

SESSION 9: Economic Growth

Session Description

Students will explore how advances in technology and investment in human capital and in capital goods impact economic growth and standards of living.

Talking Points

1. Economic growth is defined as a sustained rise over time in a nation's production of goods and services. This is measured as a percentage change in real GDP (real GDP was discussed in Session 8).
2. Economic growth is largely dependent on the following:
 - a. The quantity of resources available: An economy can produce more if it has a larger labor force, a larger stock of capital, and/or more natural resources.
 - b. The quality (productivity) of its resources: An economy can produce more if its resources become more productive—for example, through training and educating the labor force, improved capital, and/or better technology.
3. Other factors affecting economic growth include the following:
 - a. the level of economic freedom of members of the society: Economic freedom refers to the ability to choose your work, choose where you live, choose to operate a business, and so on;
 - b. the political stability of the country;
 - c. the willingness and ability of society members to save;
 - d. the level of government regulation of production and consumption;
 - e. the opportunity to earn a profit by operating a business; and
 - f. how efficiently society's resources are allocated.
4. When real GDP expands, the unemployment rate tends to fall, although there is often a lag.
5. When real GDP contracts, the unemployment rate tends to rise, although there is often a lag.
6. When real GDP expands, the price level may rise, fall, or stay the same.
7. When real GDP contracts, the price level may rise, fall, or stay the same.

Tools for Teaching the Arkansas Economics and Personal Finance Course

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Session 9: Standards and Benchmarks

Arkansas Economic Standards

Strand: National Economy

Content Standard 5: Students will analyze the current and future state of the economy using economic indicators.



- NE.5.E.2 Evaluate the impact of advancements in technology, investments in capital goods, and investments in human capital on economic growth and standards of living.

Common Core State Standards

- CCSS.ELA-Literacy.RH.9-10.1 Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.
- CCSS.ELA-Literacy.RH.9-10.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.
- CCSS.ELA-Literacy.RH.9-10.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.
- CCSS.ELA-Literacy.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.9-10.1d Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
- CCSS.ELA-Literacy.L.9-10.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9–10 reading and content*, choosing flexibly from a range of strategies.
- CCSS.ELA-Literacy.L.9-10.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CCSS.ELA-Literacy.RH.11-12.1 Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

- CCSS.ELA-Literacy.RH.11-12.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
- CCSS.ELA-Literacy.SL.11-12.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.11-12.1d Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
- CCSS.ELA-Literacy.L.11-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies.
- CCSS.ELA-Literacy.L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.











Session 9: Resources

1. Video: Economic Growth (Investopedia; 1:57);
<http://www.investopedia.com/video/play/economic-growth/>
2. Focus: High School Economics (Council for Economic Education)
 - a. Lesson 21: Economic Growth and Development;
<http://www.economicsarkansas.org/>
 - i. Register or sign in.
 - ii. Under the "Portal" menu in the green box on the right, choose "high school economics course resources."
 - iii. Under the (new) "Portal" menu, choose "Session 9."
 - iv. Choose "Lesson 21: Economic Growth and Development."
3. High School Economics (*Virtual Economics*® 4.5)
 - a. Lesson 19: Economic Growth
4. Online Course: GDP & Pizza (Federal Reserve Bank of St. Louis)
 - a. Go to <https://www.stlouisfed.org/education>.
 - b. Choose  Teachers: Go directly to the Online Course Login .
 - c. Register or, if you already have an account, log in.
 - d. Register your class for the course as follows:
 - i. Choose the "COURSES" tab.
 - ii. In the "COURSE NAME" column choose "GDP & Pizza."
 - iii. Choose "ADD TO CLASSROOM" and follow the prompts.
5. Online Course: Soar to Savings (Federal Reserve Bank of St. Louis)
 - a. Go to <https://www.stlouisfed.org/education>.
 - b. Choose  Teachers: Go directly to the Online Course Login .
 - c. Register or, if you already have an account, log in.
 - d. Register your class for the course as follows:
 - i. Choose the "COURSES" tab.
 - ii. In the "COURSE NAME" column choose "Soar to Savings."
 - iii. Choose "ADD TO CLASSROOM" and follow the prompts.











6. Lesson: Which Came First—Democracy or Growth? (*Inside the Vault*, Federal Reserve Bank of St. Louis);
<https://www.stlouisfed.org/publications/inside-the-vault/spring-2009/lesson-plan>
7. Lesson: What Are the Ingredients of Economic Growth? (*Page One Economics Classroom Edition*, Federal Reserve Bank of St. Louis);
<https://www.stlouisfed.org/education/page-one-economics-classroom-edition/what-are-the-ingredients-for-economic-growth>
 - a. Choose “Classroom Edition.”

Adaptation: Cards (page 1 of 3)

Use with “**Lesson 21: Economic Growth and Development**” in Focus: High School Economics (see Resource 2 on p. 114).

<p>After years of little or no population growth, immigration and a higher birth rate increase the labor supply.</p> <p>L + 1</p> 	<p>More women enter the nation’s labor force.</p> <p>L + 1</p> 
<p>Older workers postpone their retirement.</p> <p>L + 1</p> 	<p>A growing portion of the population is elderly and retiring.</p> <p>L – 1</p> 
<p>Private savings increase, interest rates fall, and businesses borrow more for new factories and equipment.</p> <p>K + 1</p> 	<p>Private savings decrease, interest rates increase, and businesses borrow less for new factories and equipment.</p> <p>K – 1</p> 
<p>Individuals and businesses from other nations decide to invest more in your country.</p> <p>K + 1</p> 	<p>Individuals and businesses from other nations decide to invest less in your country.</p> <p>K – 1</p> 
<p>Political and economic stability in other nations leads to more investment in your country.</p> <p>K + 1</p> 	<p>World War III breaks out. Many young adults are killed and many cities and factories are destroyed.</p> <p>L – 2 K – 3</p> 

Adaptation: Cards (page 2 of 3)

<p>Population increases moderately.</p> <p>L + 1</p> 	<p>More women enter the nation's labor force.</p> <p>L + 1</p> 
<p>Older workers postpone their retirement.</p> <p>L + 1</p> 	<p>A growing portion of the population is elderly and retiring.</p> <p>L - 1</p> 
<p>Private savings increase, interest rates fall, and businesses borrow more for new factories and equipment.</p> <p>K + 1</p> 	<p>Private savings decrease, interest rates increase, and businesses borrow less for new factories and equipment.</p> <p>K - 1</p> 
<p>Individuals and businesses from other nations decide to invest more in your country.</p> <p>K + 1</p> 	<p>Individuals and businesses from other nations decide to invest less in your country.</p> <p>K - 1</p> 
<p>Political and economic instability in other nations lead some people and firms in other countries to invest more in your country, but others fear that the instability will develop in your country, too, and invest less.</p> <p>No net change in K.</p> 	<p>World War III breaks out. Many young adults are killed and many cities and factories are destroyed.</p> <p>L - 2 K - 3</p> 

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Adaptation: Cards (page 3 of 3)

<p>Population growth is extremely high because of high birth rates and falling mortality rates.</p> <p>L + 2</p> <p style="text-align: right;"><input type="radio"/></p>	<p>More women enter the nation's labor force.</p> <p>L + 1</p> <p style="text-align: right;"><input type="radio"/></p>
<p>Older workers postpone their retirement.</p> <p>L + 1</p> <p style="text-align: right;"><input type="radio"/></p>	<p>Droughts and crop failures reduce the population and labor force.</p> <p>L - 1</p> <p style="text-align: right;"><input type="radio"/></p>
<p>A sharp increase in loans and grants from foreign governments and international agencies is used to fund new public and private investments.</p> <p>K + 1</p> <p style="text-align: right;"><input type="radio"/></p>	<p>A sharp decrease in loans and grants from foreign governments and international agencies reduces public and private investments.</p> <p>K - 1</p> <p style="text-align: right;"><input type="radio"/></p>
<p>Individuals and businesses from other nations decide to invest more in your country.</p> <p>K + 1</p> <p style="text-align: right;"><input type="radio"/></p>	<p>Individuals and businesses from other nations decide to invest less in your country.</p> <p>K - 1</p> <p style="text-align: right;"><input type="radio"/></p>
<p>Political and economic instability in your nation leads to less investment in factories and equipment.</p> <p>K - 1</p> <p style="text-align: right;"><input type="radio"/></p>	<p>World War III breaks out. Many young adults are killed and many cities and factories are destroyed.</p> <p>L - 2 K - 3</p> <p style="text-align: right;"><input type="radio"/></p>