

Hamilton's National Bank

Lesson Author

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Standards and Benchmarks (see pages 25-27)

Lesson Description

In this lesson, students participate in two rounds of a role play to help them understand the role of banks in facilitating economic growth through loans. Round 1 is conducted without a bank. After the first round, students read excerpts from Secretary of the Treasury Alexander Hamilton's 1790 report to Congress in which he proposes a national bank because the United States had few banks at the time. Students then conduct Round 2 of the role play with a bank. After the round, students read excerpts from and summaries of the statute creating a national bank, Thomas Jefferson's opposition, and Hamilton's rebuttal.

Grade Level

8-12

Concepts

Banks
Capital formation
Capital resources
Collateral
Gross domestic product (GDP)
Loan
Risk
Risk-reward relationship
Savings
Usury

Compelling Question

How do banks promote economic growth?

Objectives

Students will

- define banks, capital formation, capital resources, collateral, gross domestic product (GDP), loan, risk, the risk-reward relationship, savings, and usury;
 - explain the meaning of capital formation and its role in economic growth;
 - assess the role of banks in capital formation; and
 - compare the views of Jefferson and Hamilton regarding banks.
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Time Required

50-60 minutes

Materials

- Visuals 1 to 6
 - One copy of Handout 1, cut into cards
 - Handouts 2 and 3, copied back to back, one copy for each student
 - Handout 4, three copies of page 1 and three copies of page 2
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Procedure

1. Ask students who Alexander Hamilton was. (*Answers will vary but should include the first secretary of the U.S. Treasury.*)
2. Explain that as secretary of the treasury, Hamilton did many things including “keeping the books” for the United States. In that capacity he collected the revenue and paid the bills for the nation. He had read extensively about **banks** and had a keen interest in how banks should be run to avoid **usury** or encourage wanton speculation and bubbles (such as the Dutch tulip mania in the 1630s), which cause grave economic hardship and loss. People who went bankrupt in the 1790s were sent to debtor’s prison. (Robert Morris, a founding father; financier of the American Revolution; and signer of the Declaration of Independence, Articles of Confederation, and the U.S. Constitution, did a stint in debtors’ prison after finding himself overextended due to a huge land purchase during the Panic of 1796.¹)

3. Display *Visual 1: Vocabulary*. Explain/discuss the following, referring to Visual 1 as needed:
 - What are **capital resources**? (*Goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process. Also called capital goods and physical capital.*)
 - There is a relationship between **capital formation** and capital resources. Capital formation is the making of capital resources (e.g., tools, machines, and transport equipment) for future production of goods and services.
 - What capital resources does your stylist/barber use? (*Answers will vary but may include scissors, combs, clippers, blow dryers, or mirrors.*) Is a haircut an example of a good or service? (*A service*)
 - How do we measure a country's output of goods and services today? (**Gross domestic product, GDP**)
 - To measure the standard of living, we often use GDP per capita. What does per capita mean? (*Per person*)
 - GDP per capita means the amount of GDP per person in a country.
4. Explain to the students that they are going to participate in a role play relating to capital formation in the early days of the United States. Understanding the other vocabulary words will help them succeed in the role play. Review the definition of **collateral** on Handout 1. Discuss the following:
 - What are some examples of collateral a barber might have to offer should the barber want to get a loan? (*Answers will vary but may include the barbershop building itself or any equipment in the shop.*)
5. Distribute a card from *Handout 1: Capital Formation Cards* and a copy of *Handout 2: Transactions* to each student. Display Handout 2. Tell the students to look at their cards and determine whether they are a saver/lender with money to invest or a borrower/spender hoping for a loan. Explain the following:
 - In the role play, they will try to make a transaction—to find a match and to borrow or lend money.
 - Savers/lenders want to make sure they get their hard-earned money back with interest.
 - Borrowers/spenders want to borrow at the lowest price possible to make sure they can pay back the loan and not lose their collateral. Those without collateral will have to pay a higher rate for a loan because there is a greater **risk** of loss to the lender since the borrower has nothing to back up the loan.
 - With the **risk-reward relationship**, there is a direct relationship between the risk of a person not repaying a loan and the amount of interest that person must pay. The less likely a borrower is to repay a loan, the higher the interest rate that borrower must agree to pay to get a loan. The higher interest rate paid to the person who makes the loan is that

person's reward. Conversely, the more likely a borrower is to repay a loan, the lower the interest rate (or reward) the borrower must pay the lender. The greater the risk, the higher the interest rate. The lower the risk, the lower the interest rate.

- Each transaction is to be recorded on Handout 2.
6. Review the questions on the cards each party should ask and why.
 7. Give the students two to three minutes to make a transaction. (NOTE: It is very likely that several students will not lend or borrow during this round.)
 8. Tally the number of transactions and discuss why more loans were not made.
 9. Explain to the students that corn sold for between \$0.56 and \$1.00 per bushel in 1795.² Discuss the following:
 - What does the owner of the 25 bushels of corn need to do to invest his corn? (*Sell it for cash and then invest the cash.*)
 10. Display *Visual 2: Hamilton Explains the Merits of a National Bank*. (NOTE: The excerpts are copied exactly from the original text, including original errors.)
 - Invite a student to read aloud the first paragraph and then discuss the following:
 - What does Hamilton mean by asserting that gold and silver employed merely as instruments of exchange were dead stock that could acquire life when deposited in banks to become the basis of paper circulation? (*Monies in banks can be loaned and earn interest.*)
 - Invite a student to read aloud the second paragraph and then discuss the following:
 - What proportion of paper money in circulation does Hamilton suggest? (*Two to three times the amount of gold/silver deposits*)
 11. Explain that the student will now participate in a second round of lending/borrowing. This time, six students will be bankers. Choose six students to be the bankers and give each one a copy of *Handout 4: Bank Deposit and Loan Ledgers*. Make the following assignments:
 - Three student bankers will accept deposits and agree to pay 6 percent interest per year. No interest will be paid if the funds are withdrawn before 6 months. Bankers can accept all cash and gold deposits. Bankers can lend to borrowers they consider to be "good" risks to repay the loan.
 - Three student bankers will make loans and charge 8 percent interest per year with collateral and 10 percent without collateral. Full payment—principal and interest—is due in two years.

12. Remind the students to record the transactions on Handout 2. Allow three to five minutes for the second round of transactions.
13. Tally the number of transactions and discuss the following:
 - Which round had more potential capital formation? (*Round 2*) Why? (*With a bank, the students could go directly to the bank and not have to spend time looking for a lender or something in which to invest their money. Uncertainty is reduced because the interest rate is set. Banks can lend the exact amount desired. Individuals who get loans are able to purchase capital goods and increase their earning capacity.*)
 - What did Hamilton mean by saying banks can circulate three times the amount of monies they have on deposit? (*A portion of money in **savings** is not sitting idle but loaned to borrowers.*)
 - What does capital formation do for a nation? (*It creates economic growth and a higher standard of living because more goods and services are being produced and more income is generated.*)
 - How do banks assist in capital formation? (*Banks link savers with borrowers and assess the risk of a borrower's ability to repay a loan. Banks also collect the loan payments and pay interest to savers.*)
 - Are there drawbacks to capital formation? (*It can be uneven. If a person has no collateral, it is more difficult to get a loan, and if a person has no savings, that person cannot earn interest on investments.*)
14. Display *Visual 3: Summary of the Law Creating the First Bank of the United States*. Direct students to *Handout 3: Vocabulary* (on the back of Handout 2) and then discuss the following:
 - What is usury? (*Lending money at exorbitant interest rates higher than permitted by law and considered unfair.*)
 - What safeguard did Hamilton put in place against usury? (*Borrowers could now avoid usury because they would have the option to borrow from the national bank at a set interest rate.*)
 - Were there any other safeguards? (*Directors had to rotate off the bank's board and couldn't serve for life. Congress had to approve loans to states and foreigners. The bank's charter was for 20 years, subject to renewal by Congress. Only stockholders who were U.S. citizens were eligible to serve as directors.*)
15. Instruct the students to work in pairs to answer the questions at the bottom of Handout 3. (Refer to the Answer Key below as needed.)

Handout 3: Using Your Vocabulary—Answer Key

- a. In the role play, what were some of the capital resources individuals were seeking to borrow money to buy? (*A mast and sails, a forge, a sewing machine, a mule, tools, merchandise, typesetting equipment, a workbench, and new nets*)
 - b. How will new typesetting equipment help assist a printer in capital formation? (*The printer will use the equipment over and over to print pamphlets and papers.*)
 - c. What do we use to measure all final goods and services made in a year? (*GDP*)
16. Display *Visual 4: Hamilton's List of National Bank Advantages*. Invite a student to read aloud the first paragraph and then discuss the following:
 - What other nations had public banks? (*Italy, Germany, Holland, England, and France*)
 17. Invite students to read aloud each of the summaries and then discuss the following:
 - Which reasons for a national bank would assist the government in conducting its business? (*Branches in every major city, emergency loans to the government, and a place to pay taxes and deposit government money*)
 - Which reasons for a national bank would assist the growth of commerce? (*Branches in every major city; common currency equally accepted throughout the land; new money created through borrowing—expanding the money supply; a banking alternative for borrowing; capital for economic growth; and increased production of U.S.-made products, leading to increased trade and creating an incentive for emigration, which would help the nation grow*)
 - Which reasons seem the most compelling for creating a national bank? (*Answers will vary.*)
 18. Display *Visual 5: Jefferson's Opposition to a National Bank*. Note that at the time Thomas Jefferson was secretary of state. The Madison referred to in the excerpt is James Madison, who was a member of the U.S. House of Representatives at the time. Invite students to read aloud the excerpts and then discuss the following:
 - What were reasons Thomas Jefferson and other plantation owners disliked banks? (*They were short on cash and frequently had to borrow and considered commerce "grubby, parasitic, and degrading." Jefferson thought agrarian life to be superior and that manufacturing should be limited to households and viewed banks as "devices to fleece the poor, oppress farmers, and induce a taste for luxury that would subvert republican simplicity."*)
 19. Display *Visual 6: Jefferson's Letter Opposing a National Bank*. Invite students to read aloud the excerpts and then discuss the following:
 - What were Jefferson's arguments against a national bank? (*He believed the right to create a national bank was not written in the Constitution and so would be unconstitutional and harmful to state banks.*)

- How did Hamilton and Jefferson differ in their view of a national bank? (*Hamilton saw a national bank as a vital engine for commerce and growth of the nation, while Jefferson saw it as an unlawful, grubby attempt to undermine the power of the states.*)

Closure

20. Review the important content in this lesson by discussion the following:

- What did the people in the role play want to purchase with borrowed money? (*A mast and sails, a forge, a sewing machine, a mule, tools, merchandise, typesetting equipment, a workbench, and new nets*)
- What type of goods are these? (*Capital goods—goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process.*)
- What is capital formation and why does it matter? (*Capital formation is the making of more capital resources [e.g., tools, machines, and transport equipment] for future production of goods and services. It provides an income stream that increases the standard of living.*)
- Why do people save? (*To accumulate money to spend it in the future*)
- How do banks reward saving and facilitate borrowing? (*Banks accept savers' funds and pay them interest for keeping their money at the bank. The banks keep a portion of the money in reserve for savers who want their money immediately and then can lend the rest to borrowers who pay interest to use the money.*)
- What is the risk-reward relationship? (*It is the direct relationship between the risk of a person not repaying a loan and the amount of interest that person must pay. The less likely a borrower is to repay a loan, the higher the interest rate that borrower must agree to pay to get a loan. The higher interest rate paid to the person who makes the loan is that person's reward. Conversely, the more likely a borrower is to repay a loan, the lower the interest rate (or reward) the borrower must pay the lender. The greater the risk, the higher the interest rate. The lower the risk, the lower the interest rate.*)
- How does having collateral affect the amount of interest a borrower is charged? (*Collateral reduces the risk of nonpayment, so the interest rate is lower because the borrower has something tangible of value that the lender can take if the loan is not repaid.*)
- Only four banks existed in the early United States: the Bank of North America in Philadelphia, the Bank of New York, and the Bank of Massachusetts in Boston and Baltimore.³ What advantages did Hamilton see in creating a national bank? (*Answers will vary but may include common currency, branches in major cities across the United States, more capital to lend, the government could borrow from the bank in emergencies, and the bank would hold government monies collected from taxes.*)

- Why did Jefferson oppose the national bank? (*He thought it would create competition for state banks and promote growth of cities rather than farms, he did not trust banks, and he held that the Constitution did not give the government the authority to establish a bank.*)

Assessment

21. Instruct students to write a blog post evaluating how the creation of the first national bank shaped economic growth in the United States. They are to use either the views of Hamilton or Jefferson as supporting evidence.

Notes

¹ Axelrod, Alan. *The Real History of the American Revolution*. New York: Sterling Publishing Company, 2007, p. 349.

² Wright, Carroll D. *Comparative Wages, Prices and Cost of Living: From the Sixteenth Annual Report of the Massachusetts Bureau of Statistics, for 1885*. Reprint Edition. Boston: Wright & Potter Printing Co., 1889, pg. 66.

³ Hammond, Bray. *Banks and Politics in America: From the Revolution to the Civil War*. Princeton, NJ: Princeton University Press, 1957, p. 66.

Visual 1: Vocabulary

Banks: Businesses that accept deposits and make loans.

Capital formation: The making of more capital resources (e.g., tools, machines, and transport equipment) for future production of goods and services. It provides an income stream that increases the standard of living.

Capital resources: Goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process. Also called capital goods and physical capital.

Collateral: Property required by a lender and offered by a borrower as a guarantee of payment on a loan. Also, a borrower's savings, investments, or the value of the asset purchased that can be seized if the borrower fails to repay a debt.

Gross domestic product (GDP): The total market value, expressed in dollars, of all final goods and services produced in an economy in a given year.

Loan: A sum of money provided temporarily on the condition that the amount borrowed be repaid, usually with interest.

Risk: The chance of loss.

Risk-reward relationship: The idea that there is a direct relationship between risk of the loss of principal and the expected rate of return. The higher the risk of loss of principal for an investment, the greater the potential reward. Conversely, the lower the risk of loss of principal for an investment, the lower the potential reward.

Savings: The accumulation of money set aside for future spending.

Usury: Lending money at exorbitant interest rates higher than permitted by law and considered unfair.

Visual 2: Hamilton Explains the Merits of a National Bank

Excerpt from *The Report of the Secretary of the Treasury, (Alexander Hamilton) on the Subject of a National Bank: Read to the House of Representatives, Dec. 13, 1790*

The following are among the principal advantages of a Bank: First, The augmentation of the active or productive capital of a country. Gold and silver, where they are employed merely as the instruments of exchange and alienation, have been, not improperly, denominated dead stock; but when deposited in banks, to become the basis of a paper circulation, which takes their character and place, as the signs or representatives of value, they then acquire life, or, in other words, an active and productive quality. This idea, which appears rather subtle and abstract, in a general form, may be made obvious and palpable by entering into a few particulars. It is evident, for instance, that the money which a merchant keeps in his chest, waiting for a favourable opportunity to employ it, produces nothing till that opportunity arrives.

But if, instead of looking it up in this manner, he either deposits it in a bank, or invests it in the stock of a bank, it yields a profit during the interval, in which he partakes or not according to the choice he may have made of being a depositor or a proprietor; and when any advantageous speculation offers, in order to be able to embrace it, he has only to withdraw his money, if a depositor or if a proprietor, to obtain a loan from the bank, or to dispose of his stock; an alternative seldom or never attended with difficulty, when the affairs of the institution are in a prosperous train. His money thus deposited or invested, is a fund upon which himself and others can borrow to a much larger amount. It is a well established fact, that banks in good credit can circulate a far greater sum than the actual quantum of their capital in gold and silver. The extent of the possible excess seems indeterminate; though it has been conjecturally stated at the proportions of two and three to one. (pp. 4-5)

SOURCE: Hamilton, Alexander. *The Report of the Secretary of the Treasury, (Alexander Hamilton) on the Subject of a National Bank: Read to the House of Representatives, Dec. 13, 1790*. S. Whiting & Co, 1811;
https://fraser.stlouisfed.org/scribd/?title_id=3677&filepath=/files/docs/bankunitedstates/bankoftheunitedstates_hamilton_1790.pdf.

Visual 3: Summary of the Law Creating the First Bank of the United States

Summary of Statutes in “An Act to Incorporate the Subscribers to the Bank of the United States,” February 18, 1791

1. Bank stock will be worth \$10,000,000.
2. 25,000 shares will be sold for \$400 each.
3. Subscriptions (to buy shares) will sell for \$25 each, and full payment for a share will be due within two years.
4. Stockholders are required to pay for each share with \$100 in gold or silver coin and \$300 in U.S. government bonds.
5. The U.S. government will buy 5,000 shares, or \$2,000,000, of the bank stock.
6. Subscribers of this bank will be paid 6 percent interest per year.
7. The bank will be run by a 25-man board of directors, with not more than three-quarters of them eligible for reelection the next year; 20 will be selected by shareholders and 5 by the government.
8. Only stockholders who are U.S. citizens will be eligible to serve as a director.
9. Congress must approve loans to any state or foreigner.
10. The bank will be located in Philadelphia with branch offices in cities across the country.
11. The bank charter will run for 20 years subject to renewal by Congress.

SOURCE: U.S. Congress. “An Act to Incorporate the Subscribers to the Bank of the United States.” February 18, 1791;
https://fraser.stlouisfed.org/scribd/?title_id=1124&filepath=/files/docs/historical/congressional/first-bank-united-states.pdf.

Visual 4: Hamilton's List of National Bank Advantages (page 1 of 2)

Excerpt from *The Report of the Secretary of the Treasury, (Alexander Hamilton) on the Subject of a National Bank, Read to the House of Representatives, Dec. 13, 1790*

In this report, Hamilton made a case for how banks should work and dispelled rumors about banking in this report sent to Congress.

It is a fact well understood, that public banks have found admission and patronage among the principal and most enlightened commercial nations. They have successively obtained in Italy, Germany, Holland, England, and France, as well as in the United States. And it is a circumstance which cannot but have considerable weight, in a candid estimate of their tendency that after an experience of centuries, there exists not a question about their utility in the countries in which they have been so long established. (pp. 3-4)

Summary of the Report

A national bank would provide the following:

1. Branch banks in every major city throughout the United States
2. Common currency equally acceptable throughout the land
3. New money created through borrowing—expanding the money supply
4. Emergency loans to the government
5. A place to pay taxes and deposit government money
6. A banking alternative for borrowing that would prevent usury
7. Capital for economic growth and prosperity of the nation
8. Increased production of U.S.-made products, leading to increased trade and creating an incentive for emigration, which would help the nation grow

SOURCE: Hamilton, Alexander. *The Report of the Secretary of the Treasury, (Alexander Hamilton) on the Subject of a National Bank, Read to the House or Representative, Dec. 13, 1790*. S. Whiting & Co, 1811;
https://fraser.stlouisfed.org/scribd/?title_id=3677&filepath=/files/docs/bankunitedstates/bankoftheunitedstates_hamilton_1790.pdf.

Visual 4: Hamilton's List of National Bank Advantages (page 2 of 2)

Summary of "Hamilton's Opinion as to the Constitutionality of the Bank of the United States: 1791"

Hamilton offered this opinion in rebuttal to the concerns of Secretary of State Thomas Jefferson and Attorney General Edmund Randolph regarding formation of a national bank.

1. The U.S. government has sovereign power, and the Constitution is the law of the land.
2. Implied powers are to be considered as delegated equally with express powers.
3. A national bank relates to the collection of taxes in two ways: collecting taxes and paying bills.
4. A national bank allows the government to borrow money in emergencies, such as a time of war.
5. Coining money is an expressed power, and banks facilitate circulation of money.
6. Public debt is needed to pay for the common defense.
7. A common currency is not only convenient for the Treasury but more efficient than using 13 different currencies.

SOURCE: Hamilton, Alexander. "Hamilton's Opinion as to the Constitutionality of the Bank of the United States: 1791," in Paul Leicester Ford, ed., *The Federalist: A Commentary on the Constitution of the United States by Alexander Hamilton, James Madison, and John Jay*. Henry Holt and Company, 1898; http://avalon.law.yale.edu/18th_century/bank-ah.asp.

Visual 5: Jefferson's Opposition to a National Bank

Excerpts from *Alexander Hamilton* by Ron Chernow

This excerpt provides background on Thomas Jefferson's view of banks.

Like many Virginia plantation owners, Jefferson was land rich and cash poor and chronically indebted to British creditors...By the late 1780s, as tobacco prices plummeted, Virginia planters struggled to repay old debts to London creditors and demanded the return of slaves carried off by British troops. The steep payments he owed British bankers forced Jefferson to retain his enormous workforce of slaves despite his professed hatred for the institution. "The torment of mind I endure till the moment shall arrive when I shall owe not a shilling on earth is such really as to render life of little value," he told his American manager in 1787. But he would not sell land to pay his debts; "nor would I willingly sell the slaves as long as there remains any prospect of paying my debts with their labor." The weight of that debt, created by his own extravagance, perhaps prevented Thomas Jefferson from being the person he would ideally like to have been. Even while secretary of state, he remained in hock to British creditors for an exorbitant seven thousand pounds. He carried these large debts until his death in 1826, necessitating the sale of 130 of his slaves at Monticello six months later. It was not the image that the philosopher of the common man would have preferred to leave to posterity. (pp. 314-15)

As members of the Virginia plantation world, Jefferson and Madison had a nearly visceral contempt for market values and tended to denigrate commerce as grubby, parasitic, and degrading. Like landed aristocrats throughout history, they betrayed a snobbish disdain for commerce and financial speculation. Jefferson perpetuated a fantasy of America as an agrarian paradise with limited household manufacturing. He favored the placid, unchanging rhythms of rural life, not the unruly urban dynamic articulated by Hamilton...For Jefferson, banks were devices to fleece the poor, oppress farmers, and induce a taste for luxury that would subvert republican simplicity. Strangely enough for a large slaveholder, he thought agriculture was egalitarian while manufacturing would produce a class-conscious society. (p. 348)

*Malone, Dumas. *Jefferson and His Time*. Vol. 2. Little Brown, 1981, p. 204.

SOURCE: Chernow, Ron. *Alexander Hamilton*. Penguin Press, 2004.

Visual 6: Jefferson's Letter Opposing a National Bank

Excerpt from Thomas Jefferson's February 15, 1791, Letter to President George Washington

I consider the foundation of the Constitution as laid on this ground that 'all powers not delegated to the U.S. by the Constitution, not prohibited by it to the states, are reserved to the states or to the people' [XIIth. Amendmt.]. To take a single step beyond the boundaries thus specially drawn around the powers of Congress, is to take possession of a boundless field of power, no longer susceptible of any definition.

The incorporation of a bank, and other powers assumed by this bill have not, in my opinion, been delegated to the U.S. by the Constitution...

It has been much urged that a bank will give great facility, or convenience in the collection of taxes. Suppose this were true: yet the constitution allows only the means which are 'necessary' not those which are merely 'convenient' for effecting the enumerated powers. If such a latitude of construction be allowed to this phrase as to give any non-enumerated power, it will go to every one, for there is not one which ingenuity may not torture into a *convenience, in some way or other, to some one* of so long a list of enumerated powers. It would swallow up all the delegated powers, and reduce the whole to one phrase as before observed. Therefore it was that the constitution restrained them to the *necessary* means, that is to say, to those means without which the grant of the power would be nugatory...

Besides; the existing banks will without a doubt, enter into arrangements for lending their agency: and the more favourable, as there will be a competition among them for it: whereas the bill delivers us up bound to the national bank, who are free to refuse all arrangement, but on their own terms, and the public not free, on such refusal, to employ any other bank. That of Philadelphia, I believe, now does this business, by their post-notes, which by an arrangement with the treasury, are paid by any state collector to whom they are presented. This expedient alone suffices to prevent the existence of that *necessity* which may justify the assumption of a non-enumerated power as a means for carrying into effect an enumerated one. The thing may be done, and has been done, and well done without this assumption; therefore it does not stand on that degree of *necessity* which can honestly justify it.

It may be said that a bank, whose bills would have a currency all over the states, would be more convenient than one whose currency is limited to a single state. So it would be still more convenient that there should be a bank whose bills should have a currency all over the world. But it does not follow from this superior convenience that there exists anywhere a power to establish such a bank; or that the world may not go on very well without it.

Summary of the Letter

1. The national government does not have the constitutional power to establish a bank.
2. A national bank would have unfair advantage over state banks and hinder them.

SOURCE: Jefferson, Thomas. Letter to President George Washington. February 15, 1791. National Archives; <https://founders.archives.gov/?q=%20bank%20of%20United%20States%20Recipient%3A%22Washington%2C%20George%22%20Author%3A%22Jefferson%2C%20Thomas%22&s=1111312111&sa=Je&r=3&sr=Wa>.

Handout 1: Capital Formation Cards (page 1 of 4)

Saver/Lender Fleet owner Savings: \$100 in gold Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Dutch merchant Savings: \$50 in gold Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?
Saver/Lender Tavern owner Savings: \$25 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Blacksmith Savings: \$15 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?
Saver/Lender Butcher Savings: \$10 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Shopkeeper Savings: \$20 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?

Handout 1: Capital Formation Cards (page 2 of 4)

Saver/Lender Boat builder Savings: \$20 in gold Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Tailor Savings: \$15 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?
Saver/Lender Baker Savings: \$10 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Farmer Savings: 25 bushels of corn Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?
Saver/Lender Miller Savings: \$20 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?	Saver/Lender Fur trader Savings: \$40 Questions to ask borrowers: 1. Do you have any collateral? If you do, what is it? 2. How soon will you pay me back? 3. What interest rate will you pay?

Handout 1: Capital Formation Cards (page 3 of 4)

Borrower/Spender Ship captain Collateral: Ship Loan: \$100 to refurbish mast and sails Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Blacksmith Collateral: Tools/old forge Loan: \$25 for new forge Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?
Borrower/Spender Tailor Collateral: None Loan: \$20 for new sewing machine Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Farmer Collateral: Farm Loan: \$20 for mule Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?
Borrower/Spender Glassblower Collateral: None (just completed apprenticeship) Loan: \$20 for tools to start business Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Shopkeeper Collateral: Shop Loan: \$50 for new line of merchandise Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?

Handout 1: Capital Formation Cards (page 4 of 4)

Borrower/Spender Carpenter Collateral: Some older tools Loan: \$10 for new tools Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Peddler Collateral: Donkey Loan: \$10 for new wares to sell Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?
Borrower/Spender Printer Collateral: Shop and printing press Loan: \$30 for new typesetting equipment Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Cobbler Collateral: Tools Loan: \$10 for new workbench Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?
Borrower/Spender Fisherman Collateral: Boat Loan: \$10 for new nets Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?	Borrower/Spender Harness/Saddle maker Collateral: None (just completed apprenticeship) Loan: \$25 for new tools Questions to ask lenders: 1. What interest rate will you charge me? 2. How soon do I need to pay back all the money and interest?

Handout 2: Transactions

Round 1					
Lender	Borrower	Collateral	Loan amount	Agreed interest rate (%)	Payment due

Round 2					
Lender	Borrower	Collateral	Loan amount	Agreed interest rate (%)	Payment due in 2 years

Handout 3: Vocabulary

Banks: Businesses that accept deposits and make loans.

Capital resources: Goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process. Also called capital goods and physical capital.

Capital formation: The making of more capital resources (e.g., tools, machines, and transport equipment) for future production of goods and services. It provides an income stream that increases the standard of living.

Collateral: Property required by a lender and offered by a borrower as a guarantee of payment on a loan. Also, a borrower's savings, investments, or the value of the asset purchased that can be seized if the borrower fails to repay a debt.

Gross domestic product (GDP): The total market value, expressed in dollars, of all final goods and services produced in an economy in a given year.

Loan: A sum of money provided temporarily on the condition that the amount borrowed be repaid, usually with interest.

Risk: The chance of loss.

Risk-reward relationship: The idea that there is a direct relationship between risk of the loss of principal and the expected rate of return. The higher the risk of loss of principal for an investment, the greater the potential reward. Conversely, the lower the risk of loss of principal for an investment, the lower the potential reward.

Savings: The accumulation of money set aside for future spending.

Usury: Lending money at exorbitant interest rates higher than permitted by law and considered unfair.

Using Your Vocabulary

- a. In the role play, what were some of the capital resources individuals were seeking to borrow money to buy?
- b. How will new typesetting equipment assist a printer in capital formation?
- c. What do we use to measure all final goods and services made in a year?

Handout 4: Bank Deposit and Loan Ledgers (page 1 of 2)

Deposits		
NOTE: No interest will be paid if the funds are withdrawn before six months.		
Name	Deposit amount	Interest rate per year

Handout 4: Bank Deposit and Loan Ledgers (page 2 of 2)

Loans			
NOTE: Full payment—principal and interest—is due in two years.			
Name	Loan amount	Collateral	Interest rate per year

Handout 4: Bank Deposit and Loan Ledgers—Answer Key

Deposits		
NOTE: No interest will be paid if the funds are withdrawn before six months.		
Name	Deposit amount	Interest rate per year
Baker	\$10	6%
Blacksmith	\$15	6%
Boat builder	\$20 in gold	6%
Butcher	\$10	6%
Dutch merchant	\$50 in gold	6%
Farmer*		6%
Fleet owner	\$100 in gold	6%
Fur trader	\$40	6%
Miller	\$20	6%
Shopkeeper	\$20	6%
Tailor	\$15	6%
Tavern owner	\$25	6%

*The farmer must sell his 25 bushels of corn first and then deposit the money earned.

Loans			
NOTE: Full payment—principal and interest—is due in two years.			
Name	Loan amount	Collateral	Interest rate per year
Blacksmith	\$25	Tools	8%
Carpenter	\$10	Tools	8%
Cobbler	\$10	Tools	8%
Farmer	\$20	Farm	8%
Fisherman	\$10	Boat	8%
Glassblower	\$20	None	10%
Peddler	\$10	Donkey	8%
Printer	\$30	Printing press	8%
Harness/Saddle maker	\$25	None	10%
Ship captain	\$100	Ship	8%
Shopkeeper	\$50	Shop	8%
Tailor	\$20	None	10%

Voluntary National Content Standards in Economics 2nd Edition

Standard 12: Interest Rates. Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.

- **Benchmarks: Grade 8**
 1. An interest rate is a price of money that is borrowed or saved.
- **Benchmarks: Grade 12**
 2. Higher real interest rates increase the rewards for saving and make borrowing more expensive.
 3. Real interest rates normally are positive because people must be compensated for deferring the use of resources from the present into the future.
 4. Riskier loans command higher interest rates than safer loans because of the greater chance of default on the repayment of a risky loan.

Standard 15: Economic Growth. Investment in factories, machinery, new technology, and in the health, education, and training of people stimulates economic growth and can raise future standards of living.

- **Benchmarks: Grade 8**
 2. Productivity is measured by dividing output (goods and services) by the number of inputs used to produce the output. A change in productivity is a change in output relative to input.
 4. Increases in productivity can result from advances in technology or increases in physical or human capital.

National Standards for Financial Literacy

Standard III: Saving. Saving is the part of income that people choose to set aside for future uses. People save for different reasons during the course of their lives. People make different choices about how they save and how much they save. Time, interest rates, and inflation affect the value of savings.

- **Benchmarks: Grade 8**
 1. Banks and other financial institutions loan funds received from depositors to borrowers. Part of the interest received from these loans is used to pay interest to depositors for the use of their money.
 2. For the saver, an interest rate is the price a financial institution pays for using a saver's money and is normally expressed as an annual percentage of the amount saved.

- **Benchmarks: Grade 12**

3. Real interest rates typically are positive because people expect to be compensated for deferring the use of savings from the present into the future. Higher interest rates increase the rewards for saving.

Standard IV: Using Credit. Credit allows people to purchase goods and services that they can use today and pay for those goods and services in the future with interest. People choose among different credit options that have different costs. Lenders approve or deny applications for loans based on an evaluation of the borrower's past credit history and expected ability to pay in the future. Higher-risk borrowers are charged higher interest rates; lower-risk borrowers are charged lower interest rates.

- **Benchmarks: Grade 4**

1. Interest is the price the borrower pays for using someone else's money.

- **Benchmarks: Grade 8**

1. People who apply for loans are told what the interest rate on the loan will be. An interest rate is the price of using someone else's money expressed as an annual percentage of the loan principal.

Standard V: Financial Investing. Financial investment is the purchase of financial assets to increase income or wealth in the future. Investors must choose among investments that have different risks and expected rates of return. Investments with higher expected rates of return tend to have greater risk. Diversification of investment among a number of choices can lower investment risk.

- **Benchmarks: Grade 8**

6. Financial risk means that a financial investment has a range of possible returns, including possibilities of actual losses. Higher-risk investments have a wider range of possible returns.

C3 Framework for Social Studies State Standards

Economics

- **Economic Decision Making**

By the End of Grade 8

INDIVIDUALLY AND WITH OTHERS, STUDENTS...

D2.Eco.1.6-8: Explain how economic decisions affect the well-being of individuals, businesses, and society.

By the End of Grade 12

D2.Eco.1.9-12: Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.

- **Exchange and Markets**

By the End of Grade 8

INDIVIDUALLY AND WITH OTHERS, STUDENTS...

D2.Eco.3.6-8: Explain the roles of buyers and sellers in product, labor, and financial markets.

D2.Eco.4.6-8: Describe the role of competition in the determination of prices and wages in a market economy.

- **National Economy**

By the End of Grade 8

INDIVIDUALLY AND WITH OTHERS, STUDENTS...

D2.Eco.10.6-8: Explain the influence of changes in interest rates on borrowing and investing.

History

- **Change, Continuity, and Context**

By the End of Grade 12

INDIVIDUALLY AND WITH OTHERS, STUDENTS...

D2.His.1.9-12: Evaluate how historical events and developments were shaped by unique circumstances of time and place as well as broader historical contexts.

D2.His.3.9-12: Use questions generated about individuals and groups to assess how the significance of their actions changes over time and is shaped by the historical context.