## Unit 9 <br> Borrowing

## Lesson 9B:

## Evaluating the Benefits and Costs of Credit

## Rule 9: Pay on time and in full.

While borrowing has both benefits and costs, at times it is an indication that something has gone wrong with your financial planning (spending too much and/or saving too little relative to your income). These lessons look at borrowing from both the lender's and the borrower's perspectives and discuss why it is wise to use credit sparingly and manage the use of credit.

## Lesson Description

Students are introduced to different types of credit and discuss some of the benefits and costs of credit. They then consider how borrowing affects a person's net worth.

Standards and Benchmarks (see page 223)

## Grade Level

9-12

## Concepts

Assets
Borrow
Credit
Interest
Liabilities
Net worth

## Compelling Question

How does using credit affect net worth?

## Making Personal Finance Decisions

© 2019, Minnesota Council on Economic Education. Developed in partnership with the Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes,

## Objectives

Students will be able to

- describe various types of loans or credit,
- describe some of the benefits and costs of credit, and
- determine how credit decisions are likely to impact their net worth over time.


## Materials

- Visual 9B.1: Types of Credit
- Handout 9B.1: Are These Goods Worth Buying With Credit?, one copy for each student and one for the teacher to use as a visual
- Handout 9B.1: Are These Goods Worth Buying With Credit?—Answer Key
- Handout 9B.2: Assessment, one copy for each student


## Time

45 minutes

## Procedure

1. Begin the lesson by asking the following:

- If you borrow a video game from a friend, what does that friend likely expect? (Answers will vary, but students may say something like the friend will let them use it for a certain period and expect them to return it.)

2. Explain the following:

- When you borrow money, there are expectations similar to borrowing something from a friend, but the process is typically more formal and costly.
- When you borrow money, you take it with the promise to repay it, usually with interest, in the future.
- For example, for formal loans from a financial institution, your promise takes the form of a contract that lays out the terms of the loan.
- Interest is the price of using someone else's money. That is, it is an additional payment of money for the right to use someone else's money.
- Credit is the granting or money (or something else of value) in exchange for a promise of future repayment.
- You have credit when an institution approves an amount that you can borrow
from them. For example, a credit card company may extend you credit by providing you a credit card with a limit up to $\$ 1,000$. You can then use that card to borrow up to $\$ 1,000$ at any time. If you pay your credit card balance in full each month, you pay no interest. However, if you don't pay the balance in full each month, you pay interest and perhaps fees.

3. Display Visual 9B.1: Types of Credit and review the different types. Discuss the following:

- What are some benefits of borrowing money (or using credit)? (Answers will vary but may include the following: getting goods and services now instead of later, paying for emergency expenses, enjoying payment convenience, getting in on a deal that may not be available later, acquiring assets that will increase your net worth over time, building a credit record/history, it is less costly than using invested funds, and so on.)
- What are some costs of borrowing money (or using credit)? (Answers will vary but may include the following: finance charges [interest plus any fees], creating debt and lowering your net worth, having less money to purchase goods and services in the future, having less credit available in case of an emergency, having greater exposure to identity theft, and so on.)

4. Explain that all these benefits and costs should be considered when deciding whether to use credit. The remainder of the lesson will focus on the impact of credit on a person's net worth, which may not be as obvious as some of the other benefits and costs.
5. Remind students that a person's net worth is the value of that person's assets minus the value of his or her liabilities. Assets are things that you own such as a house, stocks, bonds, jewelry, cash, money in a savings account, cars, or coins. Your liabilities are things you owe, such as unpaid bills, a mortgage, a car loan, or unpaid taxes. (See Unit 2: Planning and Tracking.) Discuss the following:

- What are some examples of assets? (Answers will vary but may include houses, cars, gold coins, computers, jewelry, televisions, savings accounts, stocks, bonds, cash, and so on.)
- What are some examples of liabilities, or debt? (Answers will vary but may include home mortgages, car loans, student loans, unpaid credit card balances, unpaid taxes, and so on.)

6. Explain the following:

- Typically, people wish to grow their net worth, or wealth, over time because it increases their financial security.
- One way to assess the desirability of taking out a loan or getting credit is to consider how it will affect your net worth over time.
- Taking out a loan adds immediately to your debt, or liabilities, which has a nega-


## Making Personal Finance Decisions

© 2019, Minnesota Council on Economic Education. Developed in partnership with the Federal Reserve Bank of St. Louis. Permission is granted to reprint or photocopy this lesson in its entirety for educational purposes,
tive impact on your net worth.

- The question to ask is whether a loan or credit increases the value of your assets enough over time to offset the initial increase in your liabilities (plus any future finance costs).

7. Distribute a copy of Handout 9B.1: Are These Worth Buying With Credit? to each student. Tell the students they are going to evaluate the current and possible future effects of using a loan or credit for various purchases. Review the directions and instruct the students to complete the handout individually (or assign groups). Allow time for students to complete the handout and then review answers as time permits.
8. Display Handout 9B.1—Answer Key and have students check their answers. Further explain answers if necessary as follows:

- House: A house is an asset. The market value of houses has historically risen over time; however, it can also fall. (Note: Housing prices in many areas of the country did fall during the 2007-08 financial crisis.)
- Vacation: Using credit for a vacation does not create an asset now or in the future. Having to pay off the loan in the future will decrease your assets.
- Education: Although education is not a financial asset, because education builds a person's human capital, it is likely to lead to higher future income and a better ability to acquire assets in the future.
- Car: A car is an asset, but its market value tends to fall (depreciate) very quickly. If a car enables you to earn income (get to work), it could lead to a better ability to acquire assets in the future.
- Furniture: Furniture is an asset; however, its market value tends to fall over time.
- Pizza: Buying and eating a pizza does not create an asset now or in the future. Having to pay off the credit card balance in the future will decrease your assets.
- Electronic gaming system: An electronic gaming system is an asset; however, its market value tends to fall very quickly. Having to pay off the credit card balance in the future will decrease you assets.
- Gasoline: Buying gasoline does not create an asset now or in the future. However, you may need gasoline to travel to work. Having to pay off the credit card balance in the future (if you do not pay the balance in full each month) will decrease your future assets.

9. Discuss the following:

- Which of the purchases on Handout 9B:1 seem like reasonable uses of credit regarding the future impact on assets? (Loans for a house and education are likely to have long-term positive impacts on the value of your assets and net worth. A car is a special case where a depreciating asset may be worth buying with credit.

The other purchases would either not increase the value of your assets or would actually reduce it over time, decreasing your net worth.)

## Closure

10. Explain the following:

- With the exception of education, using credit for non-asset purchases (such as a vacation, pizza, or cable TV service) will increase your liabilities and lower your net worth.
- Similarly, except perhaps for a car, using credit to purchase assets that tend to fall in value (depreciate) quickly over time (such as furniture or an electronic gaming system) would also likely lower your net worth over time (as the loan balance would likely exceed the value of the asset). Unless there are other benefits to offset the costs of such purchases, credit may not be in your best interest.


## Assessment

11. Distribute a copy of Handout 9B.2: Assessment to each student and allow time for students to work (or assign as homework).

## Handout 9B.2: Assessment—Answer Key

Frank is facing a choice. He wants both a newer car and to spend a month in Europe; each costs $\$ 6,000$. He has decided he will use credit now for one of his options and save his money for three years to pay for the other.
Option 1: Use credit now to purchase a newer car and save for a vacation in three years.
Option 2: Use credit now to pay for a European vacation and save to purchase a newer car in three years.
Explain to Frank how each option will affect his net worth and then make a recommendation for which option he should choose.

Option 1: Borrowing $\$ 6,000$ to buy a car would increase Frank's liabilities, but it would add assets equal to the value of the car (\$6,000 at the time of purchase). Because the car has value, the purchase will have minimal impact on Frank's net worth.
Option 2: Borrowing $\$ 6,000$ to spend a month in Europe will increase Frank's liabilities, and it would add $\$ 0$ to his assets. It will have a negative effect on Frank's net worth.
Based on the effects of spending on Frank's net worth, students should advise Frank that Option 1 is a better choice.

## Making Personal Finance Decisions

© 2019, Minnesota Council on Economic Education. Developed in partnership with the Federal Reserve Bank of St. Louis.

## Visual 9B.1: Types of Credit (page 1 of 2)

## Service Credit

- Issuers: utility services (e.g., water, electricity, or Internet)
- Receive services for a given period (usually a month) and pay at the end of that period
- No interest charged if bill is paid on time


## Installment Credit

- Issuers: stores or companies
- Buy goods or services with equal payments over a set period (e.g., a year)
- Down payment often required
- Finance charges (interest) possible
- Example: Purchase a $\$ 700$ bicycle at a bike shop and pay $\$ 100$ (the down payment) and $\$ 55$ per month for a year at a $10 \%$ interest rate ( $\$ 600 \times 0.10$ $=\$ 60$ and $\$ 660 / 12=\$ 55)$


## Charge Card

- Issuers: stores or companies (e.g., American Express and department store charge cards)
- Buy goods or services and repay in full at the end of the month
- Generally interest free
- Often an annual fee


## Credit Card

- Issuers: stores or companies (e.g., MasterCard, Discover, and VISA)
- Buy goods and services up to a given dollar limit, with a minimum payment due each month
- No interest charged if paid in full at the end of the month; interest charged the next month on the unpaid balance
- May have an annual fee


## Visual 9B.1: Types of Credit (page 2 of 2)

## Personal Loan

- Issuers: financial institutions
- Make purchases or pay off past debts
- Finance charges assessed
- Typically unsecured (no collateral [valuable asset] required)
- Example: Borrow $\$ 3,000$ from a credit union to purchase a boat


## Auto Loan

- Issuer: financial institutions or auto dealerships
- Buy a car with equal payments over a set period (usually several years)
- Typically secured, with the car being the collateral
- Finance charges assessed
- Example: Borrow \$10,000 from a commercial bank and make 60 monthly payments of $\$ 200$ (or a total of $\$ 12,000=60 \times \$ 200$, so the finance charges [including interest] are $\$ 2,000=\$ 12,000-\$ 10,000$ )


## Home Loan (mortgage)

- Issuer: Financial institutions
- Purchase a house or property
- Typically secured, with the collateral being the house or property
- Finance charges assessed
- Example: Borrow \$200,000 from a mortgage company and make 360 monthly payments of $\$ 1,100$ (or a total of $\$ 396,000=360 \times \$ 1,100$, so the finance charges [including interest] are $\$ 196,000=\$ 396,000-$ $\$ 200,000)$.


## Student Loan

- Issuer: the federal government or financial institutions
- Pay for education beyond high school with the obligation to repay after graduation
- Finance charges assessed
- Unsecured
- Example: Stafford loan


## Handout 9B.1: Are These Goods Worth Buying With Credit?

Name: $\qquad$

Directions: For each purchase, determine how it will affect your assets both now and over time. Write " + " for increase, " - " for decrease, and " 0 " for no effect.

| Purchase | Effect on assets |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Now | Over time |
| Home | Mortgage |  |  |
| Vacation | Personal loan |  |  |
| Education | Student loan |  |  |
| Car | Auto loan |  |  |
| Furniture | Credit card |  |  |
| Pizza | Credit card |  |  |
| Electronic gaming system | Personal loan |  |  |
| Gasoline | Credit card |  |  |

## Handout 9B.1: Are These Goods Worth Buying With Credit?-Answer Key

Directions: For each purchase, determine how it will affect your assets both now and over time. Write " + " for increase, "-" for decrease, and " 0 " for no effect.

| Purchase | Effect on assets |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Now | Over time |
|  |  | Mortgage | + |
| + or - |  |  |  |
| Vacation | Personal loan | 0 | - |
| Education | Student loan | 0 | + |
| Car | Auto loan | + | - or + |
| Furniture | Credit card | + | - |
| Pizza | Credit card | 0 | - |
| Electronic gaming system | Personal loan | + | - |
| Gasoline | Credit card | 0 | - |

## Handout 9B.2: Assessment

Name: $\qquad$

Frank is facing a choice. He wants both a newer car and to spend a month in Europe; each costs $\$ 6,000$. He has decided he will use credit now for one of his options and save his money for three years to pay for the other.

Option 1: Use credit now to purchase a newer car and save for a vacation in three years.

Option 2: Use credit now to pay for a European vacation and save to purchase a newer car in three years.

Explain to Frank how each option will affect his net worth and then make a recommendation for which option he should choose.

## Standards and Benchmarks

## National Standards for Financial Literacy

Standard 4: 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; lowerrisk borrowers are charged lower interest rates.

- Benchmark: Grade 4

2. When people use credit, they receive something of value now and agree to repay the lender over time, or at some date in the future, with interest.

- Benchmark: Grade 8

4. Borrowers who use credit cards for purchases and who do not pay the full balance when it is due pay much higher costs for their purchases because interest is charged monthly. A credit card user can avoid interest charges by paying the entire balance within the grace period specified by the financial institution.
5. People can use credit to finance investments in education and housing. The benefits of using credit in this way are spread out over a period of time and may be large. The large costs of acquiring the education or housing are spread out over time as well. The benefits of using credit to make daily purchases of food or clothing are short-lived and do not accumulate over time.

- Benchmark: Grade 12

3. Loans can be unsecured or secured with collateral. Collateral is a piece of property that can be sold by the lender to recover all or part of a loan if the borrower fails to repay. Because secured loans are viewed as having less risk, lenders charge a lower interest rate than they charge for unsecured loans.
4. People often apply for a mortgage to purchase a home. A mortgage is a type of loan that is secured by real estate property as collateral.
