

UNIT TWO: COLONIZATION AND SETTLEMENT

LESSON 3

WHY DO ECONOMIES GROW?

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LESSON DESCRIPTION

The students examine information about former colonies and discuss factors associated with economic growth. They participate in a simulation activity, working in groups to recommend economic development policies for a newly discovered planet.

Throughout history, some nations have grown economically while others have not. Historians point to many possible explanations including the influence of colonialism, the presence of natural resources, population, and economic systems and institutions including trade and private property ownership.

MYSTERY

It would be easy to suppose that rich nations are rich because they possess natural resources, and that poor nations are poor because they lack natural resources. Oil is valuable, after all, and revenue does flow to countries that produce it. But many nations holding vast stores of natural resources are very poor, and other nations lacking in natural resources are very wealthy. This means that holding natural resources is neither a necessary nor a sufficient condition for wealth. What might explain this somewhat surprising fact?

ECONOMIC HISTORY

Economists place little emphasis on natural resources in explaining economic growth. Instead, they stress the role of economic systems and institutions. One such institution is strong legal protection for private ownership of property; another is freedom to invest and trade. These institutions (others are also important) provide tangible rewards for productive behavior, thus fostering economic growth. Nations without such institutions have no good way to reward productive behavior on the part of their citizens, and they often struggle with economic stagnation.

Spanish and English colonial history provides a lesson on the importance of economic systems and institutions. Spain and England launched ambitious colonial ventures in the Americas and

elsewhere, but the paths of economic development their respective colonies took led to very different outcomes.

By the time the first English colonists founded Jamestown, England had taken important steps toward establishing parliamentary government and, with it, a legal system that provided protection for private property ownership. Institutions favoring private property rights soon developed in England's American colonies as well. By contrast, Spanish policy favored a large role for government in economic decisions, at home and in the colonies. While other factors have some bearing on the disparate results of Spanish and English ventures in South and North America, contrasting economic systems and institutions played a key role.

CONCEPTS

- Economic freedom
- Gross domestic product
- Growth
- Human capital
- Incentives
- Infrastructure
- Investment
- Physical capital
- Private property rights

OBJECTIVES

Students will:

1. Discuss the relationship between economic growth and natural resources.
2. Analyze economic growth by reference to private property rights, capital and investment.
3. Explain how economic rules established by the Spanish and English in the Americas encouraged different approaches to economic development.

4. Analyze past, present and future instances of economic development in the light of economic reasoning.

CONTENT STANDARDS

Economics

- People respond predictably to positive and negative incentives. (NCEE Content Standard 4)
- Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and well-enforced property rights, is essential to a market economy. (NCEE Content Standard 10)
- A nation's overall levels of income, employment and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies and others in the economy. (NCEE Content Standard 18)

History

- Why the Americas attracted Europeans, why they brought enslaved African Americans to their colonies, and how Europeans struggled for control of North America and the Caribbean. (Era 2, Standard 1, National Standards for History)
- How political, religious, and social institutions emerged in the English colonies. (Era 2, Standard 2, National Standards for History)
- How the values and institutions of European economic life took root in the colonies, and how slavery reshaped European and African life in the Americas. (Era 2, Standard 3, National Standards for History)

TIME REQUIRED

75 minutes

MATERIALS

- A transparency of Visuals 3.1 and 3.2.
- A copy for each student of Activity 3.1 and 3.2.

PROCEDURE

1. Tell the students that the purpose of this lesson is to examine economic growth, using economic reasoning to determine why some economies in the past have grown while others have not.
2. Remind the class that we all know the United States eventually developed a strong, dynamic economy. But it did not necessarily have to turn out that way. Other nations have had many of the advantages the United States had but still have failed to grow and prosper economically. (*Growth* here refers to increasing production per person.) What is it about the American past that enabled it to grow economically?
3. Introduce one common explanation of the economic growth of the United States: its rich endowment of natural resources, including abundant land, valuable minerals and a climate conducive to production in agriculture. Briefly discuss ways in which natural resources might foster economic growth.
4. Ask: Do you think that, in order to grow and prosper, a nation must have abundant natural resources? (*Accept a variety of responses.*)
5. Display Visual 3.1. Ask the students to infer from the information provided which of these countries will have the highest income. Also, ask the students to speculate about the identities of countries A, B, C and D, and ask them to explain their hunches.
6. Display Visual 3.2. Take note of the countries identified. Use a world map as necessary to orient the students to each country. Explain that Per Capita Gross Domestic Product (GDP) refers to the total value of the final goods and services produced per person within a nation's borders.

7. The students may be somewhat surprised to learn that nations such as Argentina, Brazil and India — which have rich endowments of natural resources — are not notably wealthy nations as measured by GDP. In contrast, Hong Kong, a region nearly without natural resources, has a very wealthy economy. Make this point explicit: Natural resources can help an economy to prosper, but they do not provide a necessary or a sufficient condition for growth and wealth. Some countries well endowed with natural resources are not wealthy, and some wealthy countries are not well endowed with natural resources. Other factors are often more important than natural resources.
8. Distribute Activity 3.1. Review the definition and explanation of *economic growth*. Discuss the information about private property rights, physical capital, human capital, investment and infrastructure. Ask:
 - A. Would you keep a savings account or wish to own a farm in a nation that expropriated savings and farmland every few years? *(Probably not. You would be encouraged to spend income immediately or to move it out of the country. Knowing that your farmland could be taken away from you at any time would reduce your incentive to care for the land and make it productive over time.)*
 - B. What incentives might encourage the development of physical capital? *(Allowing individuals to keep any earnings from investing in physical capital is a strong inducement. National and state governments often provide tax incentives to encourage investment in physical capital.)*
 - C. What incentives could a nation provide to encourage the development of human capital? *(Offering inexpensive education and job training is an inducement for people to invest in human capital. Tax advantages such as tax deductions of tuition payments can also be an incentive.)*
 - D. What incentives might encourage people to save and invest? *(National and state governments often provide tax incentives to encourage saving and investment.)*
 - E. How is infrastructure similar to investment? *(With infrastructure, people use resources today as means of improving production in the future.)*
9. Tell the students that they will participate in a “back to the future” activity, examining the development of economies in North and South America in the 1500s and 1600s; they will apply what they learn in making decisions about what to do in the year 2033.
10. Distribute Activity 3.2. Allow the students to read and discuss the fictional newspaper article in Part I. Then ask them to read Part II. Review the two rules the Task Force will use to make recommendations and the jobs the groups are to perform. Ask:
 - A. What is an example of an incentive? *(While incentives may be non-monetary, many incentives involve monetary rewards — payment for work, for example.)*
 - B. What is an example of a rule in our economic system? *(In our economy, people are allowed to own and run their own businesses; the government may not arbitrarily take away property owned by individuals; people make their own decisions about careers they want to pursue and where to live.)*
11. Divide the class into small groups. Each group is to take the role of a Task Force. Each group should appoint a reporter who will report later.
12. Ask the students to read Part III of Activity 3.2. Explain that the research report will help them understand what some prominent economic historians believe to be important differences between English and Spanish settlement in North and South America. Ask the groups to respond to the discussion ques-

tions in Activity 3.2 and to develop their policy recommendations.

13. Lead a discussion of Spanish and English economic development in American colonies. Ask:

- A. How did political institutions differ between Spain and England? (*Spain had an absolute monarchy. Individual economic rights were not as well developed or protected. England had moved toward a parliamentary form of government with some protection for individual economic freedom.*)
- B. Describe ways in which Spain influenced the economic development of South and Central America. (*Spain took gold from the land and from the people. The local economy was controlled by Spaniards, who replaced the local leadership.*)
- C. Describe ways in which England developed the eastern coast of North America. (*The English had a stronger tradition of private property rights. Agriculture became an important feature of English settlement.*)

14. Ask the reporters from each Task Force to present the policies they recommend for the economic development of Z93. Encourage the students, in their explanations, to apply the rules: (1) people respond to incentives in predictable ways; (2) people create economic systems that influence incentives and choices.

CLOSURE

Review the idea that people often exaggerate the importance of natural resources in relation to economic growth. This lesson stresses the importance of other factors. Ask the students to summarize economic systems and institutions that foster economic growth, including those related to property rights, capital and investment.

Tell the class that many countries in Asia, Eastern Europe, South America and Africa have not to date developed strong economies. Point out that while many obstacles exist, this lesson has stressed economic systems and institutions

that encourage economic development. Ask:

- A. How might private land ownership in Cuba or North Korea encourage economic development today? (*Individuals who own land will find ways to make it productive if they can benefit from any profits they make in using it. But individuals need to be secure in the knowledge that the government will protect their property.*)
- B. Suppose the U.S. Congress decided to reduce the federal deficit by randomly selecting people whose savings would be confiscated and put into the U.S. Treasury. How might this policy affect economic development? (*It would discourage saving, as some people would choose to spend their money rather than risk losing it. Decreased saving would mean that less money would be available for investment. If investment decreased, growth would decrease as well.*)

ASSESSMENT

Multiple-Choice Questions

1. Economic reasoning suggests that the chances for a nation to grow economically are substantially improved when the
 - A. nation has vast natural resources.
 - B. rules of the economic system reward productive behavior.**
 - C. nation is located north of the equator.
 - D. rules of the economic system reward consumption.
2. Spanish development of Central and South America can be characterized as
 - A. using political power to seize wealth from others.**
 - B. gaining voluntary cooperation of native groups.
 - C. establishing rules that expand production of additional goods and services.
 - D. allowing free trade to operate.

3. English settlements on the eastern coast of North America became relatively prosperous, in part because of
- A. careful planning by government officials.
 - B. unexpected discoveries of gold and silver.
 - C. establishment of private property rights.**
 - D. Good farm and timber land.

ESSAY QUESTIONS

1. You are serving on a special panel to give advice to a newly independent nation on how to achieve economic growth. Using economic reasoning, what ideas would you stress?

(Possible answer: People respond to incentives in predictable ways, and economic systems influence individuals' choices and incentives. The rules of the economic system should be designed to reward productive behavior. Economic development is encouraged when a large share of the economy is given to individuals in the form of private, well-protected property rights.)

2. Spain and England have much in common. Both were major colonial powers in the Americas. But they followed different policies for colonial economic development. Compare the different policies followed by Spain and England.

(Possible answer: Spain took gold from the land and from the people. The local economy was controlled by Spaniards, who replaced the local leadership. The Spanish policy was to maintain close control of land use and trade. The English had a stronger tradition of private property rights. The hallmark of the English system became individual land ownership. This was especially important in the development of agriculture — an important feature of English settlement.)

VISUAL 3.1

WHICH NATION WILL BECOME WEALTHY?

The following nations are former European colonies. How wealthy do you think each nation has become today? Give the wealthiest nation a 4, the next wealthiest a 3, the next wealthiest a 2, and the poorest a 1.

COUNTRY A WEALTH SCORE = _____

- Under European colonial rule from early 1500s until 1816
- Benefits from rich natural resources including fertile plains, lead, zinc, iron ore, petroleum and uranium
- Population of nearly 40 million in 2004 (small for a nation of this size)
- Land area about three-tenths the size of the United States

COUNTRY B WEALTH SCORE = _____

- Under European colonial rule from early 1500s until 1822
- Benefits from rich natural resources including bauxite, gold, iron ore, nickel, phosphates, tin, uranium, petroleum, hydropower and timber
- Population of 184 million
- Land area slightly smaller than the United States

COUNTRY C WEALTH SCORE = _____

- Under European colonial rule from the nineteenth century until 1947
- Benefits from rich natural resources including large coal reserves as well as iron ore, manganese, mica, titanium ore, chromite, natural gas, petroleum, limestone and agricultural land
- Population of more than 1 billion
- Land area slightly more than one-third the size of the United States

COUNTRY D WEALTH SCORE = _____

- Under European colonial rule from 1841 to 1997
- Has a good harbor but no natural resources
- Population of nearly 7 million people
- Land area six times larger than Washington D.C.

VISUAL 3.2

THE MYSTERY NATIONS UNMASKED

COUNTRY A

- Argentina
- Per capita Gross Domestic Product: \$11,200 (2003 estimate)

COUNTRY B

- Brazil
- Per capita Gross Domestic Product: \$7,600 (2003 estimate)

COUNTRY C

- India
- Per capita Gross Domestic Product: \$2,900 (2003 estimate)

COUNTRY D

- Hong Kong
- Per capita Gross Domestic Product: \$28,800 (2003 estimate)

ACTIVITY 3.1

FACTORS ASSOCIATED WITH ECONOMIC GROWTH

Directions: Read the information in each section and discuss the questions.

ECONOMIC GROWTH

Definition Economic growth is an increase in an economy's output per person.

Explanation Encouraging economic growth is a way of increasing prosperity. Economic growth provides the means to reduce many problems including poverty and damage to the environment.

PRIVATE PROPERTY RIGHTS

Definition Individuals are allowed to own property and retain the benefits of their property for personal use.

Explanation Well-defined property rights, protected by governments through legal systems, create powerful incentives that encourage people to be productive. Some economic historians claim that the development of private property rights in Western Europe is what allowed Western Europe to grow economically during the Renaissance after centuries of stagnation.

Question A

Would you keep a savings account or wish to own a farm in a nation that expropriated savings and farmland every few years? Why or why not?

PHYSICAL CAPITAL

Definition Physical capital refers to human-made items used to produce and distribute goods and services. Some examples are machines and transportation equipment.

Explanation Incentives that encourage the investment in facilities to increase for production are vital to help an economy grow.

Question B

What incentives might encourage the development of physical capital?

HUMAN CAPITAL

Definition Human capital consists of the skills, knowledge, and experience that enable people to be productive and earn income.

Explanation Encouraging people to acquire knowledge and skills through education and job training will lead to a more productive economy.

Question C

What incentives could a nation provide to encourage the development of human capital?

INVESTMENT

Definition Investment is using resources today in a way that will lead to greater production in the future. When a business buys new equipment or builds a new factory, it is investing.

Explanation Saving and investment are connected. When people choose to save, they delay consumption. What they save can be invested by themselves or others. If people have an incentive to invest, this increases a nation's future ability to produce and consume.

Question D

What incentives might encourage people to save and invest?

INFRASTRUCTURE

Definition Infrastructure is an economy's transportation system, communication system, financial system and educational system.

Explanation Infrastructure reduces the costs of commerce and thus encourages voluntary trade.

Question E

How is infrastructure similar to investment?

ACTIVITY 3.2

BE A PLANET PLANNER

PART I: IN THE NEWS

The following is a news item from *USA Today*, October 17, 2040, Brussels, Belgium.

UNIDA TO DEVELOP NEW PLANET Z93

Dr. Julie Verne, head of the United Nations Intergalactic Development Administration (UNIDA), is near reaching a final decision on how to develop the newly discovered planet called Z93. Preliminary UNIDA studies show that the planet has an atmosphere much like Earth's. However, its vast potential for economic development is unknown. Dr. Julie Verne has commissioned a Task Force to write a recommendation to guide her decision. She has advised the group to use studies from history and economics for help.

PART II: WELCOME TO THE UNIDA TASK FORCE

You have just been appointed by Dr. Julie Verne to the UNIDA Task Force to plan for the development of Z93. The purpose of the Task Force is to give advice to Dr. Verne and the United Nations on how best to develop planet Z93.

Past Task Forces have been guided by two rules:

1. People respond to incentives in predictable ways. Rewarding people for their work, for example, encourages them to be productive.
2. People create economic systems that influence individual choices and incentives. In order for an economy to grow, its rules must include a system of incentives that encourages people to produce.

PART III: YOUR JOB

Read the following staff report about how economies have developed historically. Discuss the questions that follow the report. Finally, write your recommendations for the development of Z93 and share them with your class. Good Luck! The future is in your hands.

Staff Report

To: Members of the UNIDA Task Force

From: Research Staff, UNIDA Economic History Division

Date: October 17, 2040

We have investigated how North and South America were developed by the Europeans in the 1500s and 1600s. While these actions took place many years before Europe became united and long before the technological advances of the twentieth and twenty-first centuries, we think that we can learn from the different approaches followed by Spain and England.

Spanish Development

We have reviewed studies done by prominent economic historians of the past, such as Douglass North of Washington University. This research suggests that the economic rules of Spain were different from those of England. These differences influenced the economic policies each colonial power followed, producing different economic results.

In the sixteenth century Spain was an absolute monarchy. Royal power was not shared with a parliament. Private property rights were not as well developed or as secure in Spain as they were in England.

ACTIVITY 3.2, CONTINUED

BE A PLANET PLANNER

For example, private land ownership was just becoming established. Moreover, many economic decisions were not made by individuals. Many goods and services were produced by guilds (organizations of merchants or craftsmen) that operated as monopolies.

The Spanish plan for development might best be described as the use of power to gain sudden wealth. Gold was the treasure Spaniards sought. The experience of Columbus illustrates some of the notions held by the Spanish. Beginning with his second voyage, Columbus tried to establish a central outpost at the island of Hispaniola (later, Haiti and the Dominican Republic). He failed because the Spanish settlers spent their time searching for gold or plundering the nearby Indians.

The first Spanish arrivals were the Conquistadores — literally, conquerors. While some Spanish craftsmen and farmers also came to live and work in the new world, many Spanish in the Americas were interested solely in gaining quick wealth and returning to Spain.

The conquest of South and Central America was similar to the conquest of the islands in the Caribbean. The Spanish conquered the sophisticated civilizations of the Aztecs, Incas and the Chibchas. These South and Central American societies had much more gold than did the societies of the Caribbean. The Spanish quickly seized it, and almost overnight they started mining to find still more. The Spanish also sought to control the economy, first by destroying the top leadership of the Aztecs, Incas and the Chibchas, and then by gaining control over the production of cattle, tobacco and cotton.

Spain's decision to seek gold and other riches resulted in little expansion of goods and services produced in the Americas. Instead of producing new wealth, Spanish policy encouraged a transfer of existing wealth from one place (the Americas) to another (Spain).

English Development

The coastal strip of North America colonized by the English presented a set of problems different from those encountered by the Spanish. Vast civilizations like the Aztecs and Incas were not present. Nor did the English find gold or other obvious, recognized sources of wealth. The timber, furs and fish of the North American coast appeared at first as pale imitations of the riches garnered by the Spanish. Moreover, systems for transporting goods were still very inefficient and expensive.

Like the Spanish, the English arrived in the new world with their own set of economic rules. By the seventeenth century, English kings had been forced to give up some of their power to Parliament. In so doing, they turned a larger share of the economy over to individuals as private property. Also, English law continued to develop well-defined and protected rights for owners of private property. This evolving system of property rights encouraged people to be productive, to specialize and to trade.

The settlers attracted to the English colonies were different from the Spanish Conquistadores. While many came to New England to escape religious and political persecution, many more came because of economic opportunities. They responded to economic incentives such as the prospect of a higher income to be earned by work and production.

Ownership of private property, especially of land, developed quickly in the early English settlements. The Pilgrims, for example, experimented at first with common ownership of land, but they soon learned that common ownership was a poor system. In 1623, they replaced common ownership of land, in part, with individual ownership. "This had very good success," William Bradford reported, "for it made all hands very industrious, so as much more corn was planted than otherwise would have been by any means the Governor or any other could use" (*Of Plymouth Plantation, 1620–1647* [New York: Random House, 1981], pp. 132–133).

ACTIVITY 3.2, CONTINUED

BE A PLANET PLANNER

Individual ownership of land was an important condition for economic growth. The Pilgrims had expected to profit from fishing. But after some experimentation, they found that they could be more successful by pursuing agriculture and trade. This conclusion was not reached by following a preconceived plan. Rather, it emerged as individuals used property according to their own experience as to what would bring them the most profitable outcomes.

QUESTIONS FOR DISCUSSION

- A. How did the political institutions differ between Spain and England?

- B. Describe ways in which Spain influenced the economic development of South and Central America.

- C. Describe ways in which the English developed the eastern coast of North America.

POLICY RECOMMENDATIONS

Remember the two rules to assist you in making your recommendations: (1) people respond to incentives in predictable ways, and (2) people create economic systems that influence choices and incentives. Describe the policies you think should be followed to develop the resources of planet Z93. What economic rules should be established? You may wish to use the questions that follow as a guide to develop your policies.

Who should be allowed to own property on Z93? Individuals? Government? Why?