

CBO TESTIMONY

Statement of
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on
Creating a New One-Dollar Coin

before the
Committee on Banking, Housing,
and Urban Affairs
United States Senate

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NOTICE

This statement is not available for public release until it is delivered at 10:00 a.m. (EDT) on Thursday, July 13, 1995.



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Mr. Chairman and Members of the Committee, I appreciate the opportunity to discuss the cost savings and budgetary impact from the proposal to eliminate the one-dollar bill and replace it with a new one-dollar coin. In my statement, I will make four points:

- o Savings to the government in production and processing costs from substituting the more durable dollar coin for the Federal Reserve dollar note would be on the order of \$150 million per year when the change is completed.

- o Conversion would also have a favorable effect on the budget deficit. The Congressional Budget Office (CBO) estimates that over the 1996-2000 period, budgetary savings would total \$100 million as a direct result of reduced production and processing costs. That estimate is based on a generic proposal that contains several key assumptions, including a 30-month lead time before new coins would be placed into circulation, a 60-month conversion period, and an increased circulation of two-dollar notes. After the switch to coin is complete, budgetary savings could exceed \$200 million per year--an even larger amount than the government's saving on production and processing costs. Those savings, however, would occur well beyond the five-year window used by CBO to estimate budgetary effects.

- o Differences between estimates of savings to the government by CBO, the General Accounting Office (GAO), and the Federal Reserve arise from measuring different items over different time frames, not from significant discrepancies over basic assumptions.

- o Switching from one-dollar bills to one-dollar coins could also have secondary effects that could produce additional budgetary savings. Those effects consist of reductions in the interest costs on the government's debt and are not scorable under the Budget Enforcement Act (BEA). They would result only if the public was willing to hold a higher value of coins than notes; for example, if the public was willing to hold two one-dollar coins for each one-dollar note formerly held.

COST SAVINGS TO THE GOVERNMENT

The total cost of producing and processing coins and currency could be reduced by substituting dollar coins for dollar notes because the long-run annual cost of a coin is lower than the corresponding cost of a note. A dollar coin would cost about 8 cents to produce, which is more than twice the 3.8 cents that it costs to produce a dollar note. The higher initial cost of the coin is more than offset, however, by its

significantly longer useful life (30 years versus 1.5 years). In addition, the costs to the government of maintaining the quality and integrity of coins are lower than they are for notes, which must be inspected individually for fitness and counterfeits. By contrast, coins can be checked by weight.

One way of expressing the savings is to compare the average yearly cost to the government of meeting the public's need for a dollar of coin or currency over the expected 30-year life of a coin. If the government meets that need by furnishing a note, it will have to produce 20 one-dollar notes over the 30-year period to replace continuously those that wear out in order to keep a single one-dollar note in circulation. Thus, the average annual production cost for notes is about 2.5 cents (3.8 cents divided by 1.5 years) per dollar in circulation. By contrast, if the government meets the public's need for one-dollar currency through coins, the average annual production cost is only 0.27 cents (8 cents divided by 30 years) for each dollar in circulation. In addition, the more frequent and higher processing cost of notes adds to the cost of keeping a dollar note in circulation. Therefore, the government saves between 2 cents and 3 cents per year for each dollar coin that replaces a dollar note. That would add up to a savings of \$120 million to \$180 million a year if \$6 billion in notes were replaced by an equal amount in coins.

However, other factors could affect the total cost savings of replacing the one-dollar note. Most important, if the assessments of GAO and the Federal Reserve are

correct, two coins will be needed to replace each dollar note. In addition, a more precise calculation of the savings to the government in production and processing costs in any particular future year requires a large number of assumptions and projections. Those include the projected year-by-year growth in the demand for dollar notes under current policy; the 30-year outlook for the cost of producing and handling notes and coins; the extent to which the costs of production and processing are variable over the long run; the speed at which the Mint's capacity for coin production can be increased; the rate at which the public will be willing to accept coins for notes; the increase in demand for other denominations of notes that will result from withdrawing the one-dollar note; the effect of that change on the demand for other denominations of coin; and the appropriate discount rate for converting future costs to present values.

Both the Federal Reserve and GAO have developed spreadsheet models of those cost processes. The Federal Reserve, for example, estimates that the steady-state savings to the government in production and processing costs from converting to a one-dollar coin would be \$164 million per year (in 1994 dollars). The General Accounting Office has stated that those average annual savings would be \$135 million.

THE EFFECTS ON DEFICIT REDUCTION OF CONVERTING TO COINS

Under BEA scoring conventions, the budgetary and cost savings from substituting dollar coins for dollar notes are not identical. In fact, replacing notes with coins would reduce the budget deficit by more than the total savings to the government in production and processing costs for the 1996-2000 period. That difference arises because the reduction in the cost of producing and handling Federal Reserve Bank notes is reflected in the budget deficit, but the increase in the cost of producing coins is not.

The disparate treatment of the cost of notes and coins, which has no apparent economic justification, arises from a series of decisions by the 1967 President's Commission on Budget Concepts. The commission decided to exclude the Federal Reserve Banks from the budget and to count the payment to the government of Federal Reserve earnings as a governmental receipt--that is, a federal revenue. Those earnings cover the costs of operations for the Federal Reserve, including the costs of purchasing and processing currency. Consequently, a reduction in the cost of producing and processing Federal Reserve notes is reflected in higher Federal Reserve earnings and budget receipts. By contrast, the cost of producing coins is reflected in the budget as an outlay. But it is offset, dollar for dollar, by counting a portion of the value of the coinage produced as offsetting receipts in the budget.

Therefore, although the costs of producing coins are real, those costs do not increase the budget deficit.

Preliminary figures from the Mint indicate that changing to one-dollar coins would require spending \$72 million over the 1996-2000 period. That amount includes \$21 million for new equipment, approximately \$20 million for the Mint to carry out its one-time public awareness campaign, and \$3.8 million for melting down the remaining Susan B. Anthony dollars. By established budget convention, those costs would be financed from the "profits," or seigniorage, that accrues to the government from the difference between the cost of producing coins and their exchange value. Thus, the added costs of producing coins would not affect net budget outlays or the reported deficit.

It should be noted, however, that start-up and initial production costs at the Mint for new dollar coins would lead to small increases in federal borrowing and interest costs. At first, the seigniorage to offset the costs of new coins would derive from coins manufactured under current law. Net seigniorage, which is used as a means of financing the budget deficit in lieu of borrowing from the public, would be reduced as a result. In later years, introducing the dollar coin would produce gains in seigniorage. BEA conventions, though, preclude scoring the interest effects of federal transactions.

Consequently, the scorable budgetary savings from substituting one-dollar coins for one-dollar notes is simply the Federal Reserve's lower cost from producing and processing a smaller volume of notes. The savings would be reflected in the increase in the Federal Reserve's net income that is paid to the federal government each year. Those reductions in Federal Reserve costs and the increased federal receipts are projected to total \$100 million during the next five years under the generic proposal examined by CBO (see Table 1). That estimate assumes a 30-month lead time for new dollar coins to be placed into circulation, an annual production capacity at the Mint of 2 billion new coins, a phaseout of dollar notes over a five-year period, and increased production of two-dollar notes.

TABLE 1. ESTIMATED BUDGETARY IMPACT FROM THE ONE-DOLLAR COIN
(By fiscal year, in millions of dollars)

	1996	1997	1998	1999	2000	Five-Year Total
Increased Federal Reserve Earnings (Revenues)	0	0	20	30	50	100
Increased U.S. Mint Costs (Outlays)	23	3	10	22	14	72
Increased Offsetting Receipts (Outlays)	-23	-3	-10	-22	-14	-72
Net Savings	0	0	20	30	50	100

SOURCE: Congressional Budget Office.

Budgetary savings above those recognized in the CBO estimate would occur if the proposal were analyzed for years beyond the five-year budget window. Because of the 30-month lead time to produce new coins, no budgetary savings would occur in 1996 or 1997. Further, in 1998, the Federal Reserve would reap the benefits of lower costs from substituting coins for only half a year. Even by 2000, the Federal Reserve would still be incurring some costs from purchasing and processing dollar bills. Therefore, the average annual budgetary savings over the first five years are much lower than they would be over the long term.

Different budgetary savings would result if the Congress shortened the phaseout period of dollar notes. Shortening the phaseout period would also affect the time-pattern of budgetary savings.

The experience of other countries suggests that the One Dollar Coin Act of 1995 (S. 874) may require revisions in its timing to become more workable. That experience indicates that a quick transition from notes to coins increases the likelihood of public acceptance. A speedy conversion, however, requires that a large stock of new coins be minted before the changeover. Although S. 874 would phase out dollar notes over about 18 months, it would not allow sufficient lead time for the Mint to produce the coins to replace those notes. The Mint has stated that it needs a 30-month lead time. The legislation, however, requires that new dollar coins be placed into circulation within 18 months of the date of enactment. Thus, if the \$6

billion in dollar notes now in circulation were phased out within 18 months of the introduction of new coins, the Mint would be able to supply only 3 billion replacement coins.

Even with a 30-month lead time to produce dollar coins, the Mint's limited annual production capacity of 2 billion coins would almost certainly create shortages of one-dollar currency. Those shortages would be likely to slow the conversion and raise public resistance to the changeover. That resistance could prompt lawmakers to allow dollar notes to remain in circulation or even worse to reconsider the changeover during midcourse. Those developments could lead to the failure of a new dollar coin similar to that of the Susan B. Anthony dollar, but on a much larger scale.

One solution would be to extend the lead time to produce new coins. That would enable the Mint to create a preconversion stockpile of several billion coins. Another solution would be to expand production capacity at the Mint to accommodate, for example, the manufacture of 3 billion or 4 billion coins per year. Both alternatives could substantially reduce the likelihood of currency shortages and the risk of failure, but would involve a large up-front investment and change the budgetary savings from the proposal.

DIFFERENCES BETWEEN ESTIMATES OF SAVINGS

The General Accounting Office and the Federal Reserve have projected much larger budgetary savings to the government from substituting the one-dollar coin for the one-dollar note than has CBO. Those larger estimates, however, are not the result of disagreements over basic assumptions, such as the cost to produce coins or process notes. Rather, the dissimilarities stem from different approaches, items of measurement, and time frames.

CBO's estimate covers only the direct budgetary savings from replacing dollar notes with coins over the five-year budget window--that is, the reduced purchasing and processing costs at the Federal Reserve. Although the Mint would incur new costs, they would be offset by seigniorage and net to zero in the budget. Further, gains in seigniorage from the new coins do not factor into calculations of the federal budget deficit. In accordance with the President's Commission on Budget Concepts, seigniorage is treated as a means of financing; that is, it helps only to finance--not reduce--the budget deficit.

By contrast, the savings estimates of the Federal Reserve and GAO measure the long-run impact from substituting dollar coins for notes over a 30-year period. Consequently, those estimates incorporate items that do not have direct budgetary effects. For example, additional costs at the Mint for start-up and operations, reduced

portfolio earnings to the Federal Reserve System, and diminished government borrowing costs are netted out in their estimates of savings. In particular, the lower Federal Reserve earnings and reduced government borrowing costs are large items in those estimates, and consequently, anticipated average annual savings balloon to upward of \$400 million.

The fundamental source of those additional savings cited by GAO and the Federal Reserve is an assumption that the public will choose to hold more than a single one-dollar coin for each one-dollar note that is withdrawn from circulation. Specifically, once the conversion to coins is complete, the Federal Reserve and GAO assume that:

- o Twenty-five percent of the value of one-dollar notes in circulation will be held in two-dollar notes; and
- o For the remaining one-dollar notes formerly in circulation, the public will choose to hold two coins for each note.

Therefore, the Federal Reserve and GAO estimate that \$9 billion in one-dollar coins and \$1.5 billion in additional two-dollar notes would replace the \$6 billion in one-dollar notes now held. As a result, the public's total holding of coins and notes is assumed to increase by \$4.5 billion.

The General Accounting Office and the Federal Reserve cite the experience of other countries that have converted a currency note to a coin to support their assumption that the replacement rate will be much higher than one-to-one. In the cases studied, a replacement rate of 1.6 to 4 coins for each note withdrawn was reported. Whether those estimates and the experience of other countries would be directly applicable to the experience of the United States in a transition to a one-dollar coin is uncertain. Further, an increase in demand for one denomination of coin may have an offsetting effect on the demand for other denominations of coin. At the same time, an increase in demand for coins could happen here. Explanations for high replacement rates of coins for notes include:

- o The apparent cross-cultural practice of setting aside one's pockets full of coins, but retaining notes, when dressing and undressing;
- o The tendency of coins, to a much greater extent than notes, to remain for long periods of time in vending machines awaiting collection where they are unavailable to meet public demand for coinage;
- o A shortage of notes before the coins are introduced; and
- o The weight of coins that raises their explicit and implicit transportation costs. Their heaviness tends to delay their movement--

whether by commercial shipper or personal portage--relative to notes from places where they are in surplus to places where they are in demand. Delayed shipment translates into an increased demand for coins compared with the notes they replace.

OTHER POSSIBLE BUDGETARY EFFECTS

If the public chooses to hold two coins for each note in circulation, significant secondary effects would have a positive impact on the federal budget. That development would permit the government to finance \$4.5 billion of federal debt by issuing non-interest-bearing coins rather than interest-bearing debt. At a 6 percent rate of interest, the federal government would save \$270 million in interest a year by substituting \$4.5 billion in Treasury coins for Treasury securities. With reduced interest costs in the first year, borrowing from the public would be lower in all subsequent years and the interest savings would snowball into an ever larger sum.

That assumption about cumulative interest savings explicitly presumes that lower debt-service costs would be reflected in lower deficits. CBO does not score those potential indirect effects because of the scoring convention of not counting debt-service costs or savings for specific legislative proposals. Moreover, replacing two coins for one note could not happen within the five-year or even a seven-year

window in which CBO estimates the budgetary effects of legislation. Given the Mint's required lead time and production capacity constraints, an annual rate of currency growth that hovers around 5 percent, and the increased circulation of two-dollar notes, we estimate that a replacement ratio of two coins for one note could not occur before 2005.

Thus, it may be that the replacement rate of coins for notes will be greater than one-for-one. However, we regard those effects and the impact on the cost of government borrowing as far from assured. If so, it will increase the portion of federal obligations held by the public in non-interest-bearing form, thereby reducing net interest outlays and leading to further budgetary savings.

CONCLUSION

Although replacing the one-dollar note with a new one-dollar coin would clearly reduce the costs of producing and processing currency for the federal government, resulting in budgetary savings, other factors are worth taking into consideration before enacting any proposal. The importance of a convenient currency, an efficient payments system, and a coin that is well-accepted by the public need to be considered in an informed and reasoned decision to change our national system of currency.

