February 2012

U.S. COINS

Alternative Scenarios Suggest Different Benefits and Losses from Replacing the $1 Note with a $1 Coin

GAO
Accountability * Integrity * Reliability

Highlights

Highlights of GAO-12-307, a report to the Ranking Member, Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

In March 2011, GAO reported that replacing the $1 note with a $1 coin would provide a net benefit to the government of about $5.5 billion over 30 years, or an average of about $184 million per year. This benefit, which GAO estimated using an economic model based on a set of assumptions, was entirely attributable to "seigniorage," a term defined as the difference between the cost of producing coins or notes and their face value. Seigniorage reduces government borrowing and interest costs, resulting in a financial benefit to the government. As GAO noted, the estimated net benefit could increase or decrease with changes in the assumptions.

GAO was asked to provide additional details on its 2011 analysis. Accordingly, GAO (1) updated its analysis to account for recent changes in note processing, among other things, and based on this update determined (2) the specific benefit or loss to the government for each of the first 10 years of its 30-year analysis; (3) the net benefit or loss to the government over 10 years if the interest savings due to seigniorage are excluded from the analysis; and (4) the net benefit or loss to the government over 10 years if it is assumed that each note will be replaced by 1 coin, rather than 1.5 coins, as GAO assumed in its 30-year analysis.

GAO used the economic model it developed for its 2011 report, updated certain factors, and varied the assumptions for seigniorage and the replacement ratio of coins to notes as requested.

View GAO-12-307. For more information, contact Lorelei St.James at (202) 512-2834 or stjamesl@gao.gov.

What GAO Found

According to GAO's updated analysis, replacing the $1 note with a $1 coin would provide a net benefit to the government of approximately $4.4 billion over 30 years, or an average of about $146 million per year. The overall net benefit was due solely to increased seigniorage and not to reduced production costs. This estimate differs from GAO's 2011 estimate because it considers recent efficiency improvements in note processing that have extended the expected life of the $1 note and other updated information. GAO's estimate covered 30 years to be consistent with previous GAO analyses and because that period roughly coincides with the life expectancy of the $1 coin.

Using the same model and assumptions used for its 30-year analysis, GAO found that replacing the $1 note with a $1 coin would provide a net loss to the government of about $531 million in the first 10 years, or an average of about $53 million per year. The cost of producing a large number of coins necessary for the transition would result in a net loss in 6 of the first 7 years. In the eighth year, and for the remaining 2 years, this situation is reversed: the interest savings outweigh the production costs and the net benefits would be positive. Overall, the net loss over 10 years compared with the net benefit GAO estimated over 30 years would occur because of large costs in the first few years to produce the initial supply of $1 coins.

If the interest savings due to increased seigniorage are excluded from the analysis, the government would incur a total net loss of about $1.8 billion over 10 years, or an average of $179 million per year. With no interest savings to offset the costs of coin production, net losses would be incurred in 9 of the 10 years. As in the preceding scenario, these production costs are greatest in the first 4 years, when a large number of coins need to be produced for the transition. Although this scenario suggests there are no net benefits of switching to a $1 coin, GAO believes that excluding the interest savings related to seigniorage omits a monetary benefit to the government.

If it is assumed that each $1 note will be replaced by 1, rather than 1.5, $1 coins, the government would incur a total net loss of about $582 million over 10 years, or an average of about $58 million per year. The costs of producing coins for the transition dominate in the first 3 years, followed by benefits in the fourth year due to the overproduction of coins during the transition. In this scenario, net losses continue to accrue through year 10. Net losses in this scenario are smaller than in the preceding scenario because fewer coins are produced and coin production costs are lower, but the one-to-one replacement does not provide increased seigniorage. Moreover, this lower replacement ratio is not consistent with the experiences of other countries that have switched from notes to coins and is likely to produce too few coins to meet demand, which could be disruptive to the economy.

In commenting on a draft of this report, the Federal Reserve and Treasury Department noted that GAO's 30-year estimate does not consider the cost to the private sector or environmental impacts. GAO agrees that such costs and impacts are important considerations, but GAO identified no quantitative estimates that could be evaluated or modeled.