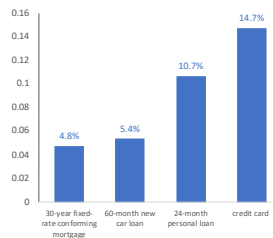




The Basics of Credit

Average Interest Rates on Different Types of Loans in 2018:Q4



Note: Non-mortgage loan rates are all for loans from commercial banks.
Credit card rate is for accounts assessed interest.

Department of Economics
Personal Finance Workshop
Professor Karen Dynan
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Outline

General background

Credit scores

Credit cards

Student loans

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What is credit?

Dictionary definition of **credit**: the ability of a customer to obtain goods or services before payment, based on the trust that payment will be made in the future [Source: [Oxford Dictionaries](#)]

Debt is what you accumulate when you use credit

Secured credit refers to loans that are backed by collateral (e.g. mortgages are backed a home) that the lender can take if the borrower gets sufficiently behind on the loan

Unsecured credit refers to loans that are uncollateralized

Why is access to credit useful?

Credit **can help you get through a rough patch** (disruptions in income, spending surprises)

Credit **creates opportunities** you wouldn't necessarily have unless you have a lot of savings:

- To invest further in your education

- To buy a home

- To buy a car

- To start a business

But those opportunities come with risks

When people take out loans, they (and lenders) are operating under a set of expectations—about their ability to pay off the loan and about the return to the purchase they financed

But **those expectations may turn out to be wrong**, leading to bad credit outcomes [to be discussed in a moment]

Your income falls because the economy goes into recession

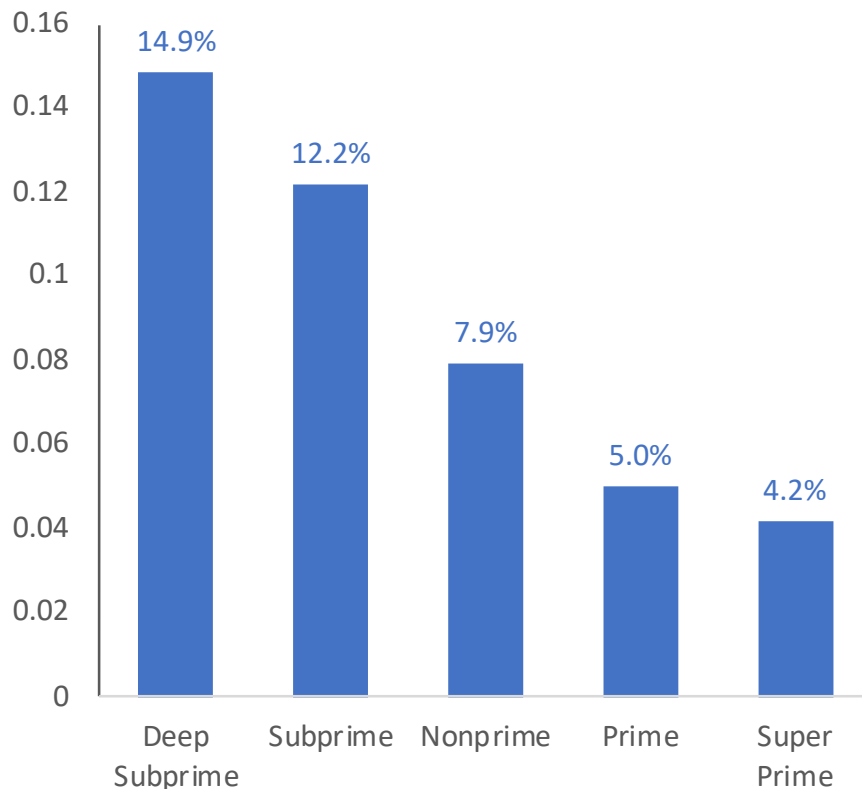
You decide not to practice in the high-paying field that you borrowed to finance a professional degree in

The home you bought declines in value

The examples above are all things that can and have happened to responsible reasonable people

The cost of credit varies depending your own “creditworthiness”

Interest Rate on Average New Car Auto Loan
in 2018:Q4



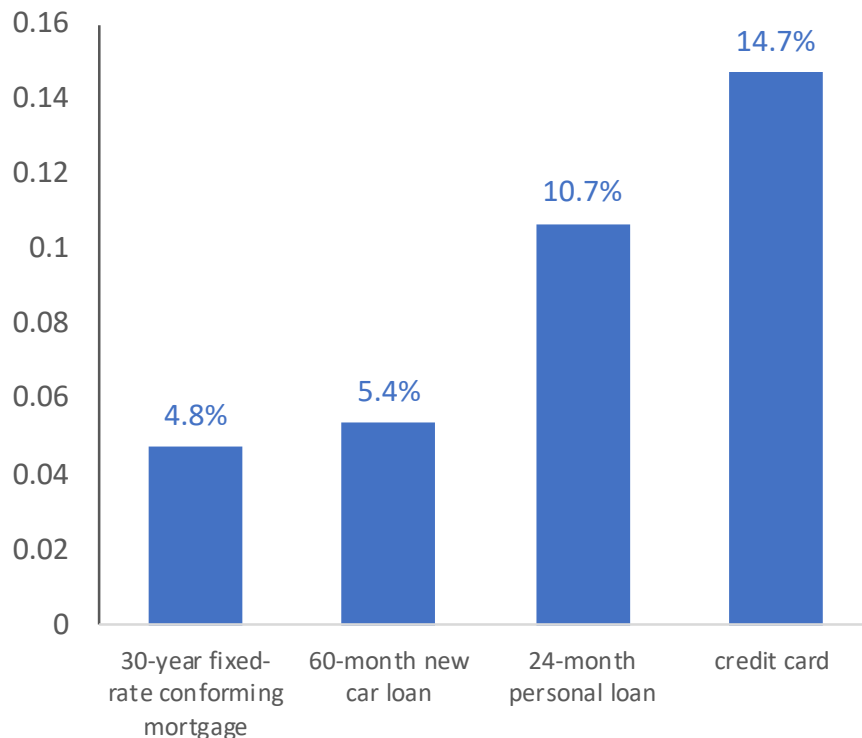
Source: [Experian](#)

Lender generally charge **higher interest rates to borrowers who are more likely to have problems making their payments**

We'll talk about how they figure this out when we discuss credit scores in the next section

The cost of credit varies depending on the type of loan

Average Interest Rates on Different Types of Loans in 2018:Q4



Note: Non-mortgage loan rates are all for loans from commercial banks. Credit card rate is for accounts assessed interest.

Lenders generally charge **higher interest rates for unsecured loans such as credit card balances and “personal loans”** to compensate for the higher risk of these loans (all else equal)

Loans that are secured are less risky because the lender can claim the collateral if the borrower cannot pay

Source: [Federal Reserve Board](#) and [Freddie Mac](#) via FRED

Interest rates are only part of the cost of credit

There are many other factors that feed into the actual cost of a loan—including features like grace periods, up-front fees, regular fees, possible penalties for missing payments or paying the loan off early

Summarizing all of them is beyond the scope of this course but the important point is to:

ALWAYS READ THE FINE PRINT

What to make of “zero-interest” loans?

“Zero-interest” loans are a good example of lenders’ ability to adjust other things (like fees and penalties or the price you negotiate) to raise the cost of the loan without raising the interest rate



It may also be the case that the interest rate on the loan rises sharply after some teaser period

There’s nothing wrong with these loans *per se*, but make sure you understand the deal

The importance of shopping around

Research has shown that **borrowers can save big from shopping around for a mortgage** loan—even getting just one additional quote can save thousands of dollars

[With the caveat that for some types of loans (especially credit cards), additional “credit inquiries” can reduce your credit score—to read more, see [this](#) piece]

Number of offers	Reduction in rates		PDV of payment savings on typical \$250K mortgage loan	
	Avg.	90 th percentile	Avg.	90 th percentile
2	.08%	.12%	\$1435	\$2086
3	.12%	.17%	\$2125	\$2943
4	.15%	.20%	\$2578	\$3477
5	.17%	.22%	\$2914	\$3904

Source: [Freddie Mac](#)

Bad credit outcomes

You become **delinquent** when you fail to make payments; your loan moves into **default** when you fail to make several (usually three) payments

What happens then?

Sometimes, **you can work out a deal** with your loan servicer (the company managing your loan) that allows you to catch up and become current on your loan again

If this doesn't happen, you'll likely lose collateral (on a secured loan), have debt collectors pursue you, and take a hit to your credit score [next section]

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What are credit scores?

A credit score is a **number based on statistical analysis of a person's credit history** that represents their capacity to repay a loan (their “creditworthiness”)



is a well-known brand of credit score

Outstanding amounts of debt, types of debt, applications for new credit, payment record, and length of credit history all matter

But only information from your credit report matter for your credit score—not your income or assets

It's a good thing that we have modern credit scoring

If lenders can better predict delinquencies and defaults, **the cost of credit will generally be lower**

Before we had modern credit scoring, bank loan officers determined your creditworthiness in a less formal and less consistent way

Credit scores **facilitated risk-based pricing**, which means that higher-risk borrowers are charged a higher rate

Not as good as being charged a lower rate but better than not having access to credit at all

Why you should care about your credit score

Credit scores are **used by lenders** to make decisions about whether to extend credit to you and how much to charge

Also, **insurance companies, utility companies, landlords**, might also look at your credit score when deciding whether to do business with you

Prospective employers may look at credit scores [though some evidence that the effects aren't significant—[Dobbie, Goldsmith-Pinkham, Mahoney, Song, 2016](#)]

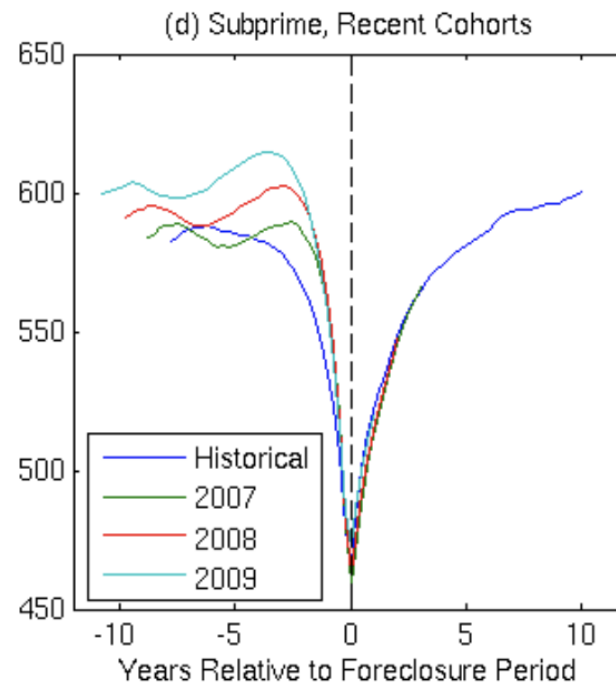
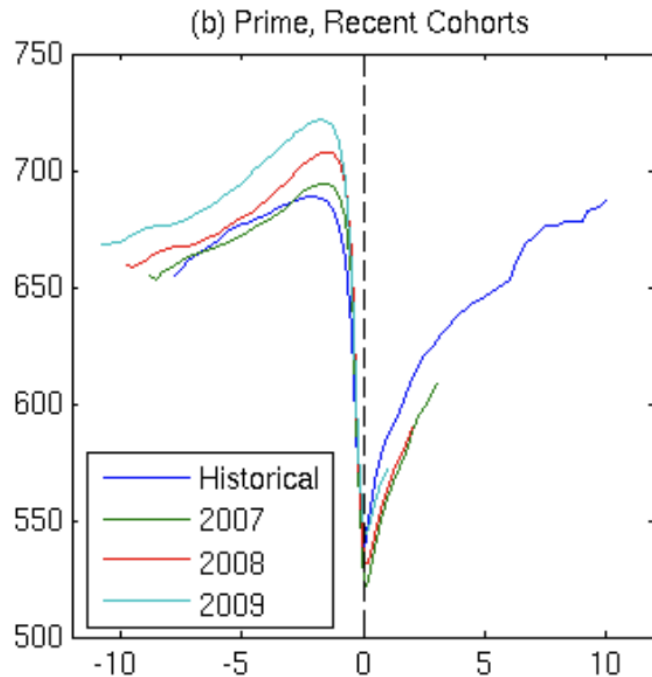
Higher credit scores will make it easier to get a loan and lead to a lower interest rates

How Experian (a major credit bureau) classifies different FICO scores

Credit Score	Rating	% of People	Impact
300-579	Very Poor	17%	Credit applicants may be required to pay a fee or deposit, and applicants with this rating may not be approved for credit at all.
580-669	Fair	20.2%	Applicants with scores in this range are considered to be subprime borrowers.
670-739	Good	21.5%	Only 8% of applicants in this score range are likely to become seriously delinquent in the future.
740-799	Very Good	18.2%	Applicants with scores here are likely to receive better than average rates from lenders.
800-850	Exceptional	19.9%	Applicants with scores in this range are at the top of the list for the best rates from lenders.

Source: Screenshot from [Experian](#)

Credit scores recover after being damaged by payment problems but only slowly



These charts are from an academic study looking at what happened to credit scores after mortgage borrowers defaulted and were foreclosed upon—prime borrowers were plunged into subprime range and remained in subprime range for several years

Screenshot from [Brevoort and Cooper](#) (2012); the different lines are for mortgages originated in different years

Do you even have a credit score?

Perhaps not—it depends on how much credit history you have

The [Consumer Financial Protection Bureau](#) found that about **40% of people between ages 20 and 24 had no credit score** because they had no credit record or too little data to score

Yes—there is a bit of a “**chicken and egg**” problem since you need credit to build a credit history but it’s hard to get a loan without a credit score

Some lenders offer ways to get around this (other than charging super high rates)—larger down payments, getting a co-signer, and securing your credit with collateral

Inaccuracies in credit reports

Credit reports can have errors—because of fraud but (more likely) just typos:

26% of participants in an [Federal Trade Commission](#) study found at least one material error on one of their credit reports

Most had their report modified after disputing the error, with about 13% seeing a subsequent change in their credit score and 5% being pushed into a higher tier [read how to dispute an error [here](#)]

The Consumer Financial Protection Bureau recommends checking your credit reports at least once a year [read how to do so for free [here](#)]

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For many of you, your first experience with credit will be with a credit card

Some **benefits** you might get from having a credit card:

- Convenience

- Help building a credit history

- Help getting through a rough patch (spending/income shock)

- Rewards

But:

- You want to avoid carrying over balances if at all possible—it's a very expensive way to borrow for the longer term

- You need to watch for fees and other complications—so **READ THE FINE PRINT**

Since 2000, the fine print on credit cards has been standardized

A summary like the one at right is available for all credit cards

There are websites that allow you to comparison shop

[always make sure you know how these services make money—*find one whose recommendations are objective even if they get paid when people apply or are approved for credit using their links*]

INTEREST RATES AND INTEREST CHARGES	
Purchase Annual Percentage Rate (APR)	15.99% . This APR will vary with the market based on the Prime Rate. ^a
Balance Transfer APR	15.99% . This APR will vary with the market based on the Prime Rate. ^a
Cash Advance APR	19.24% . This APR will vary with the market based on the Prime Rate. ^a
Overdraft Advance APR	19.24% . This APR will vary with the market based on the Prime Rate. ^a
Penalty APR and When It Applies	29.99% . This APR will vary with the market based on the Prime Rate. ^c The Penalty APR will be applicable to your Account if you: • fail to make any Minimum Payment by the date and time due (late payment); • make a payment to us that is returned unpaid; or • do any of the above or exceed your credit limit on another account or loan you have with us or any of our related banks. How Long Will the Penalty APR Apply: If your APRs are increased for any of these reasons, the Penalty APR will apply indefinitely.
How to Avoid Paying Interest on Purchases	Your due date will be a minimum of 21 days after the close of each billing cycle. We will not charge you periodic interest on purchases if you pay your entire balance by the due date each month. We will begin charging interest on balance transfers, cash advances, and overdraft advances on the transaction date.
Minimum Interest Charge	None
Credit Card Tips from the Consumer Financial Protection Bureau	To learn more about factors to consider when applying for or using a credit card, visit the website of the Consumer Financial Protection Bureau at http://www.consumerfinance.gov/learnmore .
FEES	
Annual Membership Fee	\$0 Intro fee for the first year. After that, \$95
Transaction Fees	
Balance Transfers	Either \$5 or 3% of the amount of each transfer, whichever is greater.
Cash Advances	Either \$10 or 5% of the amount of each transaction, whichever is greater.
Foreign Transactions	None
Penalty Fees	
Late Payment	Up to \$15 if the balance is less than \$100; up to \$25 if the balance is \$100 to less than \$250; up to \$35 if the balance is \$250 or more.
Return Payment	Up to \$35 .
Return Check	Up to \$35 .

An interactive version with good explanations is [here](#)

Other features to check out

Many credit cards charge you an extra **fee for international transactions** (often 3% of the total) but you can find cards that have no fee which can save you a lot of money if you frequently travel

How about **rewards**? It depends on your personal situation, but, for most people, a card that offers **cash or something like cash** back (points you can use at a retailer that you shop a lot at) will be a good choice

If you have a good credit score, you should be able to get a card with no annual fee that gives you 1-2% in cash back

How do you get a credit card if you've never had credit?

Generally **a bad idea to apply repeatedly** until you find a company that will take you—your credit score will go down as the number of inquiries goes up

A good option is to start with **secured credit card**:

You send in a security deposit (a few hundred dollars) which become your credit limit

Then use your card, pay your bills

With consistent payments for a while, you'll get your deposit back and be able to get an unsecured card

[To learn more, see [this piece](#)]

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Basic background on student loans

Most student loans (about 90% of new loans) are from the U.S. government

A key feature of the U.S. government program is that riskier borrowers are not charged higher rates or (when undergrads) denied loans

For undergrads, [interest rates on new loans](#) have ranged between 3.8% and 5.1% in recent years—very low for an unsecured loan!

Paying off your student loan

Repayment begins after a **grace period of 6 months** after graduation or separation

The standard **repayment period is 10 years**

Defaulting has the same bad consequences as it has for other loans—hurts your credit score, debt collectors may pursue you, your wages may be at risk of garnishment

And you cannot discharge student loans in bankruptcy

If you have difficulty making your payment

If you face temporary hardship, your servicer may grant you **forbearance** or put you in **deferral**

If your income is too low on an ongoing basis, your servicer can help you enroll in an **income-driven-repayment (IDR) plan** that limits your monthly payment to a given fraction of your income—and forgives remaining balance after 20-25 years of reasonable payments

You'll need to recertify every year

IDR is **good in the sense that it allows you to avoid default**; but the balances are still there and you accumulate interest on the shortfall relative to the standard payment

What about refinancing your federal student loan into a private loan with a lower rate?

Some lenders recognize that, as a Harvard graduate, you are likely to have a high future ability to repay your loan, warranting a lower rate

Refinancing might make sense *in some cases*, but, you need to be careful to **READ THE FINE PRINT**

Is the rate really lower or are the payments lower because of a longer loan term? Will the rate go up in the future?

In general, you should recognize that you will be giving up benefits of the federal loan program like IDR

Borrowing to finance additional education

The federal government also offer loans to fund graduate education

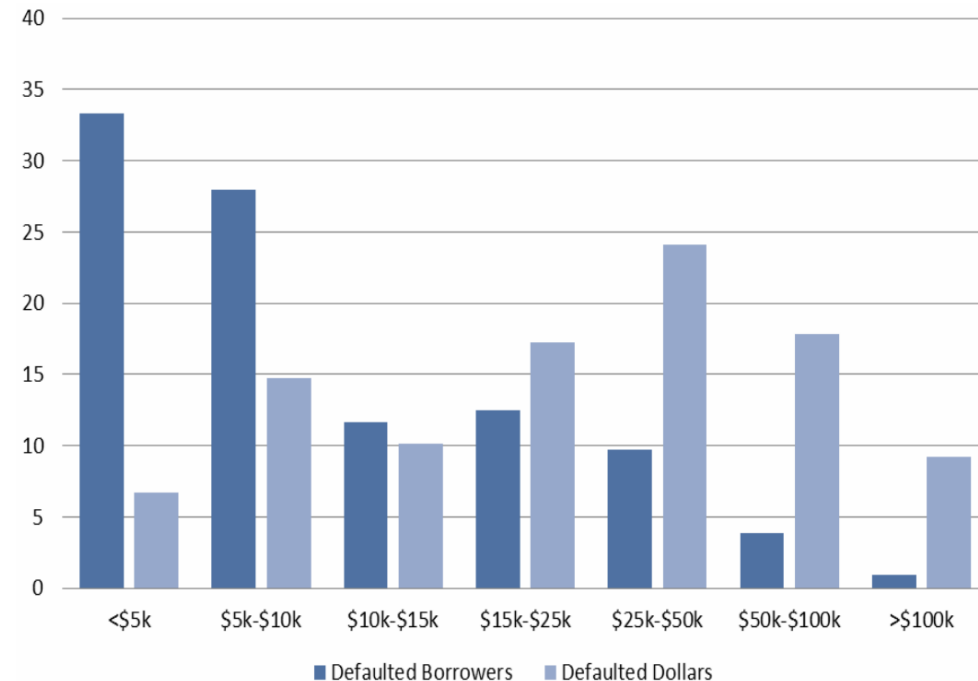
Under the “**Direct**” **program** (current interest rates at 6.6%), you can borrow \$20,000 per year—up to a total of \$138,500 including your undergraduate loans

If that’s not enough, you can borrow more through the **PLUS program** at slightly higher rates—with the amount limited only by the cost of attendance at an accredited institution

Considerations

Although many graduate students (particularly professional students) rack up a lot of debt, they also end up with very high incomes such that the share of borrowers with high balances defaulting is very low

Share of Borrowers and Dollars in Default



Screenshot from [Looney and Yannelis, 2018](#)

Considerations

But, of course, whether it makes sense to invest in further higher education (and finance it with loans) will vary depending on your individual circumstances so you'll want to think it through carefully

Take-aways

Credit provides opportunities but comes with risks

Think about the all-in cost of a loan

Make your loan payments

Check your credit report

Shop around (but be careful about multiple credit card inquiries)

Read the fine print!