Borrowing on Credit

by Sophia

WHAT'S COVERED

In this lesson, you will learn about the costs associated with borrowing money. You will explore how agility, problem-solving, and technology skills can help you understand and utilize loans. Specifically, this lesson will cover:

1. Overview of Loans

Unexpected large expenses, such as paying for costly automobile repairs or college tuition bills, often occur relatively early in an adult's life before emergency funds can be built up or sufficient savings can accumulate. As a result, you may need to be agile and borrow money by obtaining a loan. This lesson introduces the topic of borrowing. Different types of loans (such as auto, student, and housing) are discussed in greater detail in a later lesson.

Productivity: Skill Reflect

The more you understand about loans, the better you can use your problem solving skills to tackle unexpected expenses. Have you had to take a loan before? What problem were you facing? How did you determine the best choice for the circumstances?

1a. Loan Providers

You can apply for loans from a number of financial institutions, such as commercial banks and credit unions. These financial institutions bring together savers and borrowers by providing a system in which savers can earn interest on their deposits and borrowers can obtain loans.

- Banks, credit unions, and other deposit institutions are often referred to as mainstream financial service providers.
- There's also a growing lending industry called alternative financial service providers, such as check cashers, money order providers, and payday lenders. These lenders tend to be much more expensive to use, but they are often more convenient for those who use their services.

In this section, we focus primarily on mainstream financial service providers.

1b. Elements of a Loan

A loan consists of several elements:

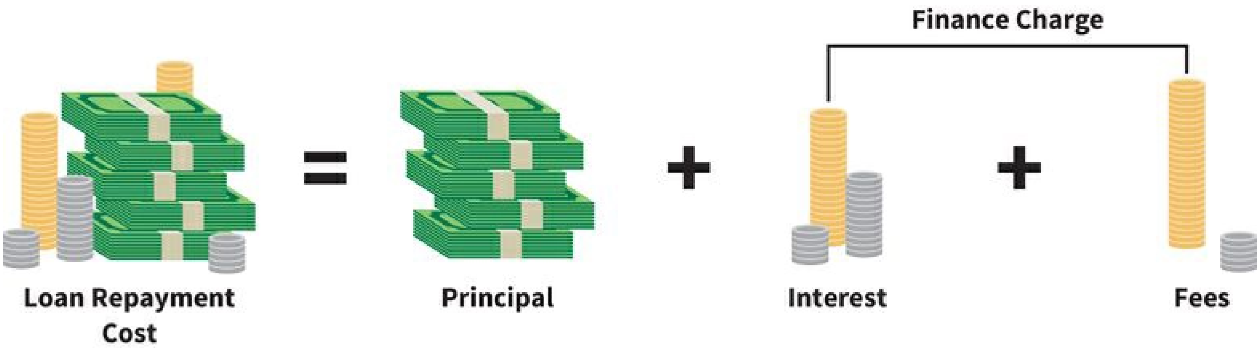
- Principal: The amount of money you borrow (the loan) that must be repaid.
- Interest: The money paid to the lender for the use of their money. How much it costs to borrow is determined by the interest rate charged on the loan.

HINT

Charging interest is one of the ways financial institutions make money.

- Loan fees: Additional money paid to the lender for things such as processing the loan or loan payments, late payments, and any other fees the lender may require the borrower to pay.

The total amount of fees and interest charged by the lender for a loan is called a **finance charge**. When you borrow money in the form of a loan, you'll be responsible for paying back not only the principal but also the interest and any fees, as the following equation shows.



TERM TO KNOW

Finance Charge
The total amount of fees and interest charged by the lender for a loan.

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2. Loans and Collateral

Often when a loan is made, the lender will want something of value, called**collateral**, that can be sold in the event that the loan payments are not made by the borrower. Lenders often do this by placing a **lien** on the collateral, which gives the lender the legal right to sell the collateral if the borrower does not repay the loan. This works great when you are borrowing money for a new car because the property you are purchasing with the loan can also serve as collateral for the loan. Collateral often reduces the cost of the loan because it reduces the lender's risk. But what if you don't have property that you can pledge as collateral?

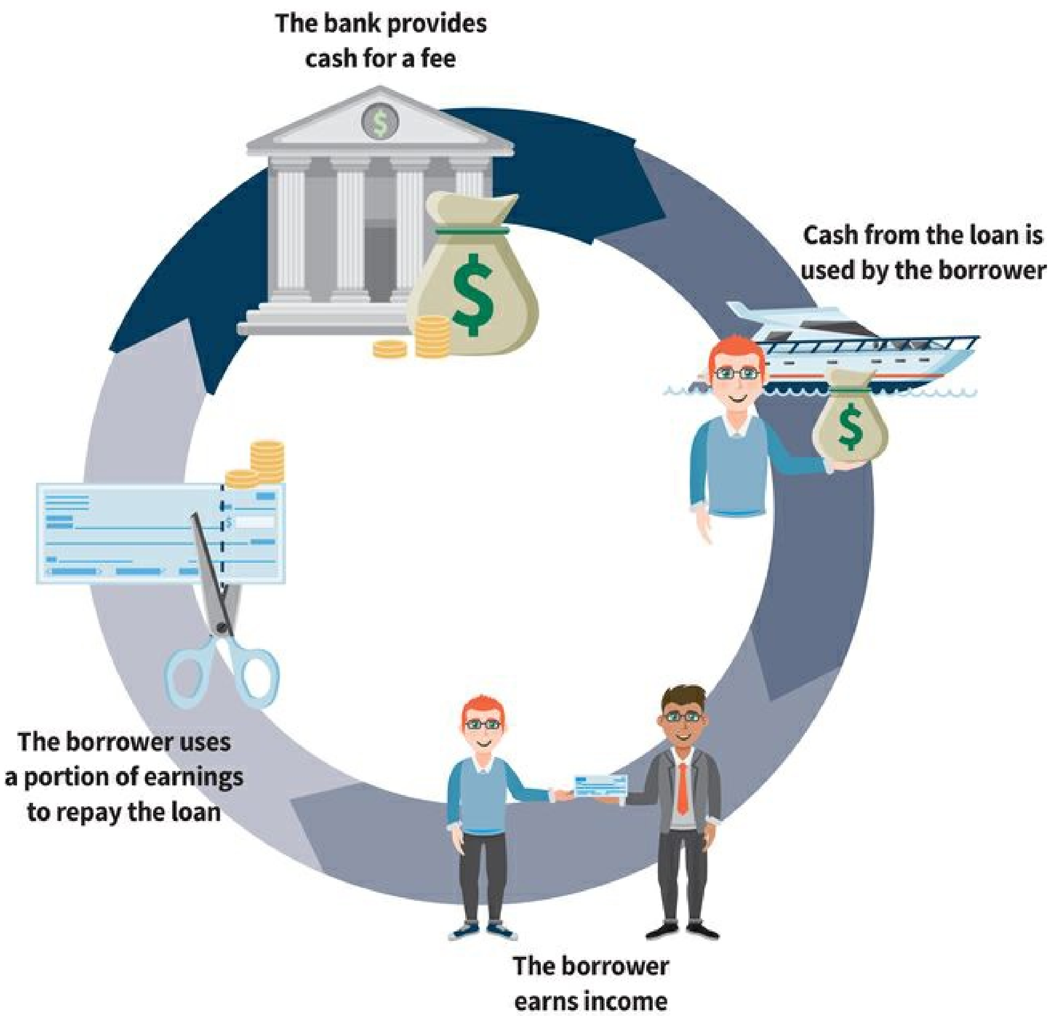
Recall that your greatest asset is your human capital! It's illegal to pledge yourself as collateral for a loan, but you can pledge your future earnings as collateral for a loan.

- Even when there's property serving as collateral for the loan, you're still pledging a portion of your future earnings to repay that loan.
- This is why few lenders will lend you money without proof of earnings.

HINT

The most notable exception to this is student loans, but you're still pledging future earnings to repay the loan.

The lender is providing a critical service by offering you resources to purchase what you desire today. In return, you're promising to repay the money borrowed plus the finance charge with future income, as shown in the illustration below. In some states, if a borrower does not repay the loan, lenders can **garnish wages**, which is a court order to have the borrower's employer pay a portion of the borrower's wages directly to a creditor.



TERMS TO KNOW

Collateral
The item of value that can be sold in the event that loan payments are not made by the borrower.

Lien
Gives the lender the legal right to sell the collateral if the borrower does not repay the loan.

Garnish Wages
A court order to have the borrower's employer pay a portion of the borrower's wages directly to a creditor.

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3. Choosing the Right Loan

It generally makes sense to invest in things that increase your ability to earn more money so you can achieve your financial goals.

BIG IDEA

Some of the best investments you can make include education, home ownership, and reliable transportation to get to work. If you can pay for these investments without going into debt, you're better off in the long run.

If you have to borrow money to make these investments, do it wisely to ensure that the cost of borrowing does not outweigh the benefit of the investment. When you borrow money, be sure to get answers to these questions:

1. What is the finance charge for this loan?
2. Will this loan increase or decrease my income or level of living in the future?

3a. Finance Charges

All lenders include a finance charge as part of the loan-making process (see Hint). Recall that a finance charge is the total cost of borrowing money. It includes the interest that will be paid, any fees associated with borrowing the money, and any fees paid as the loan is repaid, such as late fees. Finance charges are generally stated in absolute dollars.

HINT

Lenders are required to disclose the expected finance charge within the loan contract.

3b. Installment Loans

Installment loans are designed to be repaid over a fixed period of time through regular (usually monthly) payments.

Most borrowers prefer a fixed loan payment that comes with**fixed installment loans** because no one likes to see loan payments increase. Further, although **variable installment loans** can have a lower finance charge over long periods of time, keep in mind that you must be able to financially manage increased loan payments if interest rates go up rather than down.

TERMS TO KNOW

Fixed Installment Loan

Lending contracts wherein the lender agrees to loan the borrower a certain amount of money at a set interest rate for a set time period. In turn, the borrower agrees to repay the money through fixed monthly payments that will not change during the life of the loan.

Variable Installment Loan

Loans in which debt repayments can fluctuate from one period to another.

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4. Calculating Interest

Recall what you learned in an earlier lesson about compound growth and the time value of money. That information will be helpful as you work through this section.

4a. Using Amortization Tables

To calculate the interest that will be charged during any given time period, just multiply the outstanding loan balance by the interest rate stated for the loan for a given time period.

Remember, you can use your technology skills to make use of digital tools to help you with these calculations.

> ↱ EXAMPLE On January 1, assume Jose borrows $1,000 with a fixed interest rate on the loan of 9.6% and a loan term of 12 months. Jose will be making monthly payments of $87.73. How much of Jose's February 1 loan payment would be interest charged for January, the first month of the loan?

To calculate the answer, simply use the formula shown in the following illustration.

- In Jose's case, you would multiply the outstanding loan balance of $1,000 by the monthly equivalent of the 9.6% interest rate, which is 9.6% divided by 12, or 0.8% (or 0.008). This is the periodic interest rate.
- The amount of interest that Jose will be charged in January is therefore $8.00 ((0.096 ÷ 12) × $1,000).
- Of Jose's total loan payment of $87.73, $8.00 will be interest and $79.73 will be applied to the loan principal.
- The principal payment will reduce the loan balance to $920.27.

The amount of principal that Jose will repay depends on the **loan term**, which is the length of time Jose has to repay the loan. As the loan is repaid, the amount of interest charged each payment period decreases, and therefore the amount of each payment being applied to the loan principal increases. An amortization table, like the one seen below for Jose's loan, shows the amount of interest and principal associated with each fixed loan payment over the entire loan term.

Table: Amortization for Jose's Loan

		Interest		Principal		Loan Payment	
Date	Payment	Interest	Calculation	Principal	Calculation	Loan Balance	Calculation
Jan.	No payment due because he just received the loan					$1,000.00	
Feb.	$87.73	$8.00	$1,000 × .008	$79.73	$87.73 − $8.00	$920.27	$1,000 − $79.73
Mar.	$87.73	$7.36	$920.27 × .008	$80.37	$87.73 − $7.36	$839.90	$920.27 − $80.37
Apr.	$87.73	$6.72	$839.90 × .008	$81.01	$87.73 − $6.72	$758.89	$839.90 − $81.01
May	$87.73	$6.07	$758.89 × .008	$81.66	$87.73 − $6.07	$677.23	$758.89 − $81.66
June	$87.73	$5.42	$677.23 × .008	$82.31	$87.73 − $5.42	$594.92	$677.23 − $82.31
July	$87.73	$4.76	$594.92 × .008	$82.97	$87.73 − $4.76	$511.95	$594.92 − $82.97

Aug.	$87.73	$4.10	$511.95 × .008	$83.63	$87.73 − $4.10	$428.32	$511.95 − $83.63
Sept.	$87.73	$3.43	$428.32 × .008	$84.30	$87.73 − $3.43	$344.01	$428.32 − $84.30
Oct.	$87.73	$2.75	$344.01 × .008	$84.98	$87.73 − $2.75	$259.03	$344.01 − $84.98
Nov.	$87.73	$2.07	$259.03 × .008	$85.66	$87.73 − $2.07	$173.38	$259.03 − $85.66
Dec.	$87.73	$1.39	$173.38 × .008	$86.34	$87.73 − $1.39	$87.03	$173.38 − $86.34
Jan.	$87.73	$0.70	$87.03 × .008	$87.03	$87.73 − $0.70	$0.00	$87.03 − $87.03

HINT

If you talk with multiple lenders and get several different offers for loans, you should be able to negotiate the fees and the interest rates of your loan.

TERM TO KNOW

Loan Term

The length of time a borrower has to repay the loan.

4b. Annual Percentage Rate (APR)

Sometimes total finance charges can be difficult to compare across loans. As a way to simplify comparison shopping for consumers, the federal government requires lenders to disclose the **annual percentage rate (APR)** charged on a loan.

- The APR is a broad measure of the cost of borrowing and includes both the interest rate charged and any required fees for the loan.
- Generally, loans of a particular type (e.g., home loans) include the same type of fees in the APR calculation.
- For home loans, the APR is higher than the loan's annual interest rate.
- For credit cards, the APR is typically equal to the effective interest rate charged on outstanding balances and doesn't include costs such as an annual fee to have the credit card.

TERM TO KNOW

Annual Percentage Rate (APR)

A broad measure of the cost of borrowing based on the annual sum of the periodic interest rates applied to the account. The APR does not consider the effect of compound growth.

SUMMARY

In this lesson, you received an **overview of loans**. This overview included the **elements of a loan**, such as principal and interest, and a look at financial institutions that act as **loan providers**. You learned how loan providers identify collateral (property that you own), to ensure their investment in you is protected. At times, you will need to be agile and make use of a tool like a loan to ensure financial stability.

Choosing the right loan is important for your long-term financial health. It is important to use your problem solving skill to select the right product. Read the terms of your loan agreement carefully so you know about the charged **annual percentage rate (APR)**, the loan term, your **installment plan**, and any **finance charges**. You can use what you've learned earlier in the course about the time value of money and your technology skills to **calculate the interest on your loan**, using established **amortization tables** to guide your work.

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