



May 2026

When a Penny Costs More Than a Penny: The Economics Behind Ending the Cent

Scott A. Wolla, Assistant Vice President

The penny was one of the [first coins produced](#) by the U.S. Mint, authorized under the Coinage Act of 1792. And it has been part of the fabric of American life and culture ever since.

People have referred to the penny to describe literal and metaphorical saving and spending: the advice that “a penny saved is a penny earned,” the judgy description of particularly frugal people as “penny pinchers,” and expressing an opinion as “my two cents.”

But all good things come to an end. On [November 12, 2025](#), the U.S. Mint struck its final circulating penny in Philadelphia, marking an end to 232 years of penny production.

The Economics of Penny Production

The penny costs, well, *a pretty penny* to produce. And that has real implications for government spending.

When the government produces coins, it usually earns **seigniorage**, which is the difference between a coin’s face value and the cost of producing it. Because coins are sold to banks at their face value, the government normally earns the difference between face value and production cost. For example, if it costs five cents to make a dime, the government earns five cents in seigniorage.

However, when it costs more to produce a coin than the coin is worth, seigniorage becomes negative. Over the past decade, the cost of producing a penny has risen sharply—[from 1.3 cents per coin to 3.69 cents per coin](#). The rising cost reflects increases in the price of raw materials, primarily zinc and copper, as well as higher facilities and overhead expenses. So, the government loses money on each penny it produces.

In fiscal year 2024, the U.S. Mint produced over [3 billion pennies, accounting for 57% of its total circulating coin output of 5.6 billion coins](#). According to their annual report to Congress, they lost [\\$85.3 million on making pennies that year \(PDF\)](#). (See the table below.)

U.S. Coin Production: Costs, Distribution, and Seigniorage, 2024

	Cost per unit	Coins distributed	Net profit/loss (seigniorage)
Pennies	3.7¢	3,172 million	–\$85.3 million
Nickels	13.8¢	202 million	–\$17.7 million
Dimes	5.8¢	840 million	\$35.6 million
Quarters	14.7¢	1,605 million	\$165.6 million
Half-dollar	34.2¢	52 million	\$8.4 million

SOURCE: United States Mint 2024 Annual Report. Total seigniorage in 2024 was \$106.6 million, which represents 0.0015% of that year’s federal government budget of \$6.8 trillion.

The Mint projects that stopping penny production will reduce enough material costs to generate approximately \$56 million in annual savings.

Money as a Medium of Exchange

Another issue is whether the penny still serves one of money's main functions—as a **medium of exchange**. Money makes buying and selling so much easier, compared with trading goods through bartering.

But the way people make payments has changed over time. The use of physical currency and coins has declined as more consumers rely on debit cards, credit cards, mobile apps, and other electronic payment methods. According to a 2025 Federal Reserve study, cash accounted for only [14% of transactions in 2024](#). People's age also mattered: Those aged 55 and older used cash for 19% of their transactions, while those aged 18-24 used cash for only 10%. If these trends continue, the use of physical money, including coins, will likely keep falling.

The penny, in particular, seems to have lost much of its usefulness. Pennies are often left in jars at home or in cups on store counters, tossed in the trash, or ignored on sidewalks. When people choose not to spend a coin, or even pick it up, it suggests that they don't think it has much value.

Rounding to the Nearest Nickel

While penny production has ceased, existing pennies are still **legal tender**; by some counts, there are 300 billion of them still in circulation. The U.S. Treasury Department is encouraging people to spend their pennies to give retailers time to adapt to life without the coin. As pennies disappear, businesses will need to round cash transactions either up or down to the nearest five cents.

The most recommended form of rounding is symmetrical rounding:

- If the final digit of the total transaction amount (including taxes) is 1, 2, 6, or 7 cents, the amount is rounded down to the nearest multiple of five.
- If the final digit is 3, 4, 8, or 9 cents, the amount is rounded up to the nearest multiple of five.
- Transactions totaling exactly \$0.01 or \$0.02 should be rounded up to \$0.05 so that they do not round down to zero.

Transactions made using checks, gift cards, electronic methods, or other non-cash instruments would not be affected, because there is no rounding for payments made electronically.

Will Rounding Increase Overall Consumer Prices?

For cash transactions only, the final transaction prices will likely be rounded down just as often as they will be rounded up, so, on average, there would be very little overall effect on consumer prices. But estimates vary. For example, a [Richmond Fed article](#) showed that consumers could pay a "rounding tax" amounting to about \$6 million annually. A [Canadian study](#) that used evidence from grocery stores after the Canadian penny was eliminated found that stores benefited, transferring \$3.27 million (Canadian)

from consumers to grocery stores every year. A [2007 study](#), using data on nearly 200,000 transactions from a convenience store chain, showed that rounding had a very small benefit for the consumer.

Conclusion

There's good reason to eliminate the penny, as it costs more to produce the coin than it is worth. And over time, **inflation** reduces the purchasing power of money, meaning each dollar, or cent, buys fewer goods and services. Over 232 years, the penny's purchasing power has diminished to the point that many people no longer seem to value it.

It might be hard to think about life without the penny, but we've been in a similar situation before. When the U.S. Mint stopped producing the half-cent in 1857, people adjusted their financial transactions by rounding to the nearest one cent. In the end, the story of the penny is a simple one: When the costs outweigh the benefits, even the smallest forms of money may no longer make "cents."

Glossary

Inflation: A general, sustained upward movement of prices for goods and services in an economy.

Legal tender: Money that a government has declared must be acceptable as payment for debts, taxes, and other forms of monetary obligations.

Medium of exchange: Anything that is generally acceptable in exchange for goods and services.

Seigniorage: The profit the government earns from issuing money, calculated as the difference between a coin or bill's face value and the cost to produce it.

References

Bayeh, Behran; Nardone, Isaiah; O'Brien, Shaun and Phelps, Hailey. "2025 Findings from the Diary of Consumer Payment Choice." Federal Reserve Financial Services.

Cheung, C. "Eliminating the Penny in Canada: An Economic Analysis of Penny-Rounding on Grocery Items." *Atlantic Economic Journal*, 2018, 46, pp. 231–39.

U.S. Department of the Treasury. "Penny Production Cessation FAQs." December 23, 2025.

United States Mint. "United States Mint Hosts Historic Ceremonial Strike for Final Production of the Circulating One-Cent Coin." U.S. Department of the Treasury, November 12, 2025.

United States Mint. "2024 Annual Report." U.S. Department of the Treasury.

United States Mint. "Penny FAQs." U.S. Department of the Treasury.

United States Mint. "The History of U.S. Circulating Coins." U.S. Department of the Treasury.

Wang, Zhu and Wong, Russell. "Rounding Up: The Impact of Phasing Out the Penny." Federal Reserve Bank of Richmond *Economic Brief*, July 2025, No. 25-27.

Whaples, Robert. "Time to Eliminate the Penny from the U.S. Coinage System: New Evidence." *Eastern Economic Journal*, 2007, 33(1), pp. 139–46.

Name _____ Period _____

Reading Q&A

When a Penny Costs More Than a Penny: The Economics Behind Ending the Cent

After reading the article, complete the following:

1. What is seigniorage?
 - a. The difference between a coin's face value and its production cost
 - b. The increase in a coin's value after it enters circulation
 - c. The total number of coins produced by the U.S. Mint
 - d. The amount of tax revenue collected from coin production

2. What happens when seigniorage becomes negative?
 - a. The government earns more than it spends producing coins.
 - b. The government breaks even on coin production.
 - c. The government loses money on each coin produced.
 - d. The government increases the value of the coin.

3. How much did it cost to produce a penny in recent years?
 - a. About 1.3 cents per coin
 - b. About 2.5 cents per coin
 - c. About 3.69 cents per coin
 - d. About 5.61 cents per coin

4. Which of the following best describes money's role as a medium of exchange?
 - a. It allows people to save money for future use.
 - b. It makes buying and selling easier by eliminating barter.
 - c. It increases the supply of metals in circulation.
 - d. It prevents prices from rising over time.

5. According to the Federal Reserve study cited, what percentage of transactions were made using cash in 2024?
 - a. 10 percent
 - b. 14 percent
 - c. 19 percent
 - d. 57 percent

6. What is one sign that many people no longer see the penny as very useful?
 - a. It is no longer legal tender.
 - b. It is made of only rare metals.
 - c. People often ignore or discard it.
 - d. It cannot be used for electronic payments.

7. Under symmetrical rounding, what happens to a cash purchase ending in four cents?
 - a. It is rounded down to the nearest five cents.
 - b. It is rounded up to the nearest five cents.
 - c. It stays at the exact same amount.
 - d. It is rounded down to the nearest ten cents.

8. Which transactions would NOT be affected by rounding?
 - a. Electronic payments made by debit card
 - b. Cash payments at grocery stores
 - c. Cash payments at convenience stores
 - d. Cash payments at small retail shops

9. Which statement best explains how inflation contributes to arguments for eliminating the penny?
 - a. Inflation reduces the number of pennies the government can legally circulate each year.
 - b. Inflation increases the cost of producing coins, making it cheaper to mint pennies today than in the past.
 - c. Inflation decreases purchasing power over time, making the penny less useful.
 - d. Inflation causes stores to stop accepting coins as a form of payment.

10. What historical example shows that the U.S. has eliminated small coins before?
 - a. The removal of the nickel in 1905
 - b. The end of the silver dollar in 1934
 - c. The suspension of gold coins in 1971
 - d. The end of the half-cent in 1857