Inflation and the Fall of the Roman Empire

Lesson Author

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Standards and Benchmarks (see pages 16-17)

Lesson Description

Students learn the concepts of money and inflation in the context of world history. They first participate in a role play to learn how debasement increased the Roman money supply and caused inflation in the Roman Empire. They receive a soldier's wages in coins (candy) and participate in an auction, and then receive higher wages in debased coins (candy) and participate in a second auction. They compare the outcomes of the auctions and learn that inflation occurs when "too much money is chasing too few goods" and that this outcome characterized the economy during the last centuries of the Roman Empire. Finally, students analyze historical data and read historical quotes that show how people in the Roman Empire responded to inflation.

Grade Level

8-12

Concepts

Inflation

Money

Money supply

Compelling Question

How did the economic policies of Roman emperors cause inflation toward the end of the Roman Empire?

Objectives

Students will

- define money, money supply, debasement, and inflation;
- describe the relationship among debasement, the money supply, and inflation; and
- articulate the role of inflation in the fall of the Roman Empire.

Time Required

45 minutes

Materials

- Visual 1: Vocabulary
- Visual 2: Auction Results
- Visual 3: Debasement of Roman Currency
- Visual 4: Spending Priorities
- Visual 5: Rising Wheat Prices
- Visual 6: Chasing Too Few Goods
- All-white mints (e.g., Life Savers®, individually wrapped), 8 to 12 for each student (Only a few students will need to receive the highest amount.)
- Red-and-white peppermints (or other two-toned mints, individually wrapped), 16 to 24 for each student (Only a few students will need to receive the highest amount.)
- Two sets of three identical items for two auctions (e.g., two candy bars, two bags of chips, and two school T-shirts)

Procedure

- 1. Introduce the lesson by discussing the following:
 - Why do people work? (Answers will vary but will likely include that people work to earn money.)
 - Why do people want money? (Answers will vary but will likely include to buy goods and services.)
 - How many of you have received an allowance or been paid for work you have performed? (Most if not all students should raise their hands.)
 - If you could press a button and earn twice as much money for the same work but everyone else in America would also make twice as much money for their work, would you

- press the button? (Answers will vary, but most students will most likely like the idea of earning twice as much.)
- Why might this button be good for the economy? (Answers will vary, but students might suggest that people would have more money to spend and that this spending would benefit producers and create jobs.)
- Why might this button be bad for the economy? (*Answers will vary.*)
- 2. Display *Visual 1: Vocabulary*. Review each word (in bold below) in turn and explain or discuss as noted.
 - **Money:** Anything widely accepted in exchange for goods and services.
 - Money has taken many forms over time, but most of us think of coins and currency.
 - **Money supply:** The quantity of money available in an economy.
 - **Coins:** Money, usually minted from some combination of metals.
 - **Currency:** Money, usually made from some type of paper-like material.
 - What do we call U.S. currency? (Dollars)
 - o What other currencies are you familiar with? (Answers will vary but may include the Japanese yen, European Union euros, or British pounds.)
 - **Debase:** To reduce something's value; for coinage, to reduce the amount of precious metal in coins but keep the face value constant.
 - What are some precious metals? (Answers will vary but should include gold and silver.)
 - **Inflation:** A general, sustained upward movement of prices for goods and services in an economy.
- 3. Explain to the students that the Roman economy experienced inflation for over 300 years, from the time of emperors Augustus to Diocletian (27 BC–AD 304). Discuss the following:
 - Why do you think that the Roman Empire experienced inflation over this period? (*Answers will vary.*)
- 4. Explain to the students that they will participate in an activity designed to help them understand money and inflation as follows:
 - You (the teacher) will represent the Roman emperor and the students will represent Roman soldiers.
 - They, the soldiers, will receive their wages as all-white mints. Each all-white mint represents one denarius, which is equivalent to the daily wage of an unskilled worker in the early period of the Roman Empire. The all-white mints represent pure silver Roman coins.
 - Soldiers with higher rankings will receive more pay.

- You will hold an auction with three items. These items will represent the total output of goods and services in the Roman economy.
- Each item will be sold to the highest bidder.
- Soldiers may not combine their money (mints) with any other soldier's money.
- Distribute 8 to 12 all-white mints to each student, with only a few students—soldiers of higher rank—receiving 12 each (to ensure that bids may differ).
- 6. Auction off three items individually. Sell each item to the highest bidder and collect the all-white mints. Record the selling price of each item on *Visual 2: Auction Results* and calculate the total.
- 7. Explain the following:
 - The tax revenue collected by the Roman government has been in decline, and you (the emperor) have been facing pressure to pay all the obligations of the empire, including paying the many soldiers who protect the empire.
 - You realize that rather than issuing pure silver coins, you can stretch the money supply by debasing the coins by adding inferior metals. The face value of each coin will remain the same—only the percentage of the coin that is silver will be changed. This will give you more money to pay your soldiers.
 - (Show a peppermint.) The new coins are peppermints.
 - You have decided to raise the wages of the soldiers.
- 8. Distribute 16 to 24 peppermints to each student, with only a few students receiving 24 each. Remind the students that each new currency is worth the same amount as the old currency—one denarius.
- 9. Explain to the students that you will conduct another auction round as follows:
 - The three auction items will be identical to the ones from Round 1.
 - The new coins—the peppermints—have the same face value as the old coins—the all-white mints. Both may be used in this round.
 - As before, soldiers may not combine their money (mints) with any other soldier's money.
- 10. Conduct the auction as before. Prices should be considerably higher in Round 2. If bidding stalls, encourage more bidding by reminding students that this is the final auction round—their last chance to spend their money. Record the selling price of each item on Visual 2 and calculate the total.

- 11. Discuss the following:
 - What happened to prices in Round 2 compared with Round 1? (*Prices were most likely higher in Round 2*.)
 - Were the goods in the auctions different in any way? (No, they were exactly the same.)
 - Were there any more items available for people to buy in Round 2 than in Round 1? (No, the number of items was the same in Round 2 and Round 1.)
 - Why were prices higher in Round 2? (People had more money in Round 2, so they were able to bid higher amounts for the same items. The only thing that changed was the amount of money used and the prices that resulted.)
 - How would you summarize the relationship between the money supply and prices? (The supply of money and the prices of goods and services are related. If the same amount of goods and services are available and the money supply increases, prices will increase.)
- 12. Explain that the increase in prices between Rounds 1 and 2 is an example of inflation. Discuss the following:
 - What is inflation? (A general, sustained upward movement of prices for goods and services in an economy.)
- 13. Explain that economists say inflation occurs when "too much money is chasing too few goods." This means that inflation is likely to occur when the supply of money grows at a faster rate than the supply of goods and services produced in the economy.
- 14. Discuss the following to reinforce the key points of the activity:
 - In terms of the Roman Empire's currency, what did the all-white mints represent? (*Pure silver coins*)
 - In terms of the Roman Empire's currency, what did the peppermints represent? (*Currency debased by adding other metals to the mix*)
 - How did adding other metals to silver coins change the supply of coins available?
 (It increased the number of coins, or increased the money supply.)
 - How did debasement of the currency change the payment that soldiers received? (The
 government was able to pay each soldier higher wages even though each coin still had
 the same face value.)
 - What happened to prices in the auction as a result of the increased money supply? (*Prices went up.*)
 - Why did prices go up? (Soldiers in the auction had more coins, and there was a limited supply of goods available, so they bid up the prices to get what they wanted.)
 - Based on this activity, why did Rome experience inflation? (Debasement of coins increased the money supply; the increase in the money supply caused inflation.)

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- 15. Explain that military might was key to the expansion of the Roman Empire and that the empire's survival depended on maintaining a strong defense. The empire needed to pay for more soldiers and pay them well.
- 16. Display *Visual 3: Debasement of Roman Currency*. Explain that emperors debased silver and gold coins with copper and other cheaper metals to expand the money supply and thus their own spending power as follows:
 - Nero (AD 54–AD 68) debased the Roman denarius to about 90 percent silver.
 - Trajan (AD 98–AD 117) debased the Roman denarius to about 85 percent silver.¹
 - Marcus Aurelius (AD 161–AD 180) debased the Roman denarius to about 75 percent silver.
 - Commodus (AD 177–AD 192) debased the Roman denarius to about 70 percent silver.
 - Septimius Severus (AD 193–AD 211) debased the Roman denarius to about 50 percent silver.
 - By the time that Diocletian (AD 284–AD 305) stepped down, Roman coins were basically silver plated.²
 - With the added currency, the government could pay for more soldiers and pay existing soldiers more.
- 17. Display *Visual 4: Spending Priorities* and ask a student to read it aloud. Discuss and explain the following:
 - What was the Roman government's spending priority? (Pay the soldiers first.)
 - Why was this the emperor's highest priority? (Rome relied on its soldiers to expand and defend the empire.)
 - Historically, Severus increased the pay of his soldiers by one-third and most emperors rewarded their men with paid bonuses.³
 - Based on the auction experience, what effect do you think soldiers having more money
 had on the prices of goods and services for non-soldiers? (The increase in the money supply
 likely caused prices to rise.)
- 18. Display *Visual 5: Rising Wheat Prices*. Explain that from AD 150–AD 300 the price of one modius of wheat increased from 2 sesterces to 400 sesterces. This is a 200-fold increase in a century and a half.⁴ Discuss the following:

⁴ Boatwright, Gargola, and Talbert. A Brief History of the Romans. p. 277.



¹ Durant, Will. Caesar and Christ: The Story of Civilization. Vol. 3. New York: Simon and Schuster, 2011, p. 330.

² Boatwright, Mary T.; Gargola, Daniel J. and Talbert, Richard J. A. A Brief History of the Romans. New York: Oxford, 2006, p. 277.

³ Martin, Thomas R. Ancient Rome: From Romulus to Justinian. New Haven, CT: Yale University Press, 2012, p. 163.

- What did the auction teach you about the relationship between the money supply and prices? (More money drives more spending, which can lead to buyers bidding up the prices of goods and services.)
- As Roman emperors debased Roman coins, what happened to the money supply? (*The money supply increased.*)
- What relationship do you see between the value of coins and the price of wheat? (As the value of coins decreased from debasement, wheat prices increased.)
- Does this graph support what you have learned so far? (Yes, it supports the relationship between an increase in the money supply and rising prices).
- 19. Display *Visual 6: Chasing Too Few Goods* and ask a student to read it aloud. Discuss and explain the following:
 - Why do you think the Roman official told his servant to hurry? (There might have been so much money and spending that people had to rush to buy things and compete with other buyers.)
 - What would have happened if they just kept, or saved, their money? (The longer they kept their money, the less value it would have had, so they tried to spend it quickly.)
 - When buyers are rushing and competing with others to buy goods, what do you think happens to prices? (*Prices are likely to rise as buyers bid up the prices of goods.*)
 - Remind the students that this is what happened in the classroom inflation auction.
 It was like what economists suggest: Inflation was caused by too much money chasing too few goods.
 - How does the Roman official's quote reflect the "chasing too few goods" part of inflation? (The Roman official doesn't seem to be concerned about what was purchased but about the money getting spent on whatever goods were still available and before the money lost even more value.)
- 20. Explain the economic conditions in the Roman Empire as follows:
 - The Roman Empire prospered during the period known as the Pax Romana (or "Roman Peace") from AD 27–AD 180.
 - However, in the third century (the 200s), the fractures started to show in the structure of the empire. Corruption and power struggles among government officials resulted in a series of civil wars, which weakened the unity of the empire and the economy.
 - During its expansion, Rome had relied on war plunder and tribute (a type of tax) as a source of revenue. As expansion ended, so did that source of government revenue.
 - Farming, another source of wealth, was diminished as wars ravaged the countryside.
 - Starting in the late-third century, barbarian invasions further weakened the empire.
 - Wars and epidemic diseases led to a decline in population.

- The Roman road system and many ports once helped Rome establish a strong trade network. As law and order decreased, travel and trade became unsafe. As trade diminished, so did the goods and jobs supported by trade.
- As economic activity slowed, so did the tax revenue required to finance the government, military, and the many benefits that Roman citizens had once enjoyed.
- The government knew it needed to fund the military to maintain control and order, so it chose to make up for the decrease in taxes and tribute by stretching the money supply through debasement. But this became a dangerous practice and emperors often found themselves continually debasing the currency to make up for the diminishing tax revenues generated by the faltering economy.
- Due to the decline in population and patriotism, Rome found it hard to build an army with Roman citizens, so they hired barbarians, such as the Visigoths, as mercenary soldiers. These soldiers felt little loyalty to Rome.
- When Rome was unable to pay the mercenary soldiers the promised wages, the Visigoths sacked the city of Rome in AD 410, which further weakened the government.
- Although the empire had been in decline for a long time, in AD 476 a barbarian leader ousted Romulus Augustulus, the last emperor of the Roman Empire. This event is sometimes referred to as the "fall of Rome." By the time of its fall, the Roman Empire was a shadow of what it once was—the "empire" Romulus Augustulus ruled never extended past the Italian peninsula.

Closure

- 21. Review the important content of the lesson by discussion the following:
 - What does it mean to debase currency? (To reduce the amount of precious metal in coinage but keep the face value constant)
 - What happened to the money supply in the Roman Empire when currency was debased? (It increased.)
 - When there is more money in an economy, but no more goods and services produced, what happens to prices? (*Prices rise.*)
 - What is this phenomenon called? (*Inflation*)
 - What is inflation? (Inflation is a general, sustained upward movement of prices for goods and services in an economy.)
 - In short, what causes inflation? (Inflation occurs when too much money is chasing too few goods.)
 - How did the policies of Roman emperors lead to inflation in the Roman Empire? (As the empire struggled with civil wars, plagues, barbarian invasions, and many other issues, the economy did not generate enough taxes to sustain the vast Roman Empire. As a result, Roman emperors tried to make up the funding difference by debasing the currency, which caused inflation.)

Assessment

- 22. Instruct the students to write a short essay as follows:
 - Describe how debasement of Roman currency influenced the money supply and how the money supply is related to inflation.
 - List historical reasons for why several Roman emperors used debasement to try and solve the empire's economic problems.
 - Explain whether you think debasement was an effective tool for solving the Roman Empire's economic problems.

Assessment—Teacher Key

As the Roman Empire faced corruption, civil wars, plagues and barbarian attacks, it became more costly to defend the empire and provide law and order for citizens. Roman emperors chose to stretch the money supply to help pay for these obligations by debasing their coins with cheaper metals, such as copper, while keeping the face value of the coins constant. Debasement increased the money supply and thus the government's spending power. Roman emperors used the extra money to keep their armies happy by paying their soldiers large bonuses. This increase in the money supply, however, resulted in rising prices for goods and services, or inflation. Debasing the currency was not an effective method for solving the economic problems of the Roman Empire.

Visual 1: Vocabulary

Money: Anything widely accepted in exchange for goods and services.

Money supply: The quantity of money available in an economy.

Coin: Money, usually minted from some combination of metals.

Currency: Money, usually made from some type of paper-like material.

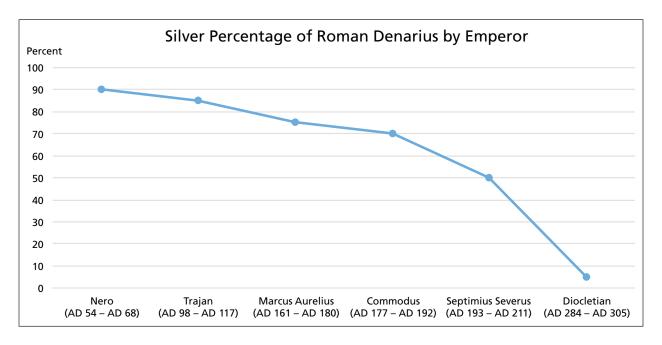
Debase: To reduce something's value; for coinage, to reduce the amount of precious metal in coins but keep the face value constant.

Inflation: A general, sustained upward movement of prices for goods and services in an economy.

Visual 2: Auction Results

	Round 1	Round 2
Auction item 1		
Auction item 2		
Auction item 3		
Total		

Visual 3: Debasement of Roman Currency



SOURCE: Boatwright, Mary T., Gargola, Daniel J. and Talbert, Richard J. A. A Brief History of the Romans. New York: Oxford, 2006, p. 277.

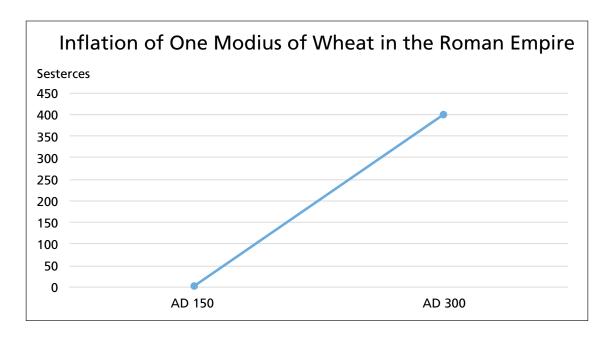
Visual 4: Spending Priorities

Roman emperor Septimius Severus (AD 193–AD 211) said this on his deathbed to his son and successor:

Make the soldiers rich, and pay no attention to everyone else.

SOURCE: Martin, Thomas R. Ancient Rome: From Romulus to Justinian. New Haven, CT: Yale University Press, 2012, p. 174.

Visual 5: Rising Wheat Prices



NOTE: A sesterces was equal to one-fourth of a denarius.

SOURCE: Boatwright, Mary T., Gargola, Daniel J. and Talbert, Richard J. A. A Brief History of the Romans. New York: Oxford, 2006, p. 277.

Visual 6: Chasing Too Few Goods

Upon hearing that another debasement of coinage was coming, a Roman official wrote this to his servant:

Hurry, spend all my money you have; buy me any kinds of goods at whatever prices they are available.

SOURCE: Martin, Thomas R. Ancient Rome: From Romulus to Justinian. New Haven, CT: Yale University Press, 2012, p. 174.

Standards and Benchmarks

Voluntary National Content Standards in Economics

Standard 11: Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. The amount of money in the economy affects the overall price level. Inflation is an increase in the overall price level that reduces the value of money.

- **Benchmark 4, Grade 8:** Inflation reduces the value of money.
- **Benchmark 5, Grade 12:** In the long run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.

Standard 13: Income for most people is determined by the market value of the productive resources they sell. What workers earn primarily depends on the market value of what they produce.

• **Benchmark 5, Grade 12:** Changes in demand for specific goods and services often, in the short run, affect the incomes of the workers who make those goods and services.

Common Core Standards, Literacy in History/Social Studies and Technical Subject, Grades 6-12

English Language Arts Standards, History/Social Studies

• Craft and Structure, Grades 9-10

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.

Key Ideas and Details, Grades 11-12

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.

Range of Reading and Level of Text Complexity, Grades 11-12

CCSS.ELA-Literacy.RH.11-12.10: By the end of grade 12, read and comprehend history/ social studies texts in the grades 11-CCR text complexity band independently and proficiently.

English Language Arts Standards, Writing

Texts Types and Purposes, Grades 9-10

CCSS.ELA-Literacy.WHST.9-10.1: Write arguments focused on discipline-specific content.

CCSS.ELA-Literacy.WHST.9-10.1.A: Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.

CCSS.ELA-Literacy.WHST.9-10.1.B: Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.

CCSS.ELA-Literacy.WHST.9-10.1.C: Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

CCSS.ELA-Literacy.WHST.9-10.1.D: Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

CCSS.ELA-Literacy.WHST.9-10.1.E: Provide a concluding statement or section that follows from or supports the argument presented.

• Production and Distribution of Writing, Grades 11-12

CCSS.ELA-Literacy.WHST.11-12.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.ELA-Literacy.WHST.11-12.5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

Research to Build and Present Knowledge, Grades 11-12

CCSS.ELA-Literacy.WHST.11-12.9: Draw evidence from informational texts to support analysis, reflection, and research.

