Viewpoints on the Wealth of Nations

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Outline: Unit I, Section RE 2

I. Demographic Transition: Lucas Article
II. Endowments and Property Rights

I. Demographic Transition

- Objective: Provide economic insights for both the high standard of living in some nations, and large income inequality across nations
- Time horizon: Very LR => Centuries of humankind
- “Industrial Revolution” = Approximately 1800 = GDP/capita grows dramatically in some nations

The Industrial Revolution: Past and Future, Lucas 2003.

Thomas Malthus (1766-1834)

- Economics of gloom and doom
- Earth has limited resources
- Food necessary for existence
- “Passions” between sexes given => population growth
- Technological progress [TP] not emphasized

Timeline of GDP per capita

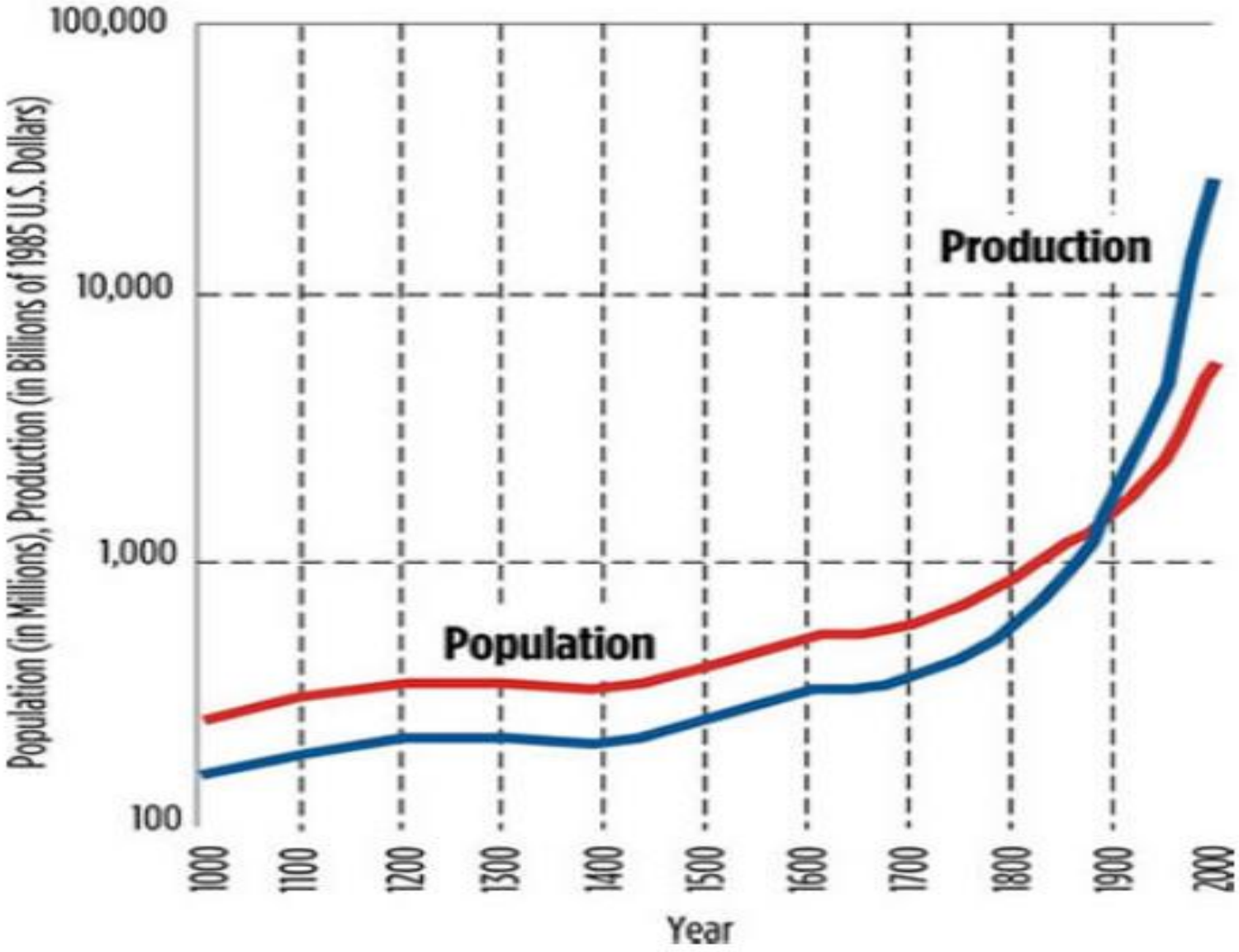
Date	1000	1600	1700	1800	1960	1960-2000
GDP/capita (1985 US$)	$600	$600	$600	$600-$1000	$600 - $8000	$600-$18,000
GDP/capita annual growth rate	≈0%	≈0%	0.3%	1%	2.4%	4%

<u>Comments:</u>
Agricultural society
GDP/capita = $400-$800 all countries
No income inequality across countries
Income inequality within countries
Ancient civilizations: Egypt(3000 BC), China(2000 BC), India(2000 BC), Maya (500 BC), Rome (0 BC)

<u>Comments:</u>
Agricultural & Non-agricultural societies
GDP/capita = $600-$18,000
large income inequality across countries
Large income inequality within countries

Figure 2

World Population and Production



Malthusian Trap

- Why has GDP/capita stayed constant at $600 for centuries until only the Industrial Revolution?
- Technological progress => Y/L increases=> Fertility rate increases=> GDP/capita constant
- If household income increases =>number of children increases => Dilutes initial TP

Figure 3

GDP Per Capita, Five Regions

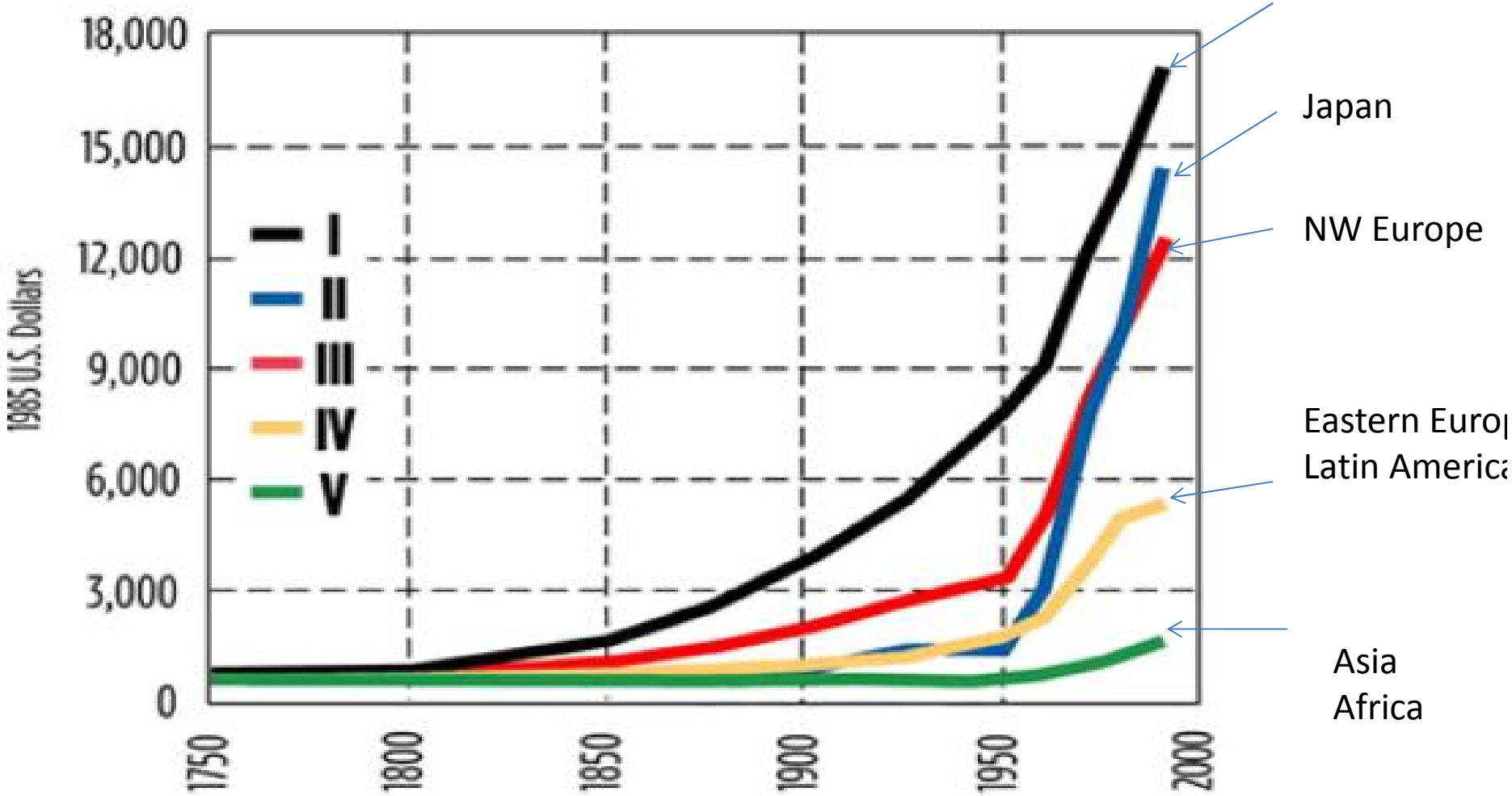


Figure 3

- Large income inequality only “recently”
- GDP per capita constant across countries until only “recently”
- Why have some countries, the US, UK, Japan, Northwest Europe experienced such increases in standards of living?

Growth Models

Malthus

- Resources fixed
- Fertility rate not constant
- TP => In the SR, population increases and GDP/capita constant
- Temporary increase in the standard of living => more children

Solow

- Resources fixed
- Fertility rate constant
- TP => In the SR, population growth constant and GDP/capita increases to a new level
- Returns to children not modeled

Demographic Transition

- As income increases, parents can have:
  - More children
  - Higher-quality children (i.e. H = human capital)
- Pre-1800s
  - Returns to H low => Many, less educated children
  - E.g. Einstein born in 1400
- Post 1800s
  - Returns to H high=> Few, more educated children
  - E.g. More and more children become educated

Why the Demographic Transition

Positive feedback loop

1. TP increases returns to H =>
2. Families have fewer, better educated children => H increases =>
3. Higher-skilled workforce increases further the returns to H =>
4. Families have even less children => …back to 2

5. GDP/capita has liftoff

Diffusion of the Demographic Transition to other countries

- Asian miracles Japan, South Korea, China
- Some Southeast Asian countries more recently
- Many Latin American & Sub-Saharan African countries eventually

What Has, and Has Not Contributed to the Standard of Living?

- Standard of living stagnant:
  - Socialist planning, corruption, lawlessness

- Standard of living breaks free:
  - Trade allows poor countries to catch up => learning-by-doing from rich countries

What Has, and Has Not Contributed to the Standard of Living?

- Over centuries, standard of living is not affected by:
  - Income inequality
    - Potential for demographic transition is so much larger than redistributing income
  - Macroeconomic policy
    - Many countries grow rapidly under inflationary policies
    - What about in the aftermath of the financial crisis?

II. Endowments and Property Rights

- Motivation: Protection of private property rights is necessary for economic growth

- Venezuela nationalizes oil property

  => Future oil companies have less incentive to invest

- Property rights are difficult to measure, but doesn't mean they aren't important

Colonial Origins of Comparative Development

500 years ago:

Mortality rates => “Extractive” or “settler” colony => Early European institutions =>

Today:

Current Institutions => Property rights level=> GDP/cap growth rate

The Colonial Origins of Comparative Development: An Empirical Investigation. Acemoglu, Johnson, Robinson (2001)

Why Nations Fail, Acemoglu & Robinson (2012)

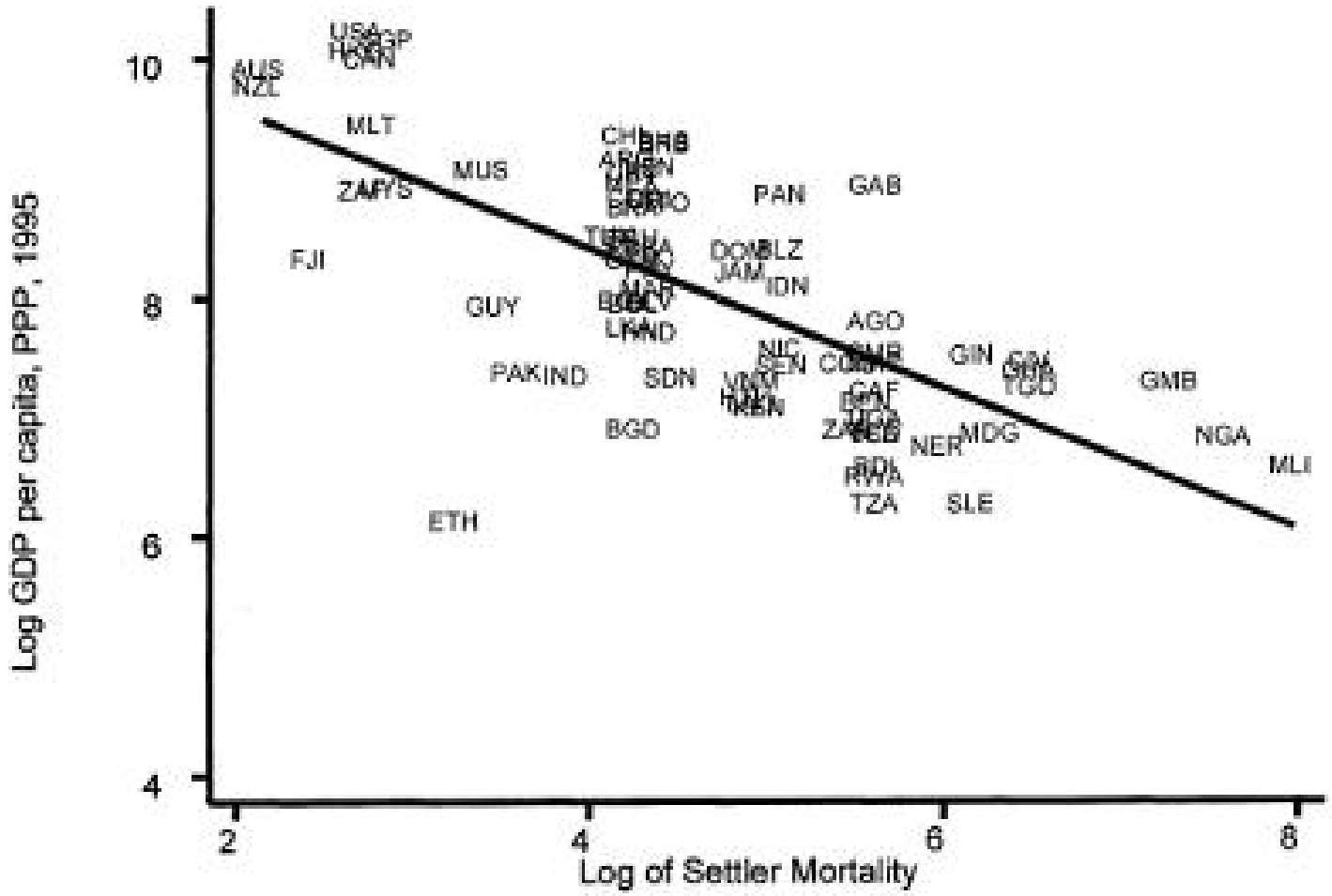


FIGURE 1. REDUCED-FORM RELATIONSHIP BETWEEN INCOME AND SETTLER MORTALITY

Illustrative Examples

- 1792: In Sierra Leone, 60% mortality rate among Europeans => “Extractive” colony
- 1805: On the overland trip from Gambia to the Niger, 87% mortality rate => “Extractive” colony
- In the US, low mortality rate => “Settler” colony

Some Counter Arguments

- Malaria versus GDP/capita graph

- Too simplistic and deterministic