

# 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 2<sup>nd</sup> and 3<sup>rd</sup> 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

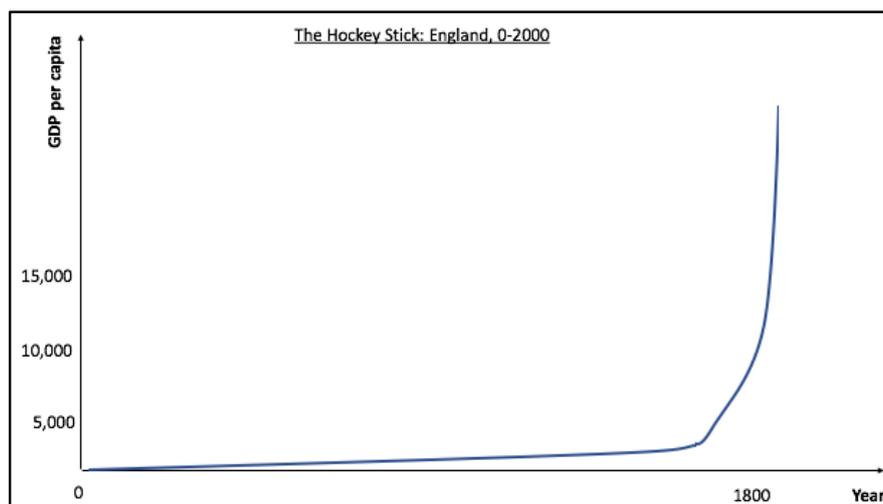
#### Advantages of GDP measurement

- 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

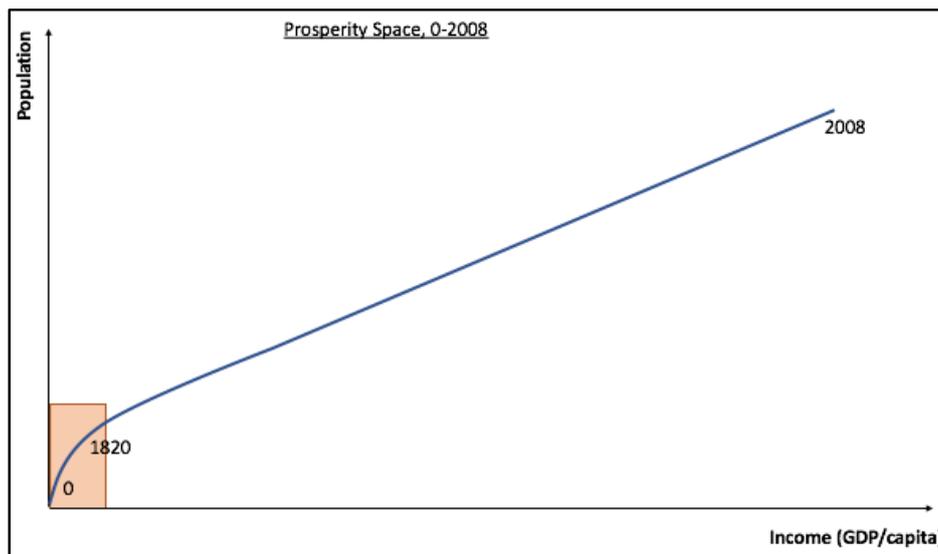
1. Scenario 1: GOOD
    - No change in population size between Year 0 and 2010
    - Rapid increase in productivity in last couple of hundred years
    - Output increases massively in size
  2. Scenario 2: BAD
    - Population decreases by 40 times between Year 0 and 2010
    - Output stays the same 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**

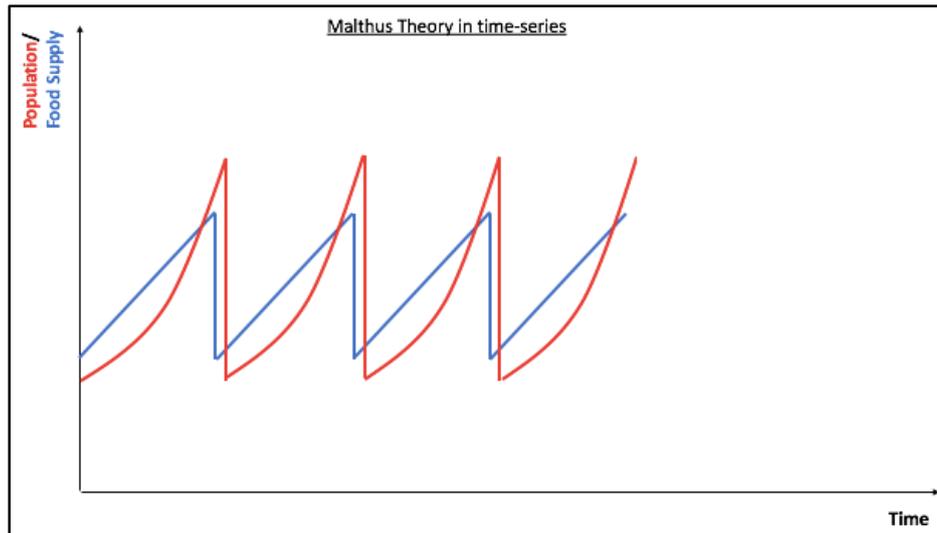
- Little box: Malthusian Period
  - compared to the following years, increase in prosperity is minimal (50% vs. 930%)

**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)

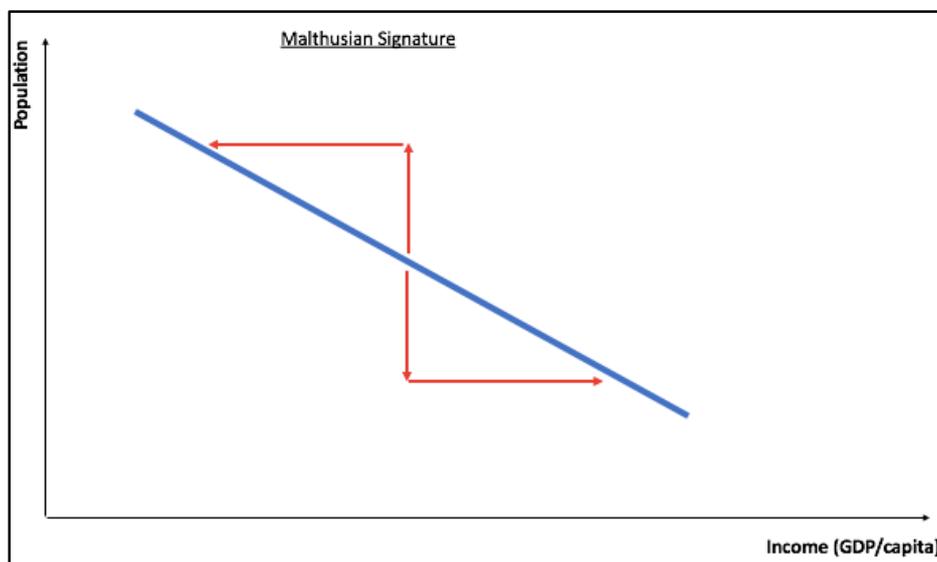
**Malthus' theory in time-series presentation**

- 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**