

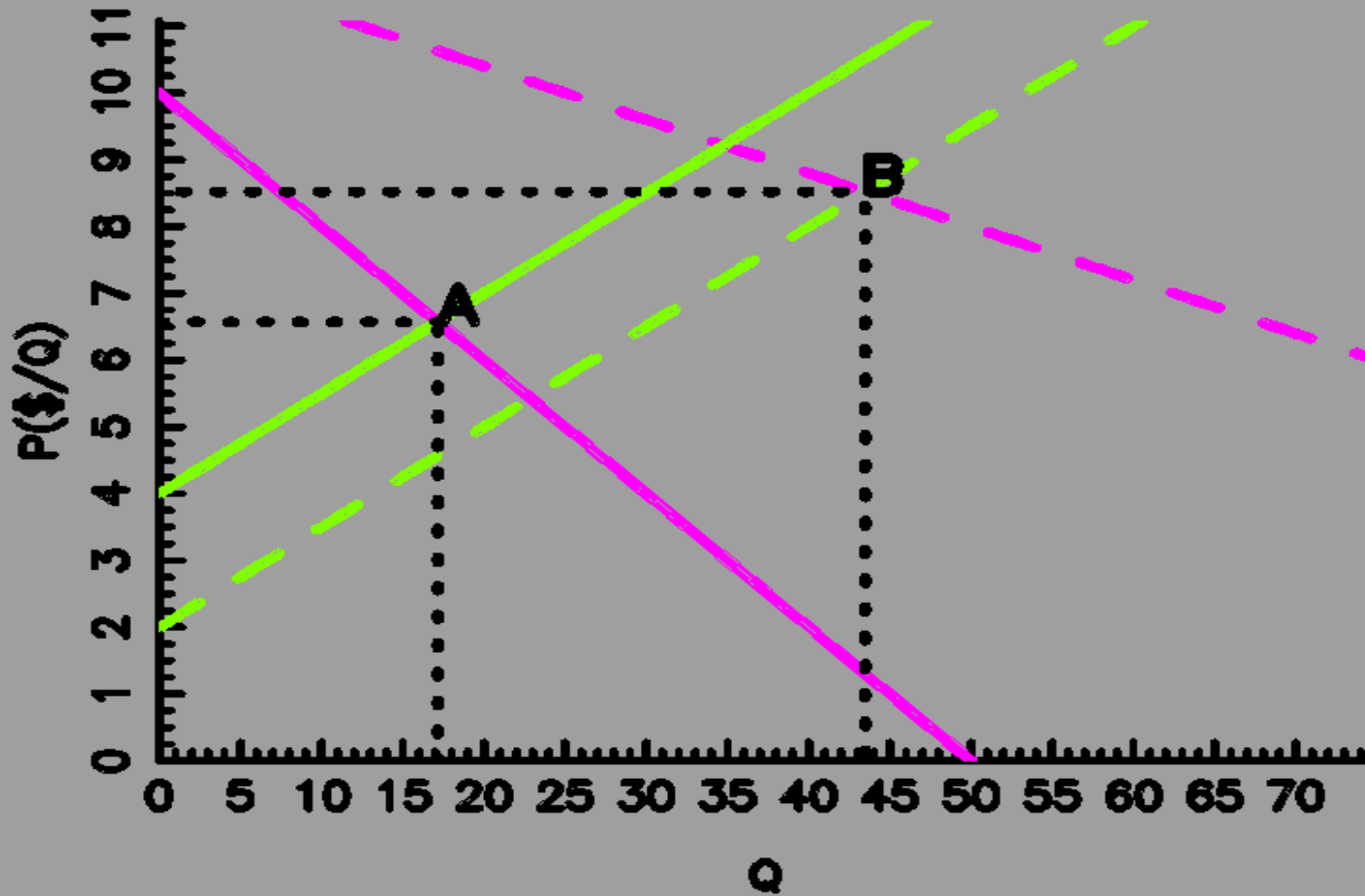
Economic Growth Theories and Innovation

A Primer
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SFU Fall 2011

- Economics- Basic assumptions about how Economics works
- The Mystery of Growth
- Potential Role of Technology in Growth
 - 2 Paradigms
- *Why are we interested in economic growth?

Key Points of Discussion

Supply and Demand

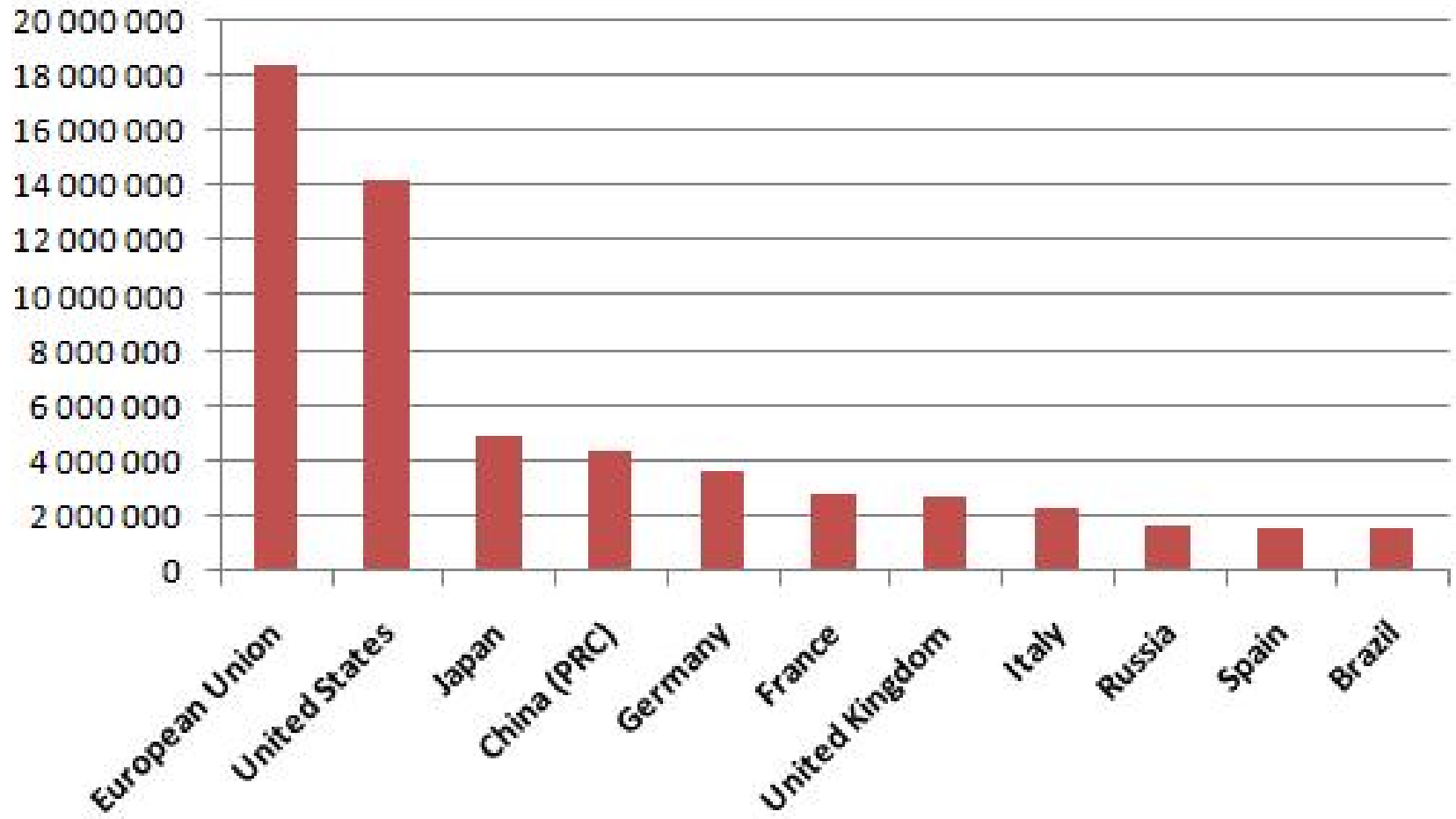


In the beginning...

- Gross National Product- what is it?
- Why do we use it as a measure for growth?
- Does it really hold up?
 - Gut test 1: Does GNP really measure the size of the economy?
 - Gut Test 2: Do high GNP countries have higher standards of living?
 - Gut test 3: When GNP growth is high or low, is there a noticeable difference in the economy?

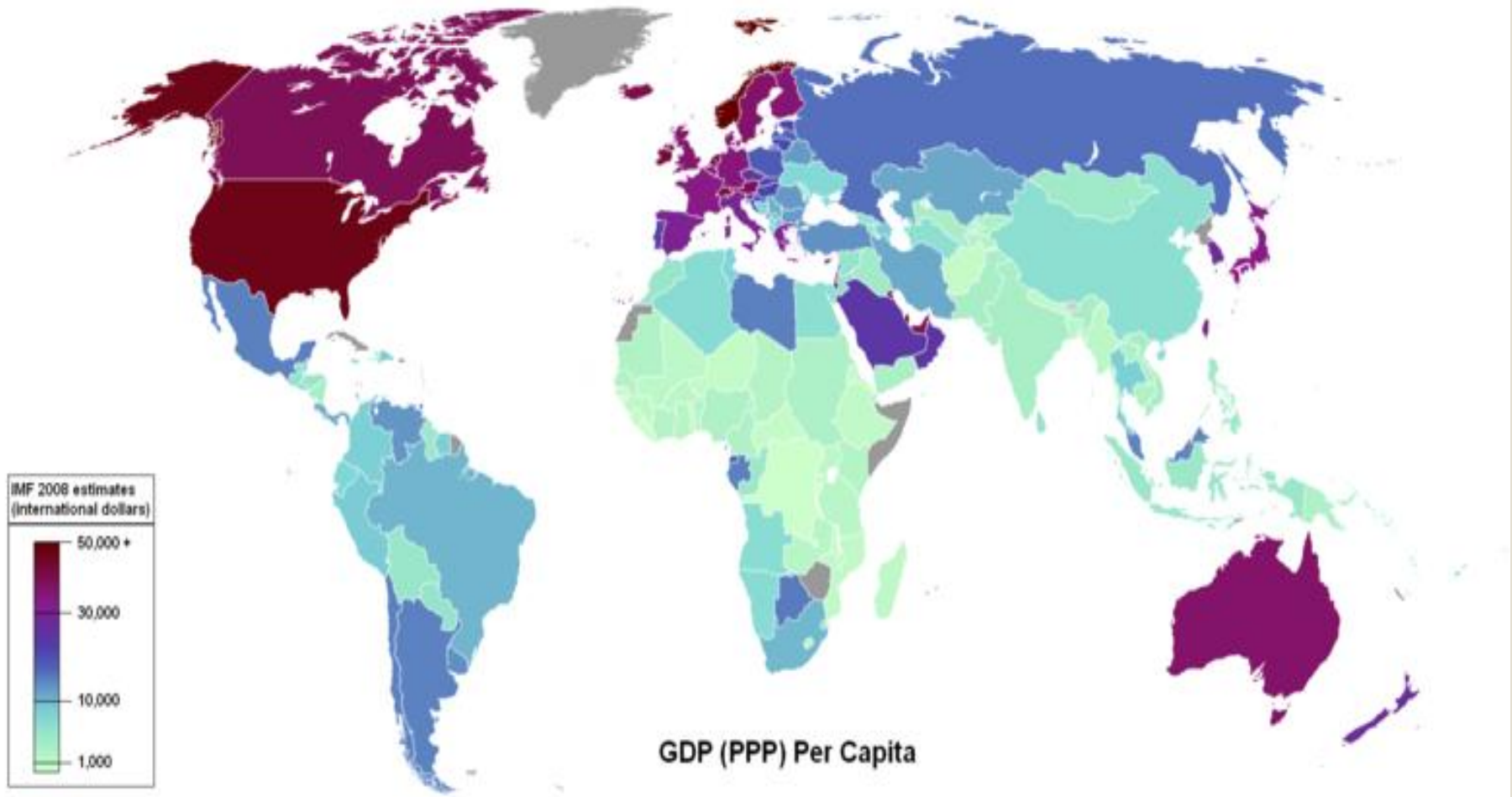
Why do we use GNP to measure economic growth?

2008 GDP Nominal \$- IMF



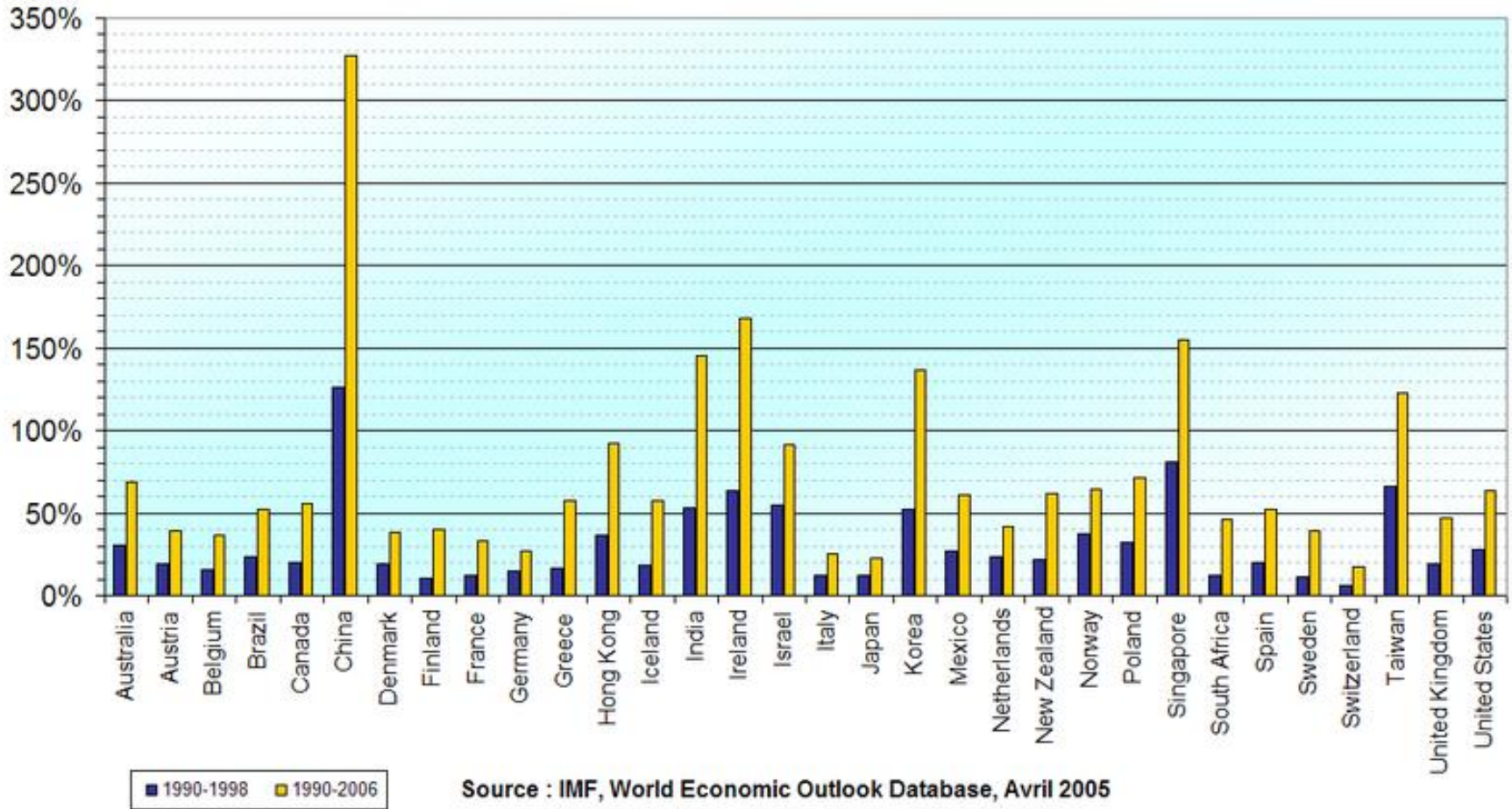
Gut Test 1

Source: IMF via wikipedia



Gut test 2

GDP accumulated growth, in percent, constant prices



Source: IMF via wikipedia

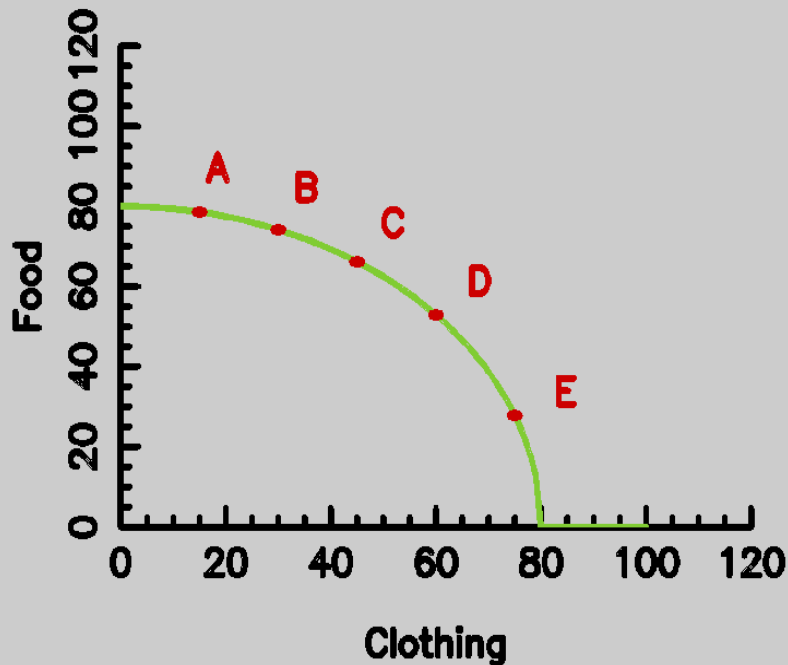
Gut Test 3

- If GNP is an adequate measure of the size and growth of an economy (overall economic well-being), how is it defined?
- $GNP = C + I + G + (x-m)$
- What does this tell us about what we need to do to grow?
- *Thought exercise: where does investment come from? Consider the economy as a whole, now consider a particular industry (eg autos)

How is GNP defined?

- GNP definition?
- Comparative Advantage? After trade?

Production Possibilities Diagram: Opportunity Cost



Mystery of Growth

Why Don't countries =ize?

- Mystery led to a re-thinking of potential sources of growth
- Factors of Production: T, L, & K
- Solow adds alpha
 - Does this really solve the problem of where growth comes from? TFP is a concept, not an explanation

Factors of Production

- Paradigm 1: Market forces & competition lead to productivity gains
 - ~endogenous- innovation “as a lottery ticket”, but once you innovate, next innovation is easier (increasing returns)
- Paradigm 2: States push forward new technologies through policies
 - ~GPT (collective goods aspects)

What does each paradigm suggest about how/why there seems to be unevenness in the spread of technologies (basic contradiction to neoclassical ecos)?

- Thought Exercise: Explain the reasoning behind each paradigm...which seems more convincing to you?...what examples would you use for evidence?
- Over the coming weeks, we will examine further the ways in which the evolutionary paradigm could possibly solve these problems (a separate question).

2 paradigm debate (course theme)