ECC2800 Prosperity, Poverty and Sustainability in a globalised world

Exam Study Guide

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Topic 1: Starting out with PPS

Two types of Economics:

1. "First-world Economics"
   - Concerns about what we see daily in the media
     - eg. unemployment rates, housing prices, predictions about the economy, growth, recessions, etc.
2. "Developing-world Economics" *we look at this
   - Poverty, despair, difficulty, material circumstances of human kind

"The Economic Problem"

- The idea of having enough to eat and enough income to meet other basic needs
- Prosperity, Poverty and Sustainability
- Has not been solved all around the world

World Economic History

1. Malthusian Trap
   - Low prosperity
2. Industrial Revolution
   - Prosperity begins to increase
   - Infant mortality rate decreases
3. Great Divergence
   - Prosperity and life expectancy very high in developed countries
   - Prosperity and life expectancy lost in developing countries

Topic 2: Reasoning about Prosperity with Malthus

PART 1: Gross Domestic Product

Gross Domestic Product (GDP)

- Definition: *the value of all goods and services produced or supplied in a country in a single year*
- Includes goods consumed locally and consumed through exports
- Does not include cash exchange, voluntary work, in-house labour
- Time bound: usually over 1 year
- 'Gross': sum of everything as if it's all equally valuable in the number ($100 cars = $100 flour = $100 IT services = $300 GDP)

Nominal vs. Real GDP

- Nominal GDP definition: *Summing up done in the prices as given, at that time*
- Real GDP definition: *Summing up done in the prices that have been adjusted for inflation over time*
  - to be able to compare across time
  - eg. '1990 dollars' or 'current dollars'

Growth in GDP

- The % change in **real GDP** year on year

Technical Recession

- Definition: *GDP growth is negative for two consecutive quarters*
- Eg. quarterly growth rate figures of +1.6, -1.2, -1.8, +2.1, +3.4 indicate the economy was in recession during the 2nd and 3rd quarter of these data

Australia GDP Growth Rate

- We haven't had a technical recession since 1960
- Mainly positive growth rates (typical for developed countries)
- Before this, we did have periods of recessions

Short-comings with GDP measurement

1. GDP doesn't take account of the **size of the population**
   - Solution: so work with GDP per capita when discussion actual material prosperity of a society
2. Only takes account of **market transactions**, i.e. those activities which are paid for, and recorded, in company and government accounts
   - doesn't capture volunteering, in-house labour, cash economy
   - Solution: so only compare across economies with similar economic composition (market/non-market)
3. GDP is blind to the **quality** of the economic activity being added up
   - Note: War increases GDP but is horrible
   - Solution: so try to ensure institutions promote prices that reflect the full, long-run, economic benefits and costs of an activity

4. High GDP, even high GDP/capita doesn't mean that people are going to be **happy**
   - happiness depends on our moods and expectations
   - Solution: so build multi-dimensional indices to try and get at happiness
5. GDP becomes an **obsession**
   - governments start competing on GDP

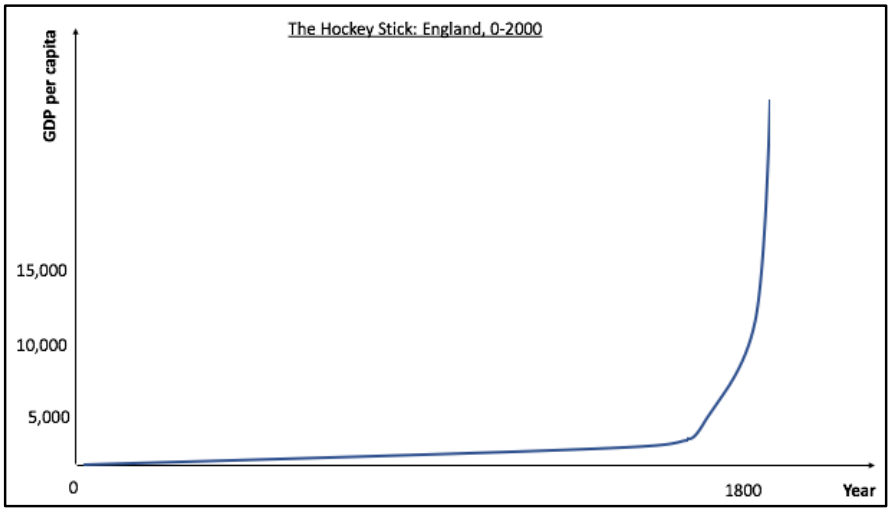
Advantages of GDP measurement

- It's simple
  - simplification of the complex economy
- Easy to compute
- We are locked into a 'mechanical' vision of the economy
- It's useful

PART 2: Analysing Long-run Economic History in Prosperity Space

Hockey-stick view of Long-run Economic History

- X- axis: Time
- Y-axis: Income (GDP/capita)
- Radical increase in prosperity in recent years



Hockey-stick view limitation

1. Scenario 1: GOOD
- No change in population size between Year 0 and 2010
- Rapid increase in productivity in last couple of hundred years
- Output increases massively in size
2. Scenario 2: BAD
- Population decreases by 40 times between Year 0 and 2010
- Output stays the same due to rise in productivity
- Material prosperity of population increases (GDP per capita)

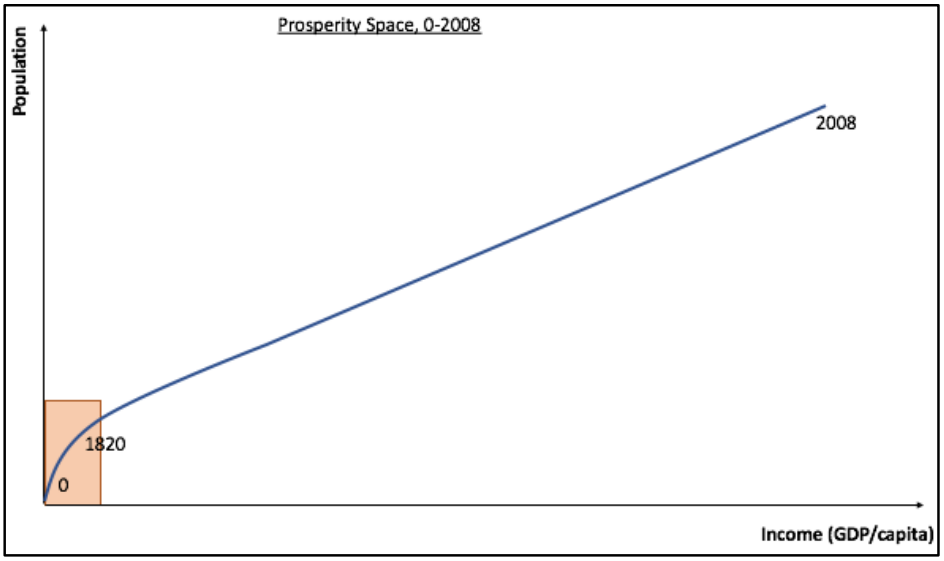
→ **Problem:** The diagram hides information about population size

Prosperity-Space

- X-axis: Income (GDP/capita)
- Y-axis: Population

Prosperity space for 2,000 years of world economic history

- Little box: Malthusian Period
  - compared to the following years, increase in prosperity is minimal (50% vs. 930%)



PART 3: Reasoning with Malthus around long-run economic stagnation

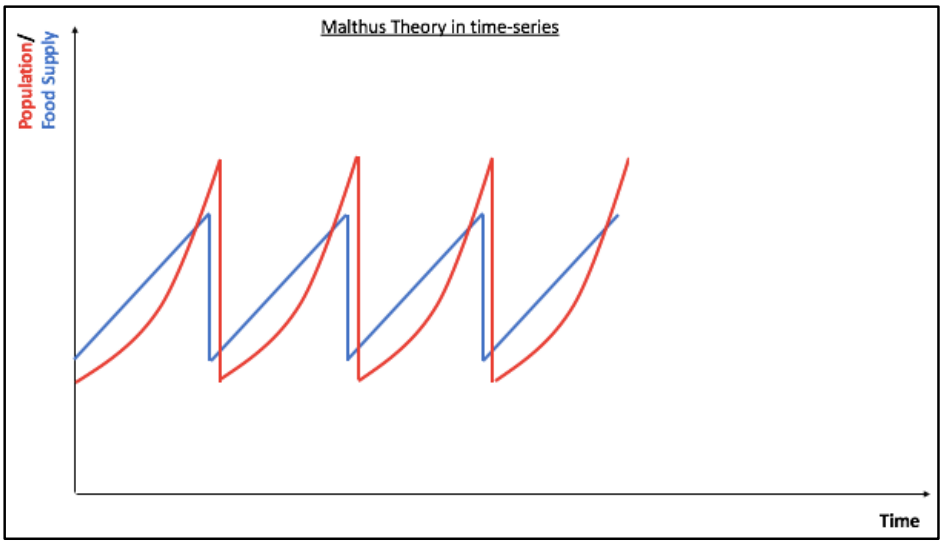
Malthus key 'postulates' that form the basis of his theory

1. Food is necessary to the existence of man
2. The passion between the sexes is necessary and will remain nearly in its present state

- He argues that the power of population to grow is much higher than the power of the earth to produce survival for man
- Ability to produce food: LINEAR (constant amount)
- Population growth: GEOMETRICALLY (constant rate)

Malthus' theory in time-series presentation

- Food output drop: Crisis
  - when rate of population growth is greater than rate of food output: over-farming, war → results in a fall in population



Malthusian dynamics in prosperity-space

- Only slight changes in population during Malthusian trap
- Oscillations around one fixed point of average population and income
- Increase in population – decrease in income
- Decrease in population – increase in income
  → SIZE OF PIE STAYS THE SAME
- Signature of Malthusian Dynamics: Downward-sloping line in prosperity-space

Underlying Assumption of Malthus Theory: **The size of the Pie is the same**

- Population and GDP/capita remain the same on average
- Cause of fixed size of pie: **very slow technological change**