The Power of Macroeconomics

Lecture Eleven:

The Economics of Developing Countries

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Introduction

- We are going to turn our attention now to the developing countries of Africa, Asia, and Latin America.
- To begin, let's explain what we mean by a "developing country"?

Aspects of a Developing Country

- Some textbooks prefer the term "less developed country" or "LDC" while others simply say "developing country" or DVC.
- Regardless, the most important characteristic of developing countries is that the people have low per capita incomes.
- In addition, people in developing countries usually have poor health and a short life expectancy, suffer from malnutrition, and have low levels of literacy.

Life In Low-Income Countries

- Imagine that you are a typical 25-year-old in a low-income country such as Mali, India, or Bangladesh.
- Your annual income barely averages $500, your life expectancy is four-fifths that of the average person in an advanced country, and already two of your brothers and sisters have died before reaching adulthood.

Living Conditions

- You can barely read, and you work very long hours in the fields without the benefit of machinery and with but one-sixtieth the horsepower of a prosperous North American worker.
- At night you sleep on a mat in a one-room house along with your parents and grandparents and five children.

Living Conditions

- Your house has no electricity, indoor toilet, or fresh water supply.
- You have little household furniture, perhaps a table and a radio.
- Your only mode of transportation is an old pair of boots while despite much sickness in your village, qualified doctors are far away tending to the needs of wealthier families.

Income

- You and your fellow citizens in the 40 poorest countries constitute 55 percent of the world population but must divide among each other only 4 percent of world income.
- You are often hungry, and the food you eat is mainly roughage or rice.

Global Income Disparity

World population	Percentage of world income
Richest 20%	82.7
Second 20%	11.7
Third 20%	2.3
Fourth 20%	1.9
Poorest 20%	1.4

Source: United Nations Development Program.

What Drives Development?

The Four Elements in Development

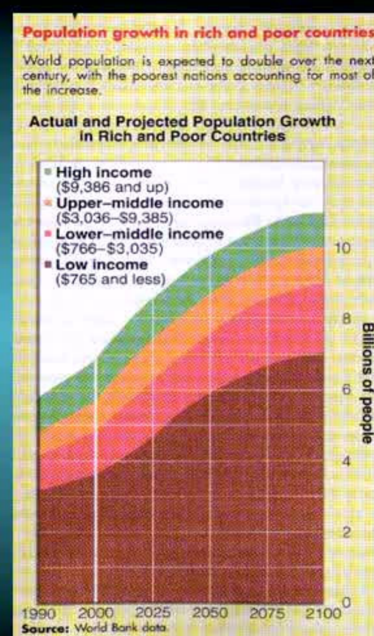
- Recall that growth in modern industrialized economies depends on four factors:
  1. Human Resources
  2. Natural Resources
  3. Capital Formation
  4. Technology

#1A: Human Resources: The Dimension of Quantity

- Because of rapid population growth, many poor countries are forever running hard just to stay in place.
- Even as a poor nation's GDP rises, so does its population.
- Many developing countries are never able to escape the Malthusian trap of high birth rates and stagnant incomes.

Country	Population per square mile	Birth Rate
United States	75	1.0%
Pakistan	430	2.9%
Bangladesh	2380	1.6%
Venezuela	65	2.3%
India	829	1.8%
China	336	1.1%
Kenya	128	2.7%
Philippines	647	2.2%
World	114	1.5%

How much is the world population expected to grow over the next century and in which category of countries will the bulk of this growth occur?



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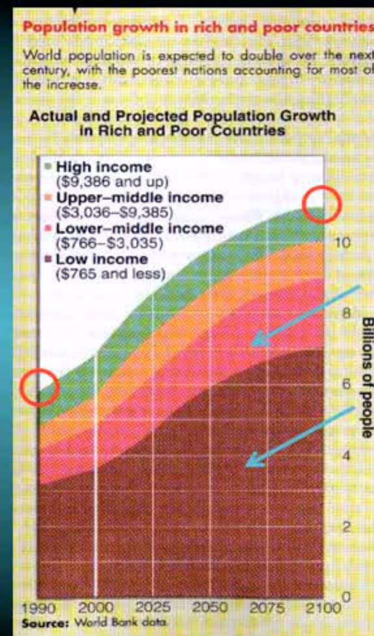
So what strategies might be adopted to address overpopulation?



Directly Control Population Growth

- Some Catholic countries in Latin America have introduced educational campaigns and subsidized birth control despite Church doctrine.
- In Asia, China's "One Child Policy" puts tight quotas on the number of births and imposes economic penalties and mandatory sterilization on those who violate their "baby quota."

Demographic Transition

- Some experts hold a view contrary to the traditional one that population growth can only be controlled directly.
- This demographic transition view holds that rising income first must be achieved before slower population growth can be achieved.

The Benefits and Costs

- There are both marginal costs and marginal benefits associated with having another child.
- In the developing countries, the marginal benefits are relatively large because the extra child becomes an extra worker to support the family and a safety net for parents in their senior years.

In The Wealthier Industrialized Nations

- The marginal cost of children is much greater than in the developing countries because of the high costs of things like healthcare, daycare, and education.
- Also, there is a government safety net for senior citizens in the form of retirement and health care programs so children as "retirement insurance" are less necessary.

Birth Rates Will Drop

- Thus, in this demographic transition view, as a country industrializes, people will choose to have fewer children.
- And indeed, in countries like Mexico, South Korea, and Taiwan we have seen birth rates drop sharply as their incomes rose and their populations received more education.

LECTURE ELEVEN - PART TWO

#1B: Human Resources: The Dimension of Quality

- The crucial role of skilled labor has been shown when sophisticated mining, defense, or manufacturing machinery has fallen into disrepair and disuse because the labor force of developing countries did not have the necessary skills for operation and maintenance.

Development Programs

- Development programs to improve education, reduce illiteracy, and train workers and improve public safety and health make a developing country's population more productive.
- Workers use capital more effectively, adopt new technologies, lose fewer days to sickness or injury, and better learn from their mistakes.

Brain Drain

- For advanced learning in science, engineering, medicine, and management, countries can benefit by sending their best minds abroad to bring back the newest advances.
- Countries must be aware of the brain drain, in which the most able people get drawn off to high-wage countries.

#2: Natural Resources

- Let's turn now to the second factor in economic growth: natural resources.
- Perhaps the most valuable natural resource of developing countries is arable land.

Farming

- Much of the labor force in developing countries is employed in farming.
- Hence, the productive use of land—with appropriate conservation, fertilizers, and tillage—will go far in increasing a poor nation's output.
- However, some poor countries of Africa and Asia have meager endowments of natural resources, and such land and minerals as they do possess must be divided among dense populations.

Natural Wealth

- Economists suspect that natural wealth from oil or minerals is not an unalloyed blessing.
- Some countries—like the United States, Canada, and Norway—have used their natural wealth to form the solid base of industrial expansion.
- In other countries, the wealth has been like "loot" subject to plunder and rent seeking by corrupt leaders and military cliques.

Unsuccessful Countries

- Countries like Nigeria and Zaire have failed to convert their natural resources into productive human or tangible capital because of venal rulers who drained that wealth into their own bank accounts and conspicuous consumption.

Land Ownership Patterns

- At the same time, land ownership patterns are a key to providing farmers with strong incentives to invest in capital and technologies that will increase their land's yield.
- When farmers own their own land, they have better incentives to make improvements, such as in irrigation systems, and undertake appropriate conservation practices.

An Unequal Distribution of Land

- A small handful of the wealthy own a large percentage of the land.
- This kind of land ownership pattern not only discourages production…
- …it has also led to violent socialist revolutions and civil strife in more than one developing country.

LECTURE ELEVEN - PART THREE

#3: Capital Formation

- A modern economy requires a vast array of capital goods.
- Countries must abstain from current consumption to rapidly accumulate capital.
- When you are poor to begin with, reducing current consumption to provide for future consumption seems impossible.

The Importance of Capital

- Growth leaders invest at least 20% of output in capital formation.
- The poorest agrarian countries often save and invest only 5 percent of their national income.
  - Much of the low level of savings goes to provide the growing population with housing and simple tools.

The Result
Too little investment in the productive capital so indispensable for rapid economic progress.

#4: Technological Change

- Developing countries have one potential advantage here:
  - They can benefit by relying on the technological progress of more advanced nations.

Technological Duplication

- Poor countries do not need to find modern Newtons to discover the law of gravity.
- Nor do they have to repeat the slow, meandering inventions of the Industrial Revolution.
- Japan and the United States clearly illustrate this pattern in their historical developments.

The Japanese Miracle

- Japan joined the industrial race late, and only at the end of the 19th century did it send students abroad to study Western technology.
- The Japanese government has taken an active role in stimulating the pace of development and in building infrastructure such as railroads and utilities.

The United States

- The case of the United States likewise provides a hopeful example to the rest of the world.
- The key inventions involved in the automobile originated almost exclusively abroad.
- Nevertheless, Ford and General Motors applied foreign inventions and rapidly became the world leaders in the automotive industry.

An Easy Recipe?

- From the histories of Japan and the United States, it might appear that adaptation of foreign technology is an easy recipe for development.
- You might say:

  - Just go abroad.
  - Copy more efficient methods.
  - Put them into effect at home.
  - Sit back and wait for the extra output to roll in!"

It's Not That Simple

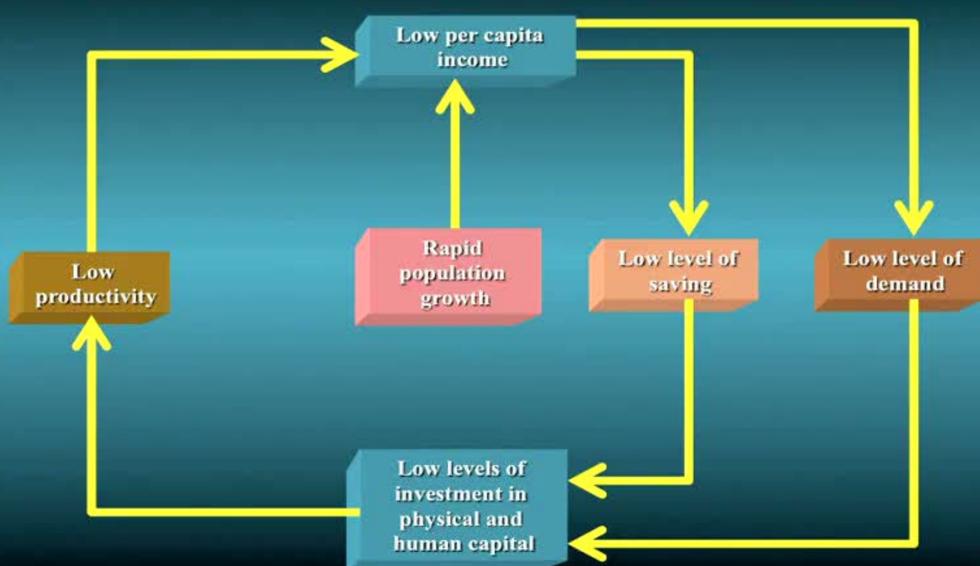
- You can send a textbook on chemical engineering to Bangladesh or Somalia.
- Without skilled scientists, engineers, entrepreneurs, and adequate capital, these countries can't even begin to think about building a working petrochemical plant!

LECTURE ELEVEN - PART FOUR

Why Do Some Countries Prosper?

- Let's better understand why some developing countries prosper while others stagnate.

The Cycle of Poverty



Education, Literacy, and Skill

- Poverty is accompanied by low levels of education, literacy, and skill.
- These elements prevent the adoption of new and improved technologies.

Overcoming Barriers of Poverty

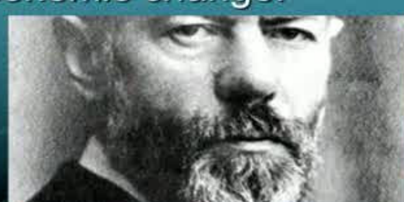
- Some development economists recommend a "big push" forward to break the vicious cycle.
- Simultaneous steps to invest more, improve health and education, develop skills, and curb population growth can break the vicious cycle of poverty and stimulate a virtuous circle of rapid economic development.

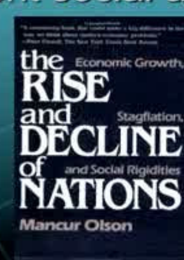
Some Answers

- Economists, historians and social scientists have long been fascinated by the differences in the pace of economic growth among nations.
- Some early theories stressed a hospitable climate, noting that all advanced countries lie in the earth's temperate zone.
- Others have pointed to custom, culture, or religion as a key factor.

Max Weber and Mancur Olson

- Max Weber, for example, emphasized the "Protestant ethic" as a driving force behind capitalism.
- Mancur Olson: Nations begin to decline when their decision structure becomes brittle and interest groups or oligarchies prevent social and economic change.





These Theories Are Not Universal

- No doubt each of these theories has some validity for a particular time and place.
- But they do not hold up as universal explanations of economic development.

What They Don't Explain

- Weber's theory leaves unexplained why the cradle of civilization appeared in the Near East and Greece while the later-dominant Europeans lived in caves, worshiped trolls, and wore bearskins.
- Where do we find the Protestant ethic in bustling Hong Kong?
- How can we explain that a country like Japan, with a rigid social structure and powerful lobbies, has become one of the world's most productive economies?

More Modern Views

- The failure of these early theories to fully explain economic development have spawned more modern views.
- Here's a sampling of the debate over how countries might break out of the vicious cycle of poverty and begin to mobilize the factors of economic development.

Industrialization vs. Agriculture

- A strategy of rapid industrialization or expanding and improving the agricultural base?
- In the past, such a choice was typically resolved in favor of industrialization.
- Today, many analysts are rethinking the role of farming.

Industrialization vs. Agriculture

- Industrialization is capital intensive, attracts workers into crowded cities, and often produces high levels of unemployment.
- Raising productivity on farms may require less capital, while providing productive employment for surplus labor.

Example
If Bangladesh could increase farming productivity by 20%, that advance would do more to release resources for the production of comforts than would trying to construct a domestic steel industry to displace imports.

A State vs. Market Economy

- The important elements of a market-oriented policy include:
  1. An outward orientation in trade policy
  2. Low tariffs and few quantitative trade restrictions
  3. The promotion of small business
  4. The fostering of competition

Key Point
Markets work best in a stable macroeconomic environment—one in which taxes are predictable and inflation is low.

Hostile Cultures

- The cultures of many developing countries are hostile to the operation of markets.
  - Often, competition among firms or profit-seeking behavior is contrary to traditional practices, religious beliefs, or vested interests.
- Decades of experience suggest that extensive reliance on markets provides the most effective way of managing an economy and promoting rapid economic growth.

Growth and Openness

- Should a developing country pursue a strategy of import substitution by replacing most imports with domestic production?
- Or should a country pursue a strategy of openness or outward orientation?
- Should it pay for its imports by improving efficiency and competitiveness, developing foreign markets, and keeping trade barriers low?

Import Substitution

- Policies of import substitution were often popular in Latin America until the 1980s.
- The policy most frequently used was to build high tariff walls around manufacturing industries so that local firms could produce and sell goods that would otherwise be imported.

A Policy of Openness

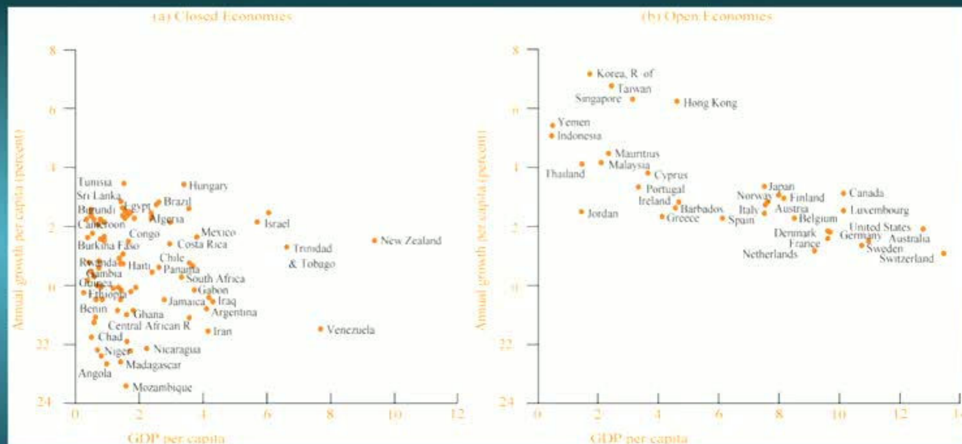
- Keeps trade barriers as low as practical, relying primarily on tariffs rather than quotas and other nontariff barriers.
  1. Minimizes interference with capital flows and allows supply and demand to operate in financial markets.
  2. Avoids a state monopoly on exports and imports.
  3. Keeps government regulation to bare necessities for an orderly market economy.
  4. Relies primarily on a private market system of profits and losses to guide production, rather than the commands of a government planning system.

The Asian Countries

- A generation ago, countries like Taiwan, South Korea, and Singapore had per capita incomes one-quarter to one-third of those in the wealthiest Latin American countries.
- Yet, by saving large fractions of their national incomes and channeling these to high-return export industries, these countries overtook every Latin American country by the late 1980s.

The Secret To Success

- The secret to success was not a doctrinaire laissez-faire policy -- the governments engaged in selective planning and intervention.
- The openness and outward orientation allowed the countries to reap economies of scale and the benefits of international specialization.
- This allowed them to increase employment, use domestic resources effectively, enjoy rapid productivity growth, and provide enormous gains in living standards.



Policies For Promoting Growth

1. Establishing the rule of law.
2. Opening economies to international trade.
3. Controlling population growth.
4. Encouraging foreign direct investment.
5. Building human capital.
6. Making peace with neighbors.
7. Establishing independent central banks.
8. Establishing realistic exchange-rate policies.
9. Privatizing state industries.

The Role of Industrialized Nations

- Industrialized nations can provide more foreign capital – both public and private – and better target such aid to the poorest developing countries.
- The United States and many other industrialized nations already assist the developing countries with substantial foreign aid in the form of both loans and grants.

Eliminate Trade Barriers

- This would allow developing countries to expand their national incomes through increased trade.
- But such a step can be politically controversial because it raises the specter of industrialized workers having to compete against people willing to work for a dollar or less a day.

Provide Debt Relief

- The problem here is that the current debt load of many developing countries is so large that monies which would otherwise go to investment in the countries has to be used for servicing these debts.

Stop The Brain Drain

- Many of the best and brightest workers in the developing countries come to the industrialized nations temporarily to get an education but wind up staying permanently to work.
- This brain drain contributes to the deterioration in the overall skill level and productivity of labor forces often least able to suffer such losses.

Discourage Arm Sales

- While arms sales create jobs and profits in the industrialized nations, they also divert precious public expenditures from infrastructure and education in the developing countries.