
LESSON TEN

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WHY ARE SOME NATIONS WEALTHY?

INTRODUCTION

Some nations have achieved great economic success yet others remain in poverty. To economists, this indicates that different nations have experienced different rates of long-term economic growth. What explains differences in economic growth? Natural resources can be important, of course, as seen in the U.S. experience. Although some nations with few natural resources have achieved high standards of living, some nations that are richly endowed with many natural resources have not. In this lesson, students see that nations that have persistently adopted the basic characteristics of a market economy – institutions that encourage savings and investment, protect private property rights, and promote decentralized decision making rather than central planning – have historically been more likely to enjoy higher growth rates and standards of living.

CONCEPTS

Economic growth
Productivity
Property rights
Saving and investment
Physical capital and human capital
Natural resources
Trade

CONTENT STANDARDS

Investment in factories, machinery, new technology, and the health, education, and training of people can raise future standards of living.

There is an economic role for government to play in a market economy whenever the benefits of a government policy outweighs its costs. Governments often provide for national defense,

address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

BENCHMARKS

Economic growth is a sustained rise in a nation's production of goods and services. It results from investments in human and physical capital, research and development, technological change, and improved institutional arrangements and incentives.

Historically, economic growth has been the primary vehicle for alleviating poverty and raising standards of living.

An important role for government in the economy is to define, establish, and enforce private property rights. A property right to a good or service includes the right to exclude others from using the good or service and the right to transfer the ownership or use of the resources to others.

OBJECTIVES

- ◆ Students predict factors associated with national long-term economic growth.
- ◆ Students explore the relationship between economic growth and the factors commonly associated with market economies, including property rights; institutions promoting saving and investment in human capital and physical capital; and free trade.

LESSON DESCRIPTION

Students work in pairs to examine data from several nations regarding size, natural resources, and population. Using these data they make predictions about which nations are likely to be below, at, or above the world average of per capita Gross Domestic Product (GDP). GDP is the basic economic measure of national income, so per capita GDP is a key measure of a nation's per person income. Students check their predictions against actual per capita GDP data.

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They then review and discuss economists' findings about the factors that contribute most to long-term economic growth.

TIME REQUIRED

One class period.

MATERIALS

- Visual 1: Rating Mystery Nations
- Visual 2: Mystery Nations Revealed
- Visual 3: Factors Contributing to Long-Term Economic Growth
- Activity 1: Mystery Nation Cards, cut apart

PROCEDURES

1. Explain to the class that in this activity they will predict which nations of the world are wealthy and which are not using data on different nations' size, population, and natural resources. Have the students work in pairs. Give each pair a Mystery Nation card cut from Activity 1. Tell the students to read the card and predict whether the nation is below, above, or at the average level of per capita income for all nations of the world. Tell the class that the U.S. Central Intelligence Agency estimated that in 1998 the average level of GDP per capita for all nations of the world was \$6,600. Tell the students to place a check mark next to the rating of their choice.

2. Display Visual 1. Record the students' ratings. Once the predictions are recorded, ask some students to explain the reasons for their choices. (*Students often guess that nations A, B, C, D, E, F, H, J, K, L are the wealthiest. Their intuition is usually that large countries with vast stores of natural resources will lead to high levels of income and material wealth. Some students favor nations such as A and K because, in addition to having a large store of natural resources, these nations have a relatively small population.*)

3. Display Visual 2. Discuss how well the students did in estimating the wealth of the Mystery Nations. Students rarely guess that

nations G, I, and M are nations with high levels of income, because of their lack of natural resources and, in the cases of nations G and M, their small size compared to their relatively large populations.

4. Have students suggest answers to the following questions:

- A. How can some nations with few natural resources – such as Japan and Singapore – be relatively wealthy?
- B. How can other nations with vast amounts of natural resources – such as Russia and Peru – be relatively poor?

5. Explain that some economists call this problem the “natural resources paradox.” Natural resources have certainly contributed to the economic success of some nations, including the United States, South Africa, and the oil-rich nations of the Middle East. But there are many examples of nations such as Japan and Hong Kong that have achieved great economic success with relatively few natural resources. And some nations with vast stocks of natural resources, such as Russia, remain relatively poor. In a class brainstorming session, have the students list other factors that might promote or discourage long-term economic growth and high standards of living.

6. Display Visual 3. Briefly review each of the factors that promote long-term economic growth. Here are some of the points that you might highlight.

- A. Investments in both **physical capital** (factories and machines) and **human capital** (the health, education, and training of workers) promote long-term economic growth. Both are also related to the widespread use of new technologies, which often require new machinery and training of workers. Over the past two centuries, technological innovations have been the

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- single most important determinant of economic growth, followed closely by investments in physical and human capital. Wealthier nations are usually in better positions to fund additional investments in physical and human capital, but less developed nations often present other kinds of opportunities for new investments. For example, lower levels of incomes mean that labor costs are lower in those nations, and it is often possible to transfer new technologies and production methods from wealthier nations to the poorer nations.
- B. Successful economies have institutions that encourage saving and investment. Saving means not spending all of the nation's income for the current consumption of goods and services. Resources that are consumed today can't be used for investment, and vice versa. But successful investments lead to higher future levels of production, income, and consumption. When a business buys new equipment or builds a new factory, it is investing. Some forms of government spending, such as building new roads and bridges, are also investments. Similarly, workers and nations invest in human capital by devoting resources to education and training of current and future workers.
- C. In market economies, high after-tax incomes (wages, rent, interest, and profits) represent the major financial incentives that motivate work, saving, and investment. Those incentives also require a strong set of property rights, so that people are able to keep and control the goods and services they purchase with their incomes. Command economies often rely on other forms of incentives, which generally prove to be less effective. However, many of those economies invest heavily in heavy industry and human capital. As a result,
- in some decades command economies have grown quite rapidly.
- D. A stable currency (low levels of inflation) enhances incentives by maintaining the value of financial assets, which encourages saving and investment. Preventing inflation also keeps people's efforts directed at work, saving, and investing, rather than searching for ways to protect their assets from the effects of inflation.
- E. Political instability in a nation makes investment there riskier and leads to lower levels of economic growth.
- F. The high income nations of the world are heavily involved in world trade – and in fact, the United States is both the wealthiest nation in the world and the world's largest trader. Canada, Germany, the United Kingdom, Japan, France, Singapore, and Hong Kong are also heavily engaged in international trade. Trading leads nations to specialize in the production and export of the goods and services they can produce at the lowest opportunity cost. Trading those exports for other products that can be produced at a lower cost in other nations reduces the total cost of production and allows higher levels of consumption worldwide. Free trade also results in increased competition, which keeps prices lower for consumers and helps insure that businesses are responsive to consumer demand. Levels of trade have increased dramatically over the past 25 years. As much as one-third of U.S. economic growth during the 1990s has been attributed to the international trade sector of the economy. Nevertheless, international trade is controversial because it adversely affects businesses that must compete with foreign producers.

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G. Although moderate population growth and increases in a nation's labor supply promote economic growth, very rapid rates of population growth, such as those observed in many Third World nations over the past 50-75 years, clearly contribute to a vicious cycle of poverty. Such rapid increases in population (when the population doubles in 20 years or less) require higher levels of current consumption for basic food, clothing, and shelter, which lead to lower levels of saving and investment.

H. Point out that, taking all of the earlier factors listed on Visual 3 into account, it is not surprising that market economies have, historically, experienced higher levels of economic growth than command economies (such as Cuba and the former Soviet Union). In market economies, financial incentives to promote work, saving, and investment appear to be more effective than the incentives or punitive disincentives provided under the command economies. That advantage was strengthened even more by greater freedom of choice in consumption and career matters, and by the greater variety of products made available by privately owned, profit-seeking firms. Competition among firms producing similar products also encourages greater efficiency than is achieved in the command economies.

2. What are the major factors that encourage long-term economic growth? (*Successful economies encourage greater productivity through investments in physical capital, human capital, and technology; control inflation and maintain political stability; experience moderate but not rapid population growth; encourage international trade; and provide strong financial incentives and protect property rights, which encourage people to work, save, and invest in themselves and in business opportunities. Over the past century, the nations with the greatest economic growth were those that adopted the key characteristics of a market economy.*)

ASSESSMENT

Answer either number 1 or 2.

1. Explain why Japan, with its history of trade barriers and few natural resources, has experienced economic growth.

2. What information do you need to predict the per capita income of a nation?

CLOSURE

To review the basic points of the lesson, ask:

1. How important are natural resources to a nation's wealth? (*Natural resources have certainly contributed to the economic success of some nations. But there are many examples of nations and regions such as Japan and Hong Kong, that have achieved great economic success with very few natural resources.*)

Visual 1

Rating Mystery Nations

World: GDP per capita: \$6,600 (1998 est.)

Mystery Nation A

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation B

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation C

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation D

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation E

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation F

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation G

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Mystery Nation H

- Below average: per capita income below \$6,000
- About average: per capita income from \$6,000 to \$7,000
- Above average: per capita income above \$7,000

Visual 1 (continued)

Mystery Nation I

- _____ Below average: per capita income below \$6,000
- _____ About average: per capita income from \$6,000 to \$7,000
- _____ Above average: per capita income above \$7,000

Mystery Nation J

- _____ Below average: per capita income below \$6,000
- _____ About average: per capita income from \$6,000 to \$7,000
- _____ Above average: per capita income above \$7,000

Mystery Nation K

- _____ Below average: per capita income below \$6,000
- _____ About average: per capita income from \$6,000 to \$7,000
- _____ Above average: per capita income above \$7,000

Mystery Nation L

- _____ Below average: per capita income below \$6,000
- _____ About average: per capita income from \$6,000 to \$7,000
- _____ Above average: per capita income above \$7,000

Mystery Nation M

- _____ Below average: per capita income below \$6,000
- _____ About average: per capita income from \$6,000 to \$7,000
- _____ Above average: per capita income above \$7,000

Visual 2

Mystery Nations Revealed

World: GDP per capita: \$6,600 (1998 est.)

Mystery Nation A: Argentina

GDP per capita: \$10,300 (1998 est.)

Rating: Above average

Mystery Nation B: Afghanistan

GDP—per capita: \$800 (1998 est.)

Rating: Below average

Mystery Nation C: China

GDP per capita: \$3,600 (1998 est.)

Rating: Below average

Mystery Nation D: Cuba

GDP per capita: \$1,560 (1998 est.)

Rating: Below average

Mystery Nation E: Egypt

GDP per capita: \$2,850 (1998 est.)

Rating: Below average

Mystery Nation F: Ghana

GDP per capita: \$1,800 (1998 est.)

Rating: Below average

Mystery Nation G: Hong Kong (Special Administrative Region [SAR] of China)

GDP per capita: \$25,100 (1998 est.)

Rating: Above average

Mystery Nation H: India

GDP per capita: \$1,720 (1998 est.)

Rating: Below average

Mystery Nation I: Japan

GDP per capita: \$23,100 (1998 est.)

Rating: Above average

Mystery Nation J: Nigeria

GDP per capita: \$960 (1998 est.)

Rating: Below average

Visual 2 (continued)

Mystery Nation K: Peru

GDP per capita: \$4,300 (1998 est.)

Rating: Below average

Mystery Nation L: Russia

GDP per capita: \$4,000 (1998 est.)

Rating: Below average

Mystery Nation M: Singapore

GDP per capita: \$26,300 (1998 est.)

Rating: Above average

Source: The World Factbook 1999, Central Intelligence Agency website:
www.odci.gov/cia/publications/pubs/html.

Visual 3

Factors Contributing to Long-Term Economic Growth

- Technological innovation (including technology transfers from more developed nations)
- High investment levels in physical and human capital
- Strong incentives to save, invest, and increase productivity (including property rights)
- High rates of savings (to permit high levels of investment)
- Low inflation
- Political stability
- Free trade
- Slower rates of population growth
- Decentralized decision making in most sectors of the economy

Activity 1

Mystery Nation Cards

Mystery Nation A

Area: slightly less than three-tenths the size of the U.S.

Natural resources: fertile plains, lead, zinc, tin, copper, iron ore, manganese, petroleum, uranium

Population: 36,737,664 (July 1999 est.)

Mystery Nation B

Area: slightly smaller than Texas

Natural resources: natural gas, petroleum, coal, copper, talc, barite, sulfur, lead, zinc, iron ore, salt, precious and semiprecious stones

Population: 25,824,882 (July 1999 est.)

Mystery Nation C

Area: slightly smaller than the U.S.

Natural resources: coal, iron ore, petroleum, natural gas, mercury, tin, tungsten, antimony, manganese, molybdenum, vanadium, aluminum, lead, zinc, uranium, hydropower potential (world's largest)

Population: 1,246,871,951 (July 1999 est.)

Mystery Nation D

Area: slightly smaller than Pennsylvania

Natural resources: cobalt, nickel, iron ore, copper, manganese, salt, timber, silica, petroleum

Population: 11,096,395 (July 1999 est.)

Mystery Nation E

Area: slightly more than three times the size of New Mexico

Natural resources: petroleum, natural gas, iron ore, phosphates, manganese, limestone, gypsum, talc, asbestos, lead, zinc

Population: 67,273,906 (July 1999 est.)

Mystery Nation F

Area: slightly smaller than Oregon

Natural resources: gold, timber, industrial diamonds, bauxite, manganese, fish, rubber

Population: 18,887,626 (July 1999 est.)

Mystery Nation G

Area: six times the size of Washington, DC

Natural resources: outstanding deepwater harbor, feldspar

Population: 6,847,125 (July 1999 est.)

Activity 1 (continued)

Mystery Nation H

Area: slightly more than one-third the size of the U.S.

Natural resources: coal (fourth-largest reserves in the world), iron ore, manganese, mica, bauxite, titanium ore, chromite, natural gas, diamonds, petroleum, limestone

Population: 1,000,848,550 (July 1999 est.)

Mystery Nation I

Area: slightly smaller than California

Natural resources: negligible mineral resources, fish

Population: 126,182,077 (July 1999 est.)

Mystery Nation J

Area: slightly more than twice the size of California

Natural resources: petroleum, tin, columbite, iron ore, coal, limestone, lead, zinc, natural gas

Population: 113,828,587 (July 1999 est.)

Mystery Nation K

Area: slightly smaller than Alaska

Natural resources: copper, silver, gold, petroleum, timber, fish, iron ore, coal, phosphate, potash

Population: 26,624,582 (July 1999 est.)

Mystery Nation L

Area: almost twice the size of the U.S.

Natural resources: wide natural resource base including major deposits of oil, natural gas, coal, and many strategic minerals, timber

Population: 146,393,569 (July 1999 est.)

Mystery Nation M

Area: slightly more than 3.5 times the size of Washington, DC

Natural resources: fish, deepwater ports

Population: 3,531,600 (July 1999 est.)