Topic 5
Growth Policies

Agenda

- Structures that promote growth
- Analysis of Government policy
- Sustainability/Desirability of growth

How can we encourage growth?

What should we target? Government policies, education, wages?

What are the components of that account for growth?

- Recall the difference between the United States and Asian Tigers

- Which path would probably be better for a developing country to follow?

- So, how do we spur investment in this(these) area(s)?

Human Capital

- Examples: Education, Health and Nutrition
- **Human** capital refers to investment in your labour force
  - More education yields better skills and higher productivity
- **Externalities:** More inventions, lower "social cost" to society.
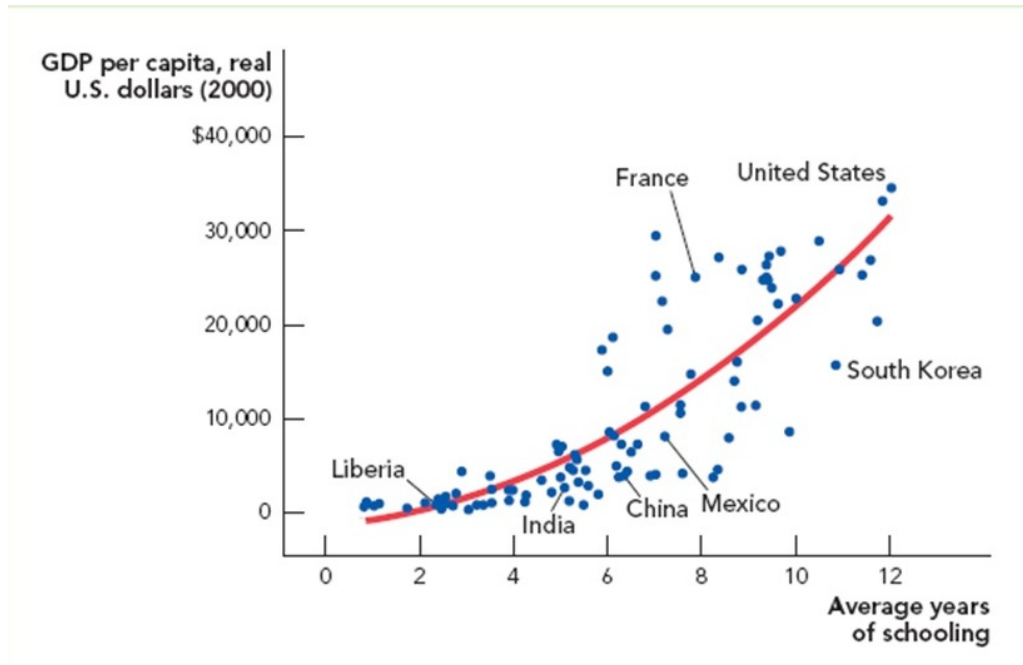 - If interested about societal benefits, read this

So why is this good?

- Because education and RGDP are strongly correlated

Savings and Investment

- Increases in capital stock can increase production
  - What is an example of this?

- But there is a tradeoff! If you invest more, you must be ….
  - Why does this tradeoff exist?

So why don't all countries do this?
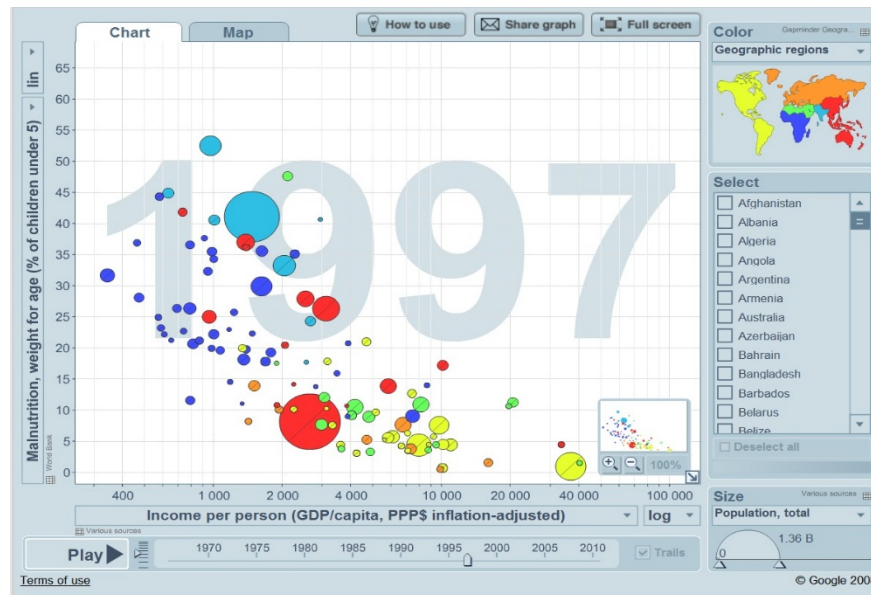
- Investment takes time to show returns (years or decades)

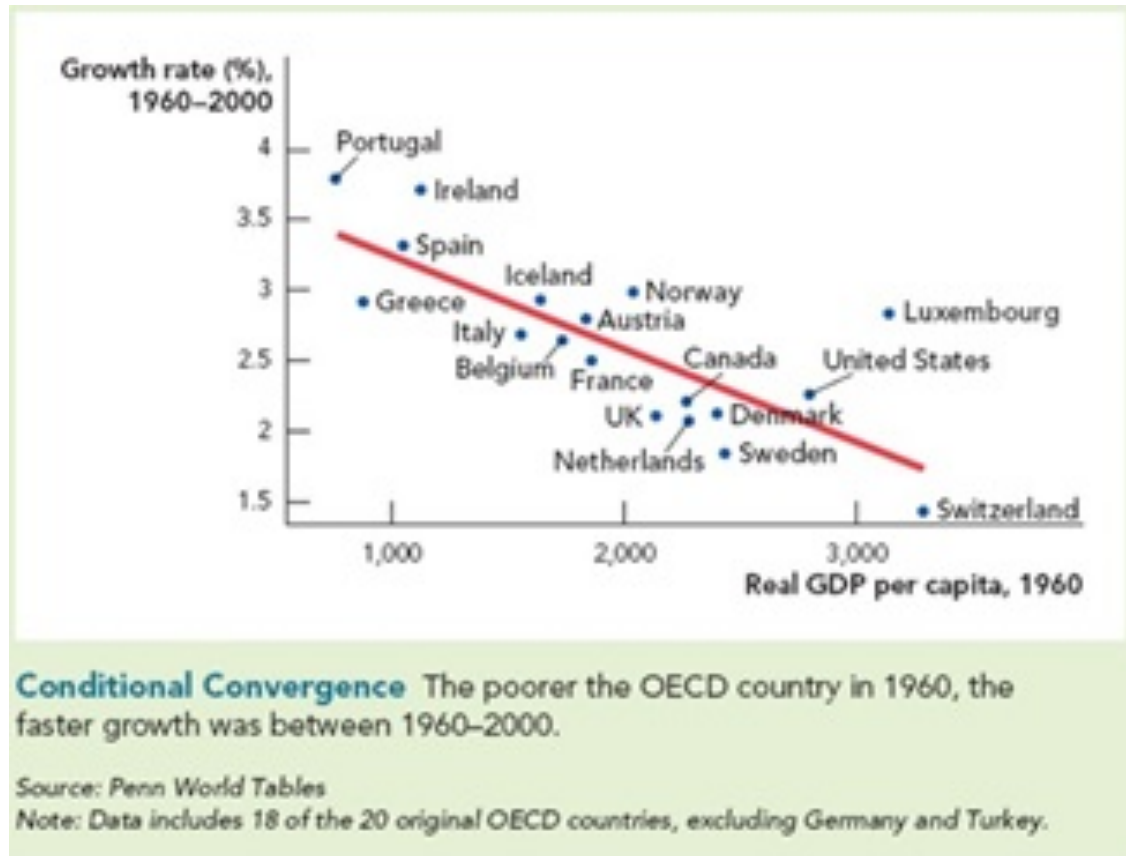# So how can poor countries build capital stock?

- Foreign Direct Investment
  - International aid in building roads, factories, etc. Basically, building capital

- Foreign Portfolio Investment
  - International agents invest in domestic firms (i.e. buy shares, make loans) that the company uses to build factories

Why would rich countries invest in others instead of themselves?

- We have **diminishing returns**.

  – Will the 1000th machine increase production by the same % as the 1st?

- Ex. Each machine produces 100 pizzas. We currently produce 1 pizza by hand.

  – 1st machine: Production = 101, growth = ((101-1)/1)*100=10,000%

  – 2nd machine: Production – 201, growth = ((201-101)/101)*100=100%

- Question: Which costs more? Boosting growth in Switzerland or in Iraq?

Do these policies work?

Growth rate (%), 1960–2000 versus Real GDP per capita, 1960.

Conditional Convergence The poorer the OECD country in 1960, the faster growth was between 1960–2000.

Source: Penn World Tables
Note: Data includes 18 of the 20 original OECD countries, excluding Germany and Turkey.

There is one important condition, however

- Look at the countries in the previous slide. They share a common factor.
  - What is it?

- Property Rights and Political Stability
  - If property can be easily appropriated (stolen) by others, you won't bother investing
  - If government is corrupt, cost of investment is high. Will invest elsewhere
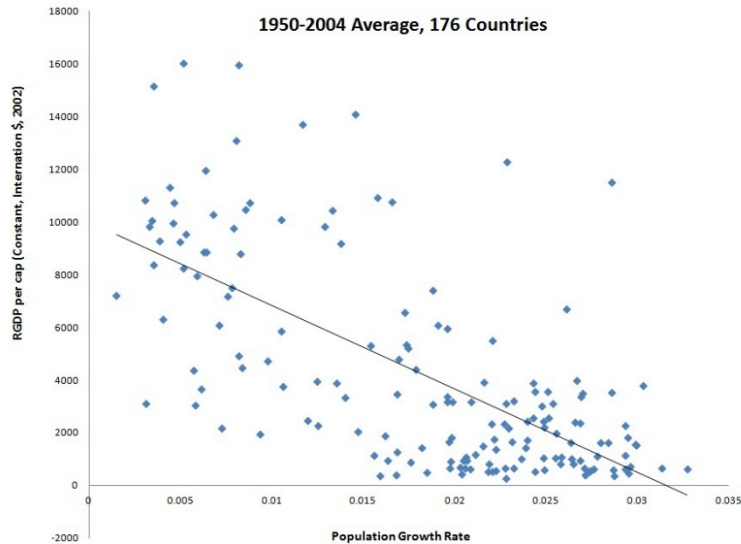
Some other policies

- Free Trade: People specialize which increases efficiency and reduces prices. May also increase investment
  - Arguments against trade: Read Chapter 9
- Patents and Copyrights:
  - Pro: Creates incentives to innovate
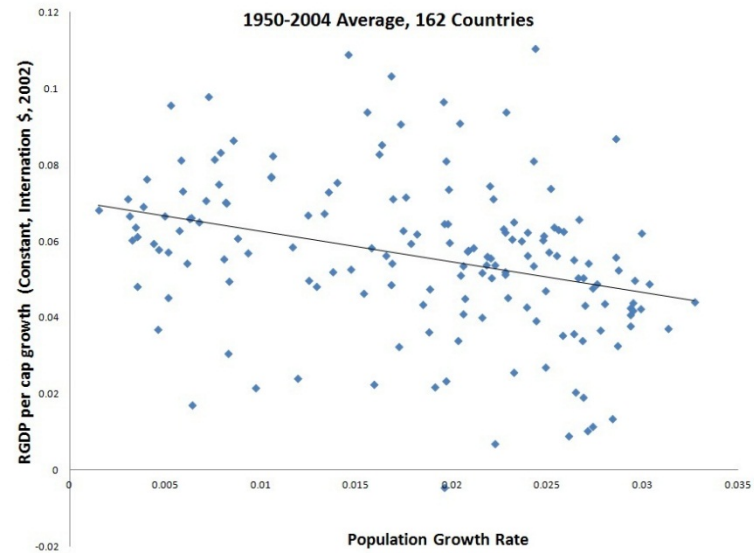 - Con: Creates monopolies (which **may** be inefficient)

Population and Growth

GDP vs Population Growth

GDP Growth vs Population Growth

High Population Growth leads to Low RGDP Growth

- RGDP: $1000, Growth: 2%
- Population: 1000, Growth: 3%
- Current RGDP p.c. = $1
- New RGDP = (1+2%)*1000=1020
- New RGDP p.c. = 1020 / (1+3%) = $0.99

High Population Growth leads to Low RGDP Growth

- RGDP: $1000, Growth: 2%
- Population: 1000, Growth: 1%
- Current RGDP p.c. = $1
- New RGDP = (1+2%)*1000=1020
- New RGDP p.c. = 1020 / (1+1%) = $1.01

High Population Growth leads to Low RGDP Growth

- Some socio-economic reasons large growth hinders development
  - Reduce ability of households to save
  - Requires larger investment to keep up with increased workforce
  - Issues with urban sprawl / environment
  - High density can lead to disease and political turmoil

What are we NOT saying?

Yes

- High Population Growth leads to Low RGDP pc growth

No

- Low Population growth leads to High RGDP pc growth
- Low RGDP pc growth leads to High Population Growth

High RGDP Growth leads to Low Population Growth

- Demographic Transition Theory: Rising incomes lead to slower population growth. Children become "more expensive" as country becomes wealthier, so people have fewer children

- Why? Longer education time (so don't start working as early), more activities (cost money), etc.

Again, what are we NOT saying?

Yes

- High RGDP pc growth leads to Low Population growth

No

- Low Population growth leads to High RGDP pc growth
- Low RGDP pc growth leads to High Population Growth

Evaluating Government Policy

And why do we need a government anyways?

A government plays two roles in a market economy

Regulator

- Provide Legal Structure
- Maintain Competition (prevent monopolies)
- Promote Stability (both social and economic)

Equalizer

- Provide public goods and services (parks, schools, police)
- Redistribution of Income (through taxation)
- Reallocation of Resources (especially if there are externalities such as pollution)

Is private industry always preferable to government?

- If the government policy interferes with market efficiency, there is a cost
  - In some sense, we are worse off
- However, markets are *not* always naturally efficient!
  - Requires **perfect competition**
  - No **externalities** (or side effects)
    - Ex. pollution

Aside: Government regulation of oil industry

- Is this a good or bad thing?
- Without regulation, what might a firm do that makes people worse off?
  - Why?
- What action can government take to limit this behavior?

Which of the following two lotteries do you prefer?

#1

- Chance of winning $100 million is 1%

- Chance of winning nothing is 99%

- Expected winnings: $1 million

#2

- Chance of winning $1,500,000 is 49%

- Chance of winning $500,000 is 51%

- Expected winnings: $990,000

Which of the following two countries do you prefer?

Country A

- Chance of earning $100 million is 1%

- Chance of earning nothing is 99%

- Expected earnings: $1 million

- Cost of regulation: $10,000

- Government regulation can help with equality (note: different than "fair")

Country B

- Chance of earning $1,500,000 is 49%

- Chance of earning $500,000 is 51%

- Expected earnings: $990,000

Role as policy advisor

- Good government and market structure (i.e. perfect competition and no instability)

- Government Goal: Increase health of population

- Method to achieve goal: Increase rice consumption

Price Ceilings
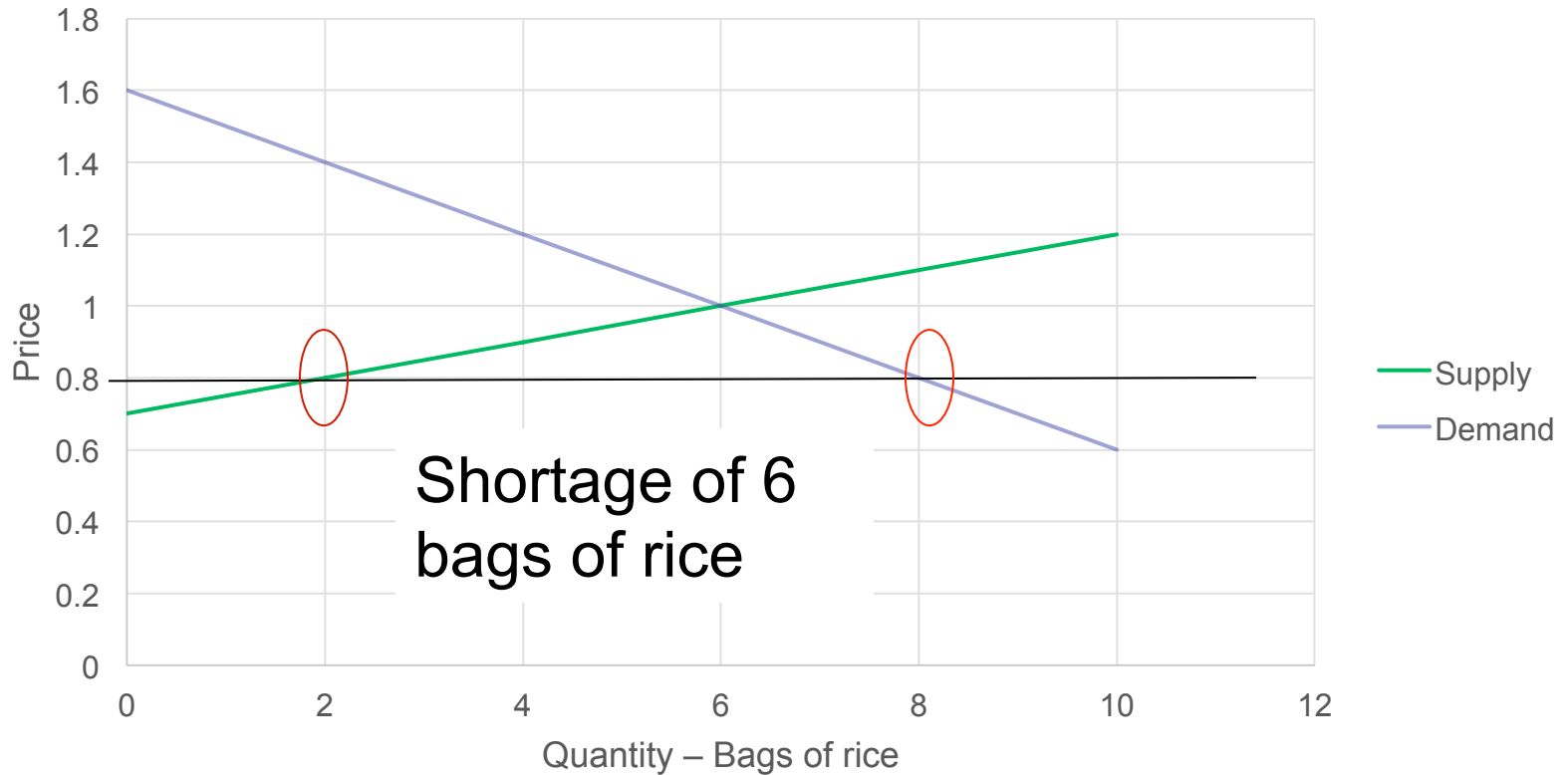

Shortage of 6 bags of rice

Instead, let's try a rebate.
What happens?
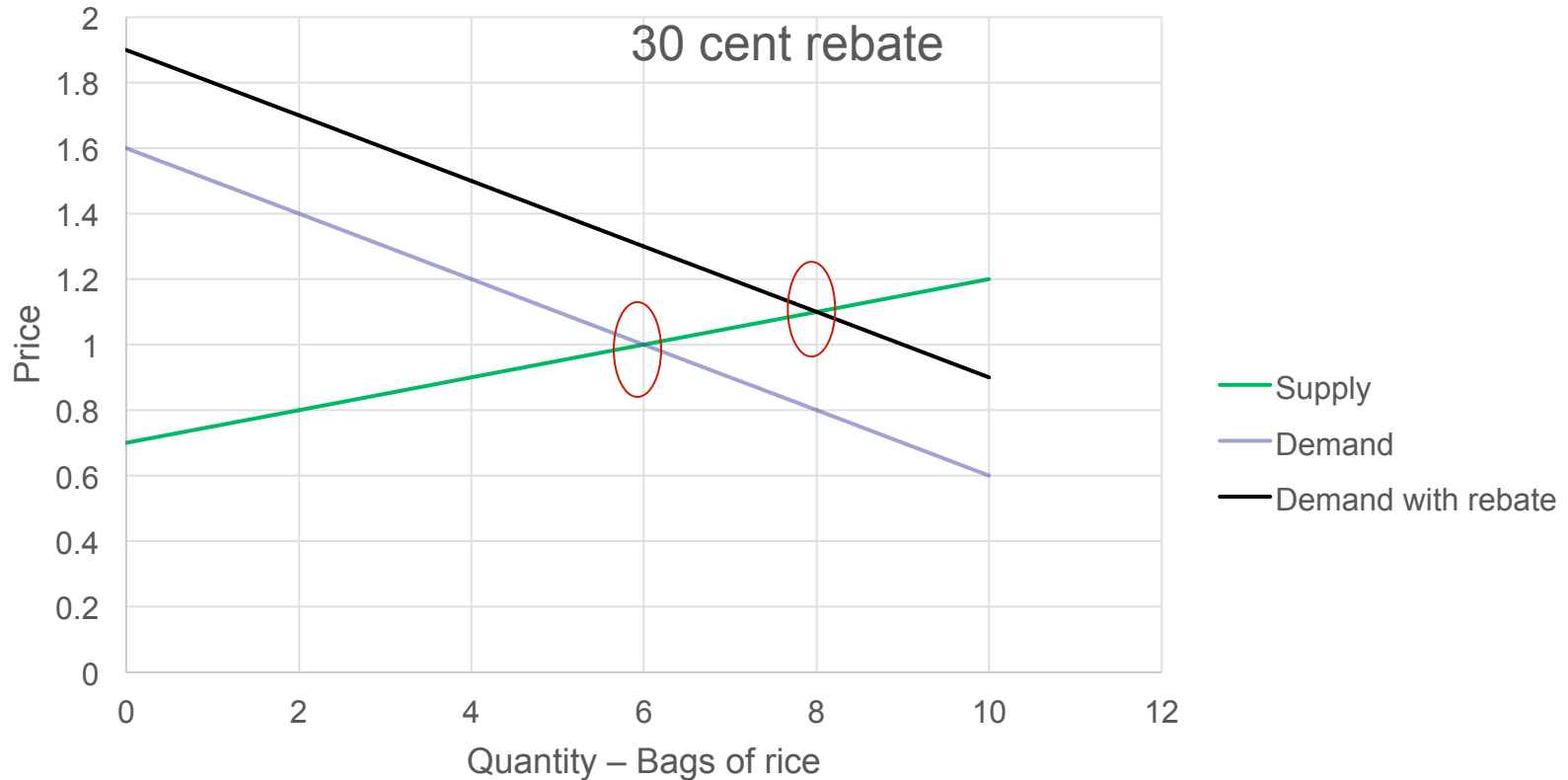
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Great! But how do we pay for this?

What about other strategies

- Lower taxes on consumers
  - this might work (why? Consider C and Y)
  - Might not (Why not? Consider G and Y)
- Tax a different good
  - Imports? Exports? Resources? All will create a distortion.

What about other strategies

- Pass laws on who can sell rice
  - Moves away from competitive markets, so **this** analysis is not valid (there are other ways to measure, but we won't cover them in this class)

- Improve infrastructure (say roads so cheaper to get rice to markets)
  - This may work. (What happens to AS?)

Are we thinking about this all wrong?

- It's only the poor who can't afford rice.
- Let's increase minimum wage!

- What happens to AS?
- Then what happens to prices?
- Can those making minimum wage now afford the rice?

What to do?

- Hard to say.
  - Increase infrastructure spending (but may hurt consumption if taxing to get money)
  - Lower taxes

- Important: Remember assumptions!

Reminder: Assumptions

- No externalities
- Perfect competition
- Economic/Social stability

- If one of these is not true, government policy **can** help

Is growth sustainable and/or desirable?

Sustainable?

Yes

- Resource prices are (generally) not rising
- Growth today is more about expansion and application of knowledge
  - Limited only by human innovation

No

- Modern growth is spurred by ideas. What if we run out of them?
  - Can they really grow forever?

Desirable?

Yes

- Growth allows us to be more sensitive to environmental concerns
  - Ex. Brazil has reduced cutting of rainforests
- Improved working conditions.
  - More leisure, happier jobs
- Improved living standard

No

- Causes more pollution
  - Global warming, oil spills
- More not always better
  - Burnout, dead-end jobs, inequality
- High growth means high stress

Key Ideas and Things To Think About

Note: This is NOT a study guide – i.e. do not limit yourself to these items when studying

Key Ideas

- Six ways to promote growth
- Role of government in market economy
- Effect of government policy
  - Assumptions for this analysis to be valid
- Is growth sustainable/desirable?

Things To Think About

- Consider this article. Would this same strategy be effective for the United States? If yes, in what way? If no, why not?

- Consider Obama's "you didn't build that" statement. What might he actually have meant? (Think about capital and how it impacts the economy)

Things To Think About

- When would government regulation be a good thing?

- Why might some countries have a negative view on modern economic growth?