

PERSONAL FINANCE > BANKING > SAVINGS

What Is APY? Understanding How Annual Percentage Yields Work

Written by [Dori Zinn](#) and [Sophia Acevedo](#); edited by [Sarah Silbert](#) Oct 18, 2024, 1:34 PM EDT



APY, or annual percentage yield, measures your interest rate over a year. FG Trade/Getty

Introduction to APY

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How APY works

- **Annual percentage yield (APY) is the rate of return you earn over a year on deposit accounts.**

Understanding changes in APY

- **APY can be fixed or variable; this means rates may stay the same for a set time or fluctuate.**

How to find the best APY offers

- **The APY on a deposit account may be affected when the Federal Reserve changes interest rates.**

APY and your financial health

FAQs

There are many ways to earn interest on your money. Investing in the stock market is one way to go about building wealth over time. However, you can also take a more conservative approach and earn money through deposit accounts, like savings or certificates of deposits (CDs), that offer an APY, or annual percentage yield.

Introduction to APY

Definition of APY

APY is what you'll earn on interest on a deposit account over the course of a year. It's common for consumers to earn an APY through deposit accounts such as savings accounts, certificates of deposits (CD), and money market accounts. An APY is always expressed as a percentage and is what you'll earn on funds that you keep in your account year-round.

"It is generally assumed the investment is to be held for 365 days," says Laura Lonie, CPA and Financial Coach at [Laura J. Lonie LLC](#). Lonie adds that this is helpful when consumers are comparing various CDs or deposit accounts in that they can better understand what they can earn on their money without having to calculate the interest themselves.

APY vs. interest rate

APY and interest rates have some overlap, but they are different. While APY represents what you can earn on a deposit account, interest rate by itself commonly represents what you're charged for an auto loan, [credit card](#), or mortgage.

"The interest rate does not take into effect compounding interest, and the APY includes compound interest," Lonie says. "Interest rate is generally used for loans and APY for deposit-type accounts."

APY	Interest rate
Calculated using compounding interest	Calculated using simple interest

Used for deposited accounts, like savings, CDs, and money market accounts	Used in deposit accounts or to borrow money, like loans or credit cards
Can have fixed or variable rates, depending on the account	Can have fixed or variable rates, depending on the account

APY vs. APR

Annual Percentage Rate (APR) is the cost of borrowing money at a yearly rate.

Both APY and APR use interest rates in their calculations. However, APY uses compounding interest, where you get interest on the principal amount and the earnings. APR doesn't have that. It is calculated with fees, though, which isn't a factor that's taken into account with APY.

"The APY includes interest earned on interest while the APR uses the simple interest method," Lonie says. "Generally, APY is used for deposit-type accounts and APR for loans or credit cards."

Hence, APYs give a holistic view of what you earn, while APRs are a realistic view of what you'll pay. When comparing products, use either APYs or APRs, not just interest rates.

APY	APR
Determines what you earn	Determines what you pay
Used to calculate what you can earn on your money on deposited accounts	Used to calculate the cost of borrowing for loans or credit cards
Computes using compound interest	Calculated with any fees or charges

The higher the APY, the higher the total return on investment

The lower the APR, the less extra you pay out of pocket in interest

How APY works

APY calculates the total amount of interest earned in an account over the course of one year. It includes your interest rate and your compounding interest, or what you earn on the principal amount plus the interest on your earnings.

"A savings account held for one year at a lower interest rate than one held for two years may have a higher amount of interest earned because interest is compounded more frequently on the one-year term account," Lonie says. "Because APY annualizes the investment a consumer can compare APYs even though they have different holding periods and interest may be compounded differently, such as quarterly versus monthly."

You might see APY in products like savings, checking, CDs, and money market accounts. These are all considered types of savings accounts.

Calculating APY: The formula

To calculate APY, you'll need to use the following formula:

How to calculate APY on savings accounts

To get a better sense of how APY works, let's take an example. You deposit \$1,000 into a 12-month CD offering a 5% interest rate, compounded monthly.

Using the above equation, here's that broken down:

Steps	Formula
1. Plug in the period rate and the number of compounding periods in the formula. (In this case, the compound period is 12, since its compounded monthly.)	$(1 + 0.05 \div 12)^{12} - 1$
2. Solve the operation in parentheses.	$(1.0041666666667)^{12} - 1$
3. Raise the quantity in the parentheses to the power of 12.	1.05116 -
4. Subtract by 1 to get APY.	5.116%
5. Mutiply APY by the amount you deposited into the account. This will determine the total interest earned.	$\$1,000 \times 5.116\% = \51.16
6. Add the total interest earned to the original amount deposited into the account. This will determine the total amount in your account at the end of the year.	$\$1,000 + \$51.16 = \mathbf{\$1,051.16}$

Compound interest calculator

Use our free [compound interest calculator](#) to determine your account balance based on your initial deposit, length of investment, monthly contributions and rate of return. If you click on "More Details" you'll also see the total interest earned.

Compound Interest Calculator (i)

Initial investment
\$5,000

Length of investment (years)
5

Contribute
\$500 Monthly Annually

Rate of return
9 %

Compounding frequency
 Daily Monthly Annually

\$10,685

Your balance after 5 years

[More details](#) ▾

Understanding changes in APY

Variable interest rates vs. fixed interest rates

APY can play an important part in choosing and opening a savings account.

The type of APY you have depends on the financial product you have. Many offer a variable APY, like checking accounts, savings accounts, and money market accounts. Some products like CDs offer fixed APYs.

When a bank account has a variable interest rate that means it can change over time. Banks have their own criteria for deciding rate changes, but many accounts are also influenced by factors like the Federal Reserve's actions.

Bank accounts with a fixed interest rate will keep a specified rate for the timeframe that you have your account open. For example, a 1-year CD will maintain the same rate for a 12-month period. If you choose to renew the account, though, the interest rate for the new account may be different from the previous rate earned.

Impact of Federal Reserve rates on APY

As stated previously, accounts with a variable APY typically see rates go up and down at any moment. One major factor that influences these account changes is the Federal Reserve's decisions. The Fed's actions impact the national economy, which banks respond to with rate adjustments on various products.

When the Federal Reserve changes its target interest rate, variable-rate accounts typically follow. Hence, variable-rate accounts often raise rates when the Federal Reserve increases rates, and accounts will often start lowering rates when the Federal Reserve cuts rates.

Paying attention to upcoming Fed meetings can help you keep track of potential rate changes and larger savings rate trends.

How to find the best APY offers

Because APY represents what you earn on your money, the higher the APY is, the better. "[A good APY is] the highest yield available to you," Lonie says. "It varies depending on the economy."

That means you should explore all your options when shopping around for a savings account or CD to find the highest APY available. Remember: The higher the APY, the more earning potential you have.

To find the best APY offers, there's two factors you should keep in mind: the type of financial institutions and the individual accounts APY details.

APY at online banks vs. traditional banks

If you're looking at variable-rate options, bear in mind high-yield savings accounts generally offer better rates than traditional savings accounts. Traditional banks only tend to offer traditional savings accounts, and their higher-tier savings accounts often have more substantial fees. You can find the best high-yield savings accounts at online financial institutions, which often have accounts with no monthly service fees.

The best CD rates are primarily available at online-only banks and credit unions, too. Sometimes traditional banks offer a special promotion for existing customers who meet certain requirements, but overall, online financial institutions tend to stand out for a variety of terms.

APY disclosure details

Ask for account disclosures when you can't find the account details on the bank's website. A disclosure document includes information such as an account's APY. It's also helpful to have this document to

make sure you understand everything about the account you're interested in.

Banks are required to provide account disclosures because of the Truth in Savings Disclosure Act. Some banks may provide this document online, while others will give you this information right before the account is opened. You can also request this information at any time, even if you are only a prospective customer.

When a bank offers a high APY, there may be limitations or criteria for earning that interest. For example, you might be required to maintain a certain amount of money in your account, or you might need to perform certain actions to qualify for the rate, like receiving direct deposits or making debit card purchases.

With CDs in particular, there is also liquidity risk. If you take out money from a CD before it reaches maturity, you'll have to pay an early withdrawal penalty. Banks often charge some of the interest you've earned, which eats away at your earnings.

APY and your financial health

Long-term savings growth

Savings accounts are useful for short-term savings goals. If you're looking for more long-term savings growth and are comfortable taking more risks, you might consider investing.

So how do you decide between a CD or a savings account? Well, CDs typically offer a higher APY than savings accounts. You may prefer CDs over other savings accounts if you don't need immediate access to your savings. They aren't the best choice for frequent deposits and withdrawals, though.

High-yield savings account rates may not be as competitive as CDs, but they are still good overall. You may choose a high-yield savings account over a CD if you want access to your money. High-yield savings accounts are also ideal places for an emergency fund.

Strategies for maximizing APY

One strategy that's often used to provide more flexibility to CDs is building a CD ladder. To create a CD ladder, you'll distribute your money between several CDs of different term lengths. This will allow you more flexibility with your money because some will be available at different maturity dates.

This strategy will also protect against rate volatility. If CD rates rise in the future, you'll be able to open a CD once the shortest term in your ladder matures. Furthermore, if rates drop in the future, you'll still have a long-term option that maintains a fixed interest rate until it reaches maturity.

If you're comfortable managing multiple bank accounts, you could open multiple savings accounts to save for individual goals in each one.

By opening savings accounts from different financial institutions, you can also get covered for more money by the FDIC. The FDIC protects up to \$250,000 per depositor per ownership account category at each bank. The NCUA offers the same federal insurance amount for credit unions.

Understanding APY FAQs

What does APY stand for, and why is it important? 

How is APY calculated? 

Can APY change over time? 

Does a higher APY always mean a better deal? 

How often is interest compounded in calculating APY? 

Dori Zinn

Dori Zinn is a freelance contributor to Insider. She has been a personal finance journalist for more than a decade. Her work has been featured in the New York Times, CNET, Forbes, Yahoo!, TIME, and others. She

[Read more](#)

Sophia Acevedo

Banking Editor

Sophia Acevedo is a banking editor at Business Insider. She has spent three years as a personal finance journalist and is an expert across numerous banking topics. **Experience**Sophia leads Personal Finance

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