colonies catch up after 1820?
- d. Why does a gap in income open up?
- e. Why does it persist
- f. Economic and political inequality

2) Background

- a. What do economists care about?

Utility vs material goods

But its very hard to find practical evidence of utility even in surveys (it does not add up across people)

Theory tells us something important, price is a measure of valuation. You prefer the bundle of goods that you buy to any other bundle that you could buy but did not.

- b. What is output?

- i. GDP-GNP

This is something we can measure in market economies, and theory tells us how to add them up. Measure the Q's add them up using the p's

Problems however: comparisons work well if the set of available goods are the same and prices are the same.

Also relatively easy if goods are the same and prices are slightly different.

I can compare US and Canada easily by asking how much can a Canadian afford of a US shopping basket (given his income and Canadian prices). Or how much better of a canadian would be if US Prices prevailed.

Harder to compare Hong Kong with London (rice vs wheat)

Particularly if rice is cheap in Hong Kong and expensive in London

Index number pb 1.

Problem with history is that prices change as does the set of goods available.

Index number pb 2

Take the price of computing. The price of 100 count cotton cloth fall by 90% between 1750 and 1850 in many parts of the world. At the beginning almost no-one in Europe consumes any cotton, so the fall in price has little effect on welfare if you use the initial budget shares. At the end cotton is important in the budget so if you use the final budgets then people are much better off.

Particular problem with quality.

Price of a computer has been about 1000 for 15 years, but what it can do has changed. Should we measure cost of computers, or the (price of machine divide by time it takes to do a given operation)

c. Productivity

- i. What is it.
- ii. Partial
- iii. Total

$$Y_1 = WL_1 + rK_1 \quad Y_2 = WL_2 + rK_2$$

In the absence of productivity and constant returns to scale,

$$Y_2 - Y_1 = W(L_2 - L_1) + r(K_2 - K_1)$$

Now

$$(Y_2 - Y_1) / Y_1 = W(L_2 - L_1) / Y_1 + r(K_2 - K_1) / Y_1$$

$$(Y_2 - Y_1) / Y_1 = ((L_2 - L_1) / L_1) (WL_1 / Y_1) + ((K_2 - K_1) / K_1) (rK_1 / Y_1)$$

If there is no productivity growth this should be zero

$$TFP = \Delta Y / Y - (\Delta L / L) (WL / Y) + (\Delta K / K) (rK / Y)$$

d. What is growth?

More stuff.

Where does it come from, in the long run on the supply side (it cost less to produce)

Some effects of demand (urban vs rural)

Growth in what?

- 3) Beyond measurement why does history matter?
 - a. Persistence
 - b. Change

- 4) David and Abramowitz
 - Everything changes
 - What was important? Why
 - Is it still important

- 5) Introduction to technological change
 - a. What is technology
 - b. What is a technology
 - c. Technology as a machinery,
 - i. Steam engine is a steam engine is a steam engine
 1. Here the object depreciated but not the technology
 - d. Technology as process
 - i. Learning and forgetting
 - e. Biological technology
 - i. Self depreciating

- 6) Factor endowments and technology
 - a. Specialization and comparative advantage
 - i. Comparative advantage comes from technology
 - ii. Heckscher-Olin comparative advantage comes from factor intensity
 - iii. Factor intensity may come from endowments
 - b. The latitude hypothesis
 - c. The latitude regularity
 - d. Agriculture
 - e. Manufacturing