United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Domestic and International Monetary Policy, Committee on Banking and Financial Services, House of Representatives

For Release on Delivery Expected at 10:00 a.m. EDT Thursday, June 26, 1997

COIN AND CURRENCY PRODUCTION

Issues for Congressional Consideration

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GAO/T-GGD-97-146

Statement

Coin and Currency Production: Issues for Congressional Consideration

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the results of our review that you requested on issues related to decreasing the costs of producing the nation's money. My testimony today discusses the issues involved in the following four areas: (1) the effects of decisions on the denominational mix of coins and currency on capital investment plans and production costs, (2) possible structural changes in the entities involved in producing money, (3) additional contracting out of money production activities, and (4) the planning of money production.

To address these four areas, we interviewed officials at the entities involved in money production; reviewed the agencies' strategic and capital plans, and production and cost data; reviewed previous Department of the Treasury studies on consolidating and reorganizing the agencies involved in producing and distributing coins and currency; reviewed relevant laws, legislative histories, and proposed legislation; and submitted questionnaires to representatives of the other G-7 nations on how they produced their money. We also reviewed past GAO and Federal Reserve studies on the replacement of the 1-dollar note with a new coin. We did not verify the information obtained from the various entities involved in money production or from foreign countries. A more detailed explanation of our objectives, scope, and methodology is contained in appendix I.

As I will discuss more fully, Mr. Chairman, my testimony today makes the following points:

- Both the U.S. Mint and the Bureau of Engraving and Printing (BEP) have significant capital investment plans that are based on the current denominational mix of coins and currency. However, proposals have been made to change the current denominational mix. Implementation of some of those proposals could have a significant impact on the current capital investment plans of the Mint and BEP.
- Treasury has considered whether merging BEP and the Mint and placing BEP under the Federal Reserve System would produce cost savings. However, in studies it conducted, Treasury concluded that cost savings may be possible but that the overall disadvantages may outweigh the advantages of such organizational changes. Federal Reserve officials also identified concerns about placing BEP under the Federal Reserve System. Neither the studies that were done nor Treasury officials we contacted provided information explaining the basis for savings or costs associated with organizational changes.

- Although some other countries rely on the private sector for money production to a greater extent than the U.S. does, Treasury has not examined the possibility of further contracting out of money production primarily because of security concerns. BEP is in the process of attempting to obtain competition for currency paper. It is unclear whether BEP will be successful.
- Strategic plans of the Mint and BEP do not consider the total cost to the government of producing and distributing the current denominational mix of coins and currency or of an alternative mix. Planning that considers such changes and their governmentwide implications might provide additional insights for Treasury and congressional decisionmaking.

Background

Several different organizations have responsibilities related to money production. For example, Congress decides what coins will be issued in our country, while the Secretary of the Treasury determines what currency denominations will be issued. Within Treasury, the U.S. Mint, established in 1792, manufactures the nation's coins in Philadelphia and Denver, and BEP has been printing the nation's currency since 1869. BEP also produces nearly half of the postage stamps needed by the U.S. Postal Service. The Federal Reserve System distributes coins and currency to depository institutions, identifies counterfeit currency, and replaces currency unfit for circulation.

Money production and related activities involve substantial resources. For example, in fiscal year 1996, the Mint employed about 2,200 persons and spent $278 million on producing circulating coins, and BEP employed 2,900 persons and spent $365 million on currency production at its plants in Washington, D.C., and Fort Worth, Texas. Also in calendar year 1996, the Federal Reserve spent $190 million to process coins and currency, and $403 million[1] in new currency expenses. During the past 5 years, the Mint produced coins with a total value of $3.9 billion, and BEP produced currency with a face value of about $680 billion. A more complete description of the entities involved, the processes used in production, and some perspective on the public's use of coin and currency are contained in appendix II.

[1]Federal Reserve expenditures of $403 million on new currency include the BEP's $365 million cost to print currency. The difference between the $403 million and the $365 million is because BEP operates on a fiscal year basis and the Federal Reserve operates on a calendar year basis and the Federal Reserve's costs also include transportation costs and other minor new currency-related expenses.

Changing the Denominational Mix of Money Could Affect Production and Capital Costs

The Federal Reserve does not expect the demand for coins and currency to be significantly reduced in the near future, despite earlier predictions by some that electronic money would replace traditional payment methods. To meet the expected demand for coins and currency at the current denominational mix, both the Mint and the BEP have significant capital investments planned to replace aging equipment and upgrade facilities and to add capacity in the next several years. However, legislation has been introduced in Congress to replace the 1-dollar note with a 1-dollar coin. In addition, last year, this Subcommittee held a hearing on the future of the penny and considered proposed legislation to authorize a circulating commemorative quarter. Implementing proposals to change the denominational mix could have an impact on the capital investments currently planned by the Mint and BEP.

Demand for Coins and Currency Is Expected to Continue

The demand for coins and currency is not expected to diminish in the near future, despite some past predictions to the contrary. According to a 1995 telephone survey commissioned by the Federal Reserve, coin and currency transactions accounted for 20 percent of adult expenditures, compared with two-thirds accounted for by checks and 12 percent by credit cards and debit cards. The Congressional Budget Office (CBO) estimated in 1996 that cash payments represent about $1 trillion, or 20 percent, of annual consumer expenditures.[2]

A 1997 Federal Reserve study[3] indicated that the retail payment system in the United States remains heavily dependent on currency and paper checks, despite predictions in the 1970s that electronic payments (e-money) would replace more traditional payment methods. E-money consists mainly of prepaid stored value cards, smart cards, and on-line payments made through computer networks. The Federal Reserve's study concluded that e-money seems unlikely to fundamentally change the nature of the current payment system in the near future. The CBO study came to a similar conclusion, saying that while trials and pilot programs are under way in the United States, markets for e-money payment systems would emerge slowly. According to CBO, the low cost and ease of making telephone calls to authorize purchases or withdrawals for credit and debit cards in the United States reduce the need for, and the advantages of, smart cards as used in other countries.

[2]Emerging Electronic Methods for Making Retail Payments, Congressional Budget Office, June 1996.

[3]Report to the Congress on the Application of the Electronic Fund Transfer Act to Electronic Stored-Value Products, Board of Governors of the Federal Reserve System, March 1997.

The Mint and BEP Have Significant Capital Investment Plans

The Mint

According to the Mint, much of the equipment that it uses to produce coins is aging and will soon need to be replaced. About 80 percent of the Mint's coin presses are used primarily to make pennies and have an average age of 20 years. Mint officials said that last year the Mint's equipment ran for 3 shifts per day, 5 days per week, in producing a record 20 billion coins. They said the equipment suffered at this high level of output because the Mint rarely had time to take machines off-line to perform maintenance.

The Mint plans to make about $176 million in capital investments over the next 5 years to replace deteriorated equipment and upgrade facilities. According to the Mint, this funding would allow the Mint to continue producing at the 20 billion coins per year level with no overtime. The Mint's current plans show continued production of the penny, which, over the last 5 years, accounted for about 71 percent of its circulating coin production. Further, the Mint's capital investment plan does not reflect the goal in its strategic plan of producing 24 billion coins per year by 2002—a 20 percent increase in output over the current production of 20 billion coins. According to Mint officials, they plan to update the capital investment plan in a few years. The Mint's goal of producing 24 billion coins annually assumes continued production of the current mix of coins.

The Mint's current $176 million capital investment plan also does not include other capital investments that could materialize. For example, it does not include an estimated $73 million in capital investments that would be required to produce a new 1-dollar coin if Congress authorizes its production. It also does not include the costs of acquiring a proposed new headquarters facility, which have not yet been estimated.

BEP

BEP has not developed a capital investment plan extending beyond 1999. Although BEP has a capital investment plan for fiscal years 1997 through 1999 showing planned expenditures of $251 million for the Fort Worth, TX, and Washington, D.C. plants, BEP's Chief Financial Officer said BEP is likely to spend significantly less than $251 million because all capital expenditures for the current D.C. facility, except for essential maintenance expenditures, have been put on hold, pending a decision on whether BEP will build a replacement facility for the current Washington, D.C., facility.

BEP officials said that they did not know when this decision will be made and that it was at least partly dependent on whether the 1-dollar note is phased out. Preliminary estimates of the cost of a new D.C. facility range from about $158 million to $250 million.

While BEP could produce all remaining denomination notes at the Fort Worth facility if the 1-dollar note were discontinued, BEP officials said this would not be desirable in view of the possibility of a catastrophe occurring at Fort Worth. BEP officials would like to continue having a facility in the Washington, D.C., area as a backup facility. We asked Treasury and Federal Reserve officials if there were alternatives to having a backup facility. The officials noted several alternatives, including (1) stockpiling currency, (2) reducing the Federal Reserve's destruction rate for unfit notes in an emergency, (3) introducing reciprocal printing agreements with other countries, and (4) making arrangements with the private sector. They said currently none of these strategies are employed and each has both advantages and disadvantages, as discussed below.

- Stockpile currency: This strategy could reduce the need for BEP to have two facilities by providing time needed to rebuild production capacity in the event of a catastrophe. The Federal Reserve currently has a target of storing a 2-month supply of currency. According to Federal Reserve officials, most of the major industrialized countries store a 1-year supply. Storing additional currency would require the Federal Reserve to acquire additional vault space.
- Reduce the rate of destruction of soiled notes: This strategy would also have the advantage of providing the time needed to rebuild production capacity. A disadvantage would be that more soiled money would remain in circulation and that consumers might experience problems using vending or automated teller machines.
- Reciprocal printing agreements with foreign countries: This alternative could reduce the need for BEP to have two facilities by providing a back-up printing capability. Other countries have shown interest in reciprocal agreements with the United States. This strategy, however, raises security concerns because the Secret Service, which has responsibility for investigating counterfeiting, has no investigative authority outside of the United States.
- Arrangements with the private sector: This strategy could also reduce the need for a second BEP facility. According to an American Banknote Corporation official we interviewed, his company would have the capacity to produce up to 100 million notes per month. A disadvantage to this strategy is that it raises security concerns associated with producing

money with non-government personnel and facilities. Also, variations in note quality produced by different manufacturers could make counterfeits harder to detect.

Eliminating the Penny and 1-Dollar Note Could Affect Mint and BEP Capital Investment Plans

As shown in table III.1, the Mint produced about 61 billion pennies over the past 5 years, which accounted for about 71 percent of all circulating coins produced by the Mint. During this same period, BEP produced about 21 billion 1-dollar notes, which accounted for about 47 percent of BEP's total note production, as shown in table III.2. During this 5-year period, the Mint coined a total of $3.9 billion in coins, and BEP printed a total face value of $679.8 billion in paper currency, for a total production of $683.8 billion.

Our prior report on the 1-dollar note showed that eliminating this note could generate substantial operating cost savings and our testimony on the penny showed that eliminating this coin could also result in savings. Last year, we testified before this Subcommittee that the production and distribution of the penny is no longer profitable to the government.[4] After considering both the Mint's profit from producing pennies and the Federal Reserve System's cost of distributing them, we estimated that the net cost to the government was about $9 million in fiscal year 1994.[5] We testified in 1995 that $456 million per year could be saved if a new 1-dollar coin replaced the 1-dollar note.[6] These estimates did not include the long-term capital investments that could be avoided by not producing the penny or 1-dollar note.[7]

Changing the denominational mix of coin and currency in the near future could significantly affect the capital investments the Mint and BEP would have to make in the next decade. Eliminating the penny could save the Mint about $2 million in planned capital improvements over the next 5

[4] Future of the Penny: Options for Congressional Consideration (GAO/T-GGD-96-153, July 16, 1996).

[5] The Mint has disagreed with our methodology for estimating the cost to the government of producing and distributing the penny. The Mint maintains the penny is still profitable, based on the difference between the face value of pennies produced and their production costs, or the seigniorage. We based our methodology on the interest avoided from the seigniorage, not the gross seigniorage. We did this to be consistent with our past analyses of a dollar coin and because only the interest savings is considered by budgetary rules established in 1968 by the President's Commission on Budget Concepts.

[6] A Dollar Coin Could Save Millions (GAO/T-GGD-95-203, July 13, 1995).

[7] In our 1990 analysis of the dollar coin, we assumed the Mint would need about $18 million in start-up costs, including capital equipment. The Mint now estimates that about $92 million in start-up costs, including $73 million in capital investments, would be needed for a new 1-dollar coin to replace the 1-dollar note.

years and perhaps even larger amounts as the Mint's aging presses exceed their useful lives and become increasingly unreliable. Eliminating the 1-dollar note could substantially reduce, and possibly eliminate, the need for a Washington, D.C., production plant. The amount of the savings would vary depending on what decisions are made by BEP and Treasury regarding whether a backup facility is needed to supplement the Fort Worth plant for currency production and whether BEP continues to produce postage stamps. While no firm estimates have been made, BEP officials said a new facility could range between $158 million and $250 million. According to the Mint, a new dollar coin could require an additional $73 million in capital investment.

As we have reported in the past, decisions on whether to eliminate the penny and 1-dollar note should include consideration of a variety of factors in addition to the government's cost savings, such as public acceptance, the needs of commerce, impact on the economy, impact on private sector and government workers producing the pennies and the dollar notes, and the experiences other countries have had.

Other Congressional Decisions on Denominations Could Also Affect Capital Investment Plans

Recent congressional proposals have been made to produce a circulating commemorative quarter and replacing the Susan B. Anthony dollar with another coin. The Mint is no longer producing Susan B. Anthony dollar coins and remaining inventories are decreasing. At the current withdrawal rate, the Mint and the Federal Reserve have a 36-month supply of Anthony dollars. Currently, the Susan B. Anthony coin is the only dollar coin authorized by law. A new dollar coin would require action by Congress and, according to the Mint, 30 months time to develop and begin manufacturing. If a decision is not made to replace the Anthony dollar with a new coin before the Anthony dollar is depleted and a new coin is ready for production, the Mint would be required to resume production of Anthony dollars to meet the Federal Reserve's demand. Although the coin has not had widespread public acceptance, due in part to its close resemblance to the quarter, it is used in certain vending machines and transit systems and some businesses depend on it.

Congress is also considering a proposal to authorize circulating commemorative quarters, which would be issued at face value with a distinctive design. Last year, Congress required the Treasury to report by June 1, 1997, on the feasibility of a circulating quarter program to commemorate each of the 50 states. The May 30, 1997, report contained the results of a public opinion survey indicating that 51 percent of respondents would favor a 50-state circulating commemorative coin program, 38 percent had no opinion, and 11 percent would be opposed. The report said that the seigniorage[8] generated from this program could be from $2.6 billion to $5.1 billion over a 10-year period. According to the report, this would require an additional $13 million in capital investments at the Philadelphia Mint and possibly an additional $22 million at the Denver Mint.

Available Information Does Not Demonstrate Significant Benefits From Organizational Changes

Treasury has considered consolidating BEP and the Mint and placing BEP under the Federal Reserve. However, it has not moved forward with either idea. Studies have been done, but none have quantified whether the savings would outweigh the costs. Furthermore, both Federal Reserve and Treasury officials identified difficulties that would need to be overcome before organizational changes would be successful, and some of the savings that were identified as possible from structural changes could possibly be achieved by other means. None of the foreign countries we contacted had merged coin and currency production into the same organization. However, five of the six countries placed currency production under their central banks.

Consolidation of the Mint and BEP

A Treasury-commissioned study in 1987 and studies recently done for the National Performance Review (NPR) have identified possible administrative cost savings from consolidating the Mint and BEP. In 1987, the Assistant Secretary for Management, the Treasurer, and the Treasury Inspector General conducted a study to determine whether the consolidation of the Mint and BEP would increase operating efficiencies. The report concluded that consolidation was feasible only for a limited number of administrative functions, which comprised no more than 5 percent of the total workforce of both bureaus. The functions included executive management, management analysis, procurement, human resource management, and information resources management. Treasury officials told us they believed the savings from consolidation would not significantly exceed implementation costs. However, the study did not address the implementation costs. A 1995 Treasury-commissioned NPR study, which included the merger of BEP and the Mint, identified savings of $4.8 million over a 5-year period through consolidating administrative functions and reducing personnel. It noted that an expanded distribution of fixed costs could occur as they could be allocated across both coins and currency. Another advantage indicated in the study was that space

[8]Seigniorage is the difference between the face value of coins and their cost of production.

requirements could be reduced by combining like functions, such as testing labs.

The 1995 study also noted several disadvantages of merging the two organizations. Specifically, it concluded that savings would not significantly exceed implementation costs. The study, however, did not identify these costs. Another disadvantage cited by the report was that BEP and the Mint are in substantially different lines of business, with no technology overlap. Additionally, the study noted two obstacles to the consolidation. The first was that legislation would be required, and the second was that bargaining with the Mint's union and BEP's 18 unions would be required.

Treasury and Federal Reserve officials we interviewed said that the production processes of BEP and the Mint were dissimilar and that the production plants were located in different cities. While they said a merger could produce some administrative savings, most commented that they did not believe that the savings associated with the merger would justify the costs. However, they had no analytical basis for their opinions.

We also contacted representatives of Canada, Germany, France, Italy, Japan, and the United Kingdom to ask them how they had organized money production. None of the countries reported that they had coin and currency production merged within the same organization.

Placing BEP Under the Federal Reserve

Treasury has not studied the possibility of placing the Mint under the Federal Reserve, but a 1995 NPR study considered the possibility of bringing the BEP under the Federal Reserve. The study indicated that, under the reorganization, the Federal Reserve would have more control and direct oversight of BEP, and BEP would gain the same procurement and personnel flexibility that benefits the Federal Reserve, saving $34 million over a 5-year period. However, the study did not provide any analysis or explanation of how the $34 million savings were estimated. Treasury officials in the office that directed the study were not able to provide any additional information on the savings estimates.

It would be possible to exempt BEP from existing procurement and personnel regulations while retaining BEP under the Treasury Department. The Mint already has a waiver from federal procurement regulations and is attempting to seek such a waiver from personnel regulations by seeking authority to become a Performance Based Organization.

Officials at the Federal Reserve told us that they had reservations about moving BEP to the Federal Reserve. Federal Reserve officials said that the Federal Reserve has no unionized employees and may not be prepared to inherit BEP's 18 unions. A Federal Reserve official also said that placing BEP under the Federal Reserve, with its fully funded retirement system, could lead to an unfunded pension liability unless Congress made provisions to appropriate funds to cover the retirement costs of the BEP employees that would be transferred to the Federal Reserve's pension system.

For additional perspective, we also contacted representatives of Canada, Germany, France, Italy, Japan, and the United Kingdom to ask them how their money production agencies were organized. In all the countries, coin production is under the executive branch of government, while currency production, except in Japan, is under the central bank. In Japan, both currency and coin production are under the executive branch of government.

Options May Exist for Further Contracting Out of Money Production

Both the Mint and BEP rely on contracting out for most of the materials used in money production, as well as for several support activities. Although some of the foreign countries we contacted rely on the private sector for basic money production to a greater extent than we do in this country, Treasury, the Mint, and BEP have not explored the possibility of contracting out additional money production activities. Officials within Treasury have a number of concerns about greater use of the private sector. These concerns include security as well as the appropriateness of contracting out for basic money production, which they view as an inherently governmental function. Treasury contractors we contacted disagree with Treasury's views. However, since the advantages and disadvantages of further contracting out have not been thoroughly studied, it is not clear whether savings would be achieved or whether the concerns raised by Treasury are valid or could be mitigated. The BEP has begun recent efforts to obtain competition for supplying currency paper. It remains to be seen if BEP's recent efforts will be successful.

Some Countries Rely on the Private Sector for Basic Money Production

We sent questionnaires to representatives from Canada, Germany, France, Italy, Japan, and the United Kingdom asking if they contracted out the production of money. Canada and Germany replied that currency production is done by private companies, while the government produces coins.[9] France, Italy, and Japan said that both coins and currency are produced by the government. In France, currency production is done by the Bank of France, and in Italy, by the Bank of Italy. The United Kingdom said that currency is produced by the Bank of England, a publicly-owned corporation that is not a government department, and coins are produced by the government mint. Japan said that it uses a private company to perform some of the minting process for small denomination coins.

Canada said it contracts out the production of bank notes to two private companies. According to the Bank of Canada, the advantages of having private companies produce notes are that the government is not required to make large capital investments and using two private producers provides competition. Officials said that the disadvantages of this arrangement are that research and development efforts are more costly and difficult. Canadian coins are produced by the Royal Canadian Mint, which contracts out for supplies of blanks for the 1-dollar and 1-cent coins. The Canadian Mint obtains nickel strip for the other coin denominations from private suppliers.

The Mint Contracts Out Many Services and Materials and Is Reluctant to Contract Out Additional Blanks

The Mint has contracted out certain support activities related to basic coin production. It has contracted out for the transportation of finished coins from Mint facilities to the Federal Reserve Banks; the manufacture of commemorative and bullion coin packaging materials and precious metal (e.g., gold, platinum, and silver) coin blanks; manufacture and assembly of numismatic jewelry; telemarketing services to assist in marketing commemorative programs; Philadelphia Mint retail sales; janitorial services; and executive and employee development programs. The Mint also uses advertising agencies to develop marketing strategies, creative mailings, and print advertisements for its commemorative and bullion programs. Mint officials said that they are also exploring the possibility of privatizing retail operations at the Denver facility, but are not considering other contracting opportunities.

The Mint has also contracted out some activities directly related to coin production. In fact, in fiscal year 1996, $79 million, or about 69 percent, of the $115 million the Mint spent on contracting was for suppliers of penny blanks and clad strip-metal that is blanked and stamped for higher

[9]In Germany, the federal government is currently the sole shareholder in one of the two private printers.

denomination coins. The Mint has two suppliers for copper-plated zinc penny blanks and has two suppliers of clad strip.

When we asked whether blanks could be contracted out for coins other than the penny, Mint officials said that none of the Mint's clad strip suppliers have the necessary equipment to produce blanks for 5-cent through 50-cent denominations. Further, Mint officials said that contracting out 5-cent through 50-cent coin blanks would present more of a security risk than penny blanks, since the blanks could be used in vending machines. Mint officials said its suppliers would have to construct or obtain separate, secure facilities dedicated solely to producing coin blanks, the cost of which would be passed on to the Mint. However, officials from two strip suppliers we contacted did not agree. Officials from the contractors told us they could institute additional security measures and could produce a total of between 2.3 billion and 2.8 billion one-dollar coin blanks a year with a total capital investment of about $300,000. We did not independently verify these companies' ability to produce these blanks or whether cost savings could be achieved by contracting out the blanks, nor did we examine the security issue.

BEP Contracts Out Many Services and Materials, Has Relied on a Sole-Source Currency Paper Supplier, and Has Not Fully Explored Further Contracting

In fiscal year 1997, BEP said that it plans to contract out supplies and services totalling $128 million specifically related to currency production, including $65 million for purchasing currency paper. Since 1879, the Bureau has used a single source, Crane & Co., of Dalton, MA., for its currency paper. The Treasury Inspector General has completed numerous audits of BEP's distinctive currency paper supplier, and has questioned how the contractor has calculated profit. BEP and the contractor eventually reached a settlement for the costs questioned by the Inspector General for $12.7 million in 1995. The Treasury Inspector General is currently continuing to audit the contract.

In 1996, Treasury studied the feasibility of obtaining competition for the supplying of currency paper. The study noted that other paper companies have chosen not to compete with Crane because of the high capital start-up costs that would be required and the limited market. On May 2, 1997, BEP sought potential offerors for that business. Before issuing the solicitation, BEP made a draft solicitation available to interested parties. The draft solicitation contained a contractor acquired government property provision that would have provided financial assistance to offerors for acquiring the necessary equipment to manufacture distinctive currency paper. The provision, which was to be considered in the price evaluation when BEP evaluated offerors' proposals, was eliminated from the final solicitation. In the solicitation issued by BEP in May 1997, the provision was replaced by another provision allowing offerors to propose innovative acquisition and financing arrangements. This solicitation does not specifically mention how this replacement provision will be evaluated. It is uncertain what effect this will have on potential offerors. The solicitation was extended on June 19, 1997, to allow offerors until October 24, 1997, to submit their proposals.

The 1997 Emergency Supplemental Appropriations Act, P.L. 105-18, signed into law on June 12, 1997, requires us to analyze "the optimum circumstances for government procurement of distinctive currency paper" and report our findings to the House and Senate Committees on Appropriations no later than August 1, 1998. The act also prohibits BEP from awarding a contract under the solicitation until our review is completed.

Aside from exploring the possibility of obtaining more than one supplier of paper, neither Treasury nor BEP has fully explored the potential for contracting out additional activities associated with currency production. According to the Treasury Department, currency production is an inherently governmental function, since a secure and reliable source for the production of U.S. currency is of paramount importance to the nation's economy and system of commerce. Treasury officials also said that the production of currency by a private contractor is not desirable from a national security perspective. The Treasurer said that the government does not want to privatize money production for security and appearance reasons. In addition, Secret Service officials said that contracting out the production of 1-dollar notes, for example, would be a problem because having more than one producer creates more variations from the original currency, making counterfeit detection more difficult. The BEP Director said that some agency functions such as currency engraving could not be privatized because of limited availability in the private sector.

We did not independently evaluate whether cost savings would be achieved by further contracting out currency production or whether further contracting out would be desirable from a public policy standpoint. These issues would obviously have to be addressed before decisions on further contracting out of basic money production could be made.

Planning for Money Production

Neither the Mint, BEP, nor the Treasury have overall goals to reduce production and distribution costs across denominations or across agencies. This issue is not new and was reported by Treasury in a 1987 study.[10] The study found that planning for future coin and currency needs is done independently by the Mint and BEP. It stated that in view of technological changes, including electronic money, coins and currency should be treated as a single money system by a single planning entity. The study recommended that a permanent planning capability be created in the Office of the Treasurer to focus on strategic planning related to the future structure of coin and currency for consideration by Congress and the Secretary of the Treasury. Further, because of the time required to establish a permanent planning staff, the study recommended that interbureau working groups should be established until a permanent staff could be arranged. Treasury officials told us that they established the interbureau working groups but did not establish the permanent planning staff in the Office of the Treasurer because they believed that it was unnecessary.

However, a decade later, Treasury's planning for the production of money does not consider governmentwide costs or address the mix of coins and currency. As we have reported in the past, while the Mint produces pennies at a small unit profit, after considering the Federal Reserve's costs to distribute pennies, the government as a whole loses money on the penny. Similarly, a 1-dollar coin would be much less costly for the government than the 1-dollar note, as we have reported in the past.

Both the Mint and BEP view their roles as that of meeting public demand for coins and currency and do not believe they have a role in determining the denominational mix of the nation's coins and currency. Both the Mint and BEP's performance measures neglect those costs of coins and currency borne by other entities, such as the Federal Reserve. In these respects, both the Mint and BEP have strategic plans that reflect compartmentalized views of the costs to produce and distribute money. Although the Treasury Department is responsible for overseeing the strategic planning efforts of the Mint and BEP, it has not ensured that strategic plans address the denominational mix of money or governmentwide costs to furnish money to the economy.

[10] The U.S. Mint and the Bureau of Engraving and Printing: a Study to Assess the Feasibility of Consolidation, Department of the Treasury, January 1987.

Conclusions

Congress will soon be faced with several decisions concerning money production. These decisions are likely to have long-term and wide-ranging effects on such issues as operating costs and capital investments of the Mint and BEP, public reaction, the needs of commerce, and the impact on the current Treasury and Treasury contractors' workforces. Among the issues Congress may want to pursue with Treasury as it deliberates on the nation's coins and currency are the following:

- The impact that changes to the denominational mix of coins and currency could have on capital investment needs of the Mint and BEP;
- Whether consolidating any administrative functions of the Mint and BEP or further exempting them from procurement and personnel regulations would produce cost savings and be otherwise advantageous;
- Whether the Mint and BEP should explore additional contracting out opportunities related to money production; and
- Whether it would be useful for Treasury, the Mint, and BEP to address in their strategic plans possible changes to the denominational mix of coins and currency and the issue of governmentwide money production and distribution costs.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions you or other Subcommittee members may have.

Objectives, Scope, and Methodology

Our objective was to identify potential issues related to reducing costs in producing coins and currency for the nation's economy. We were specifically asked to consider our past work on the dollar coin and penny. We identified the following four issues: the denominational mix of coins and currency, changes to the organizational structures of the Mint and BEP, additional contracting out opportunities, and planning for the future of money production.

To meet our objectives, we interviewed officials from the Treasury, Mint, BEP, and Federal Reserve and reviewed Mint and BEP strategic plans, budgets, performance measures, capital investment plans, production and cost data, reports on the agency revolving funds, and Treasury studies on consolidating the Mint and BEP and on circulating commemorative coins. We obtained information about the condition of money production facilities and equipment by reviewing information on their age and condition and by touring the Denver Mint and the BEP production facilities in Washington, D.C., and Fort Worth. To obtain information about BEP's production of postage stamps, we interviewed BEP and Postal Service officials and reviewed agency production agreements.

To study the effects of decisions on the denominational mix of coins and currency on capital and production costs, we reviewed the capital investment plans of the Mint and BEP, prior GAO reports on a dollar coin and the penny, and recent congressional proposals to change the mix of coins and currency.

We also interviewed Secret Service officials regarding their anticounterfeiting efforts. To obtain the views of BEP's work force on management initiatives, we interviewed officials from the Bureau's major labor unions. We also reviewed historical information about the creation of the agencies involved in money production and distribution.

To obtain information about options for contracting Mint and BEP operations, we interviewed agency officials and obtained information from the Mint and BEP on the operations they have privatized, contacted private metal and coin blank suppliers (Olin Brass and PMX Industries) and a currency printer (American Banknote Corp.), and reviewed Treasury's May 1997 solicitation for additional currency suppliers.

We obtained information about the future of electronic money by interviewing officials from the Office of the Comptroller of the Currency, the Federal Reserve, Treasury, Mint, and BEP, and by reviewing CBO and Federal Reserve studies.

We reviewed relevant laws, legislative histories, and proposed legislation to obtain information about the congressional role in money production.

To obtain information about the organization of money producing agencies in other countries, we prepared and submitted questionnaires to representatives of the other G-7 nations (Canada, France, Germany, Italy, Japan, and the United Kingdom).

We did not verify the information obtained from the agencies or the G-7 nations.

We did our work in Washington, D.C., Denver, and Fort Worth, in accordance with generally accepted government auditing practices from January through June 1997.

Description of the Entities Involved in Money Production, Production Processes Used, and the Public's Use of Coins and Currency

Several government entities are involved in money production, including the U.S. Mint, BEP, the Secret Service, the Treasury Department, the Federal Reserve System, and the Congress.

U.S. Mint

The Mint was established in 1792 to issue coins as a standard monetary system for the newly formed country. Before 1792, money from other countries was used in the colonies. In addition to producing circulating coins, starting in 1892, the Mint also began issuing noncirculating coins commemorating certain events, organizations, and individuals. In 1937, the Mint also assumed responsibility for protecting the nation's supply of gold and silver.

The Mint's primary mission is to manufacture an adequate number of coins for the nation to conduct its trade and commerce. The Mint's circulating and commemorative coin production facilities are located in Philadelphia and Denver. The Mint also has facilities in San Francisco and West Point, NY, that manufacture commemorative coins. The Mint's gold reserves are stored primarily in Fort Knox, KY. As of February 1997, the Mint had about 2,200 employees at its five regional facilities and Washington, D.C., headquarters.

In 1996, the Mint spent about $278 million to produce circulating coins, or about 46 percent of its total $601 million operating costs. The Mint sells circulating coins at face value to the Federal Reserve and earns seigniorage, the difference between the coins' face value and their cost of production.[11]

BEP

BEP prints the nation's paper currency. Before 1861, state-chartered, private banks issued paper money, and the federal government only produced coins. The privately issued notes were easily counterfeited. In 1861, Congress authorized the U.S. Treasury to issue the first U.S. government paper money in the form of non-interest bearing Treasury notes called "demand notes," because of a shortage of coins and the need to finance the Civil War. Demand notes were replaced by U.S. notes in 1862, when Congress authorized the Secretary of the Treasury to have notes engraved and printed by private bank note companies. The actual printing of currency notes by Treasury employees began in 1863. In 1869,

[11]Seigniorage is deposited into the Mint's revolving fund, which was established in 1995. Under P.L. 104-52, the Mint is required to deposit excess funds from its revolving fund to the Treasury's General Fund at least annually. In 1996, the Mint transferred about $587 million to the Treasury's General Fund.

Congress recognized BEP in legislation as the entity producing currency notes.

Currently, BEP designs and prints all of the nation's paper currency in Washington, D.C., and Fort Worth, TX, and produces some U.S. postage stamps in Washington, D.C. BEP began printing postage stamps for the Postal Service in 1894. It produced all of the nation's postage stamps until 1978, when the Postal Service began contracting out stamp production to determine if costs could be lowered through competitive bidding by private contractors. Private-sector capacity to produce postage stamps has grown since 1978, and BEP now produces less than half of the stamps that the Postal Service requires. In 1996, BEP spent $365 million on currency note production, or about 81 percent of its $450 million in total operating costs; $77 million on stamp production; and $8 million on other activities, such as the production of security documents.

U.S. Secret Service

The U.S. Secret Service, another Treasury agency, was created in 1865 to suppress counterfeit currency. By the end of the Civil War, one-third of all paper currency in circulation was counterfeit. According to the Treasury Department, by 1875 counterfeiting was sharply reduced. The current mission of the Secret Service includes protecting the President and Vice President, their families, and visiting foreign dignitaries, and enforcing laws relating to U.S. money and securities as well as those relating to electronic funds transfer and credit card fraud. The Secret Service works with BEP in assessing the security of the Bureau's money production facilities and with currency redesign. For the first 6 months of fiscal year 1997, the Secret Service spent about 11 percent of its time on anticounterfeiting efforts.

Department of the Treasury

The Department of the Treasury was established in 1789 and performs four basic functions: formulating and recommending the nation's economic, financial, tax, and fiscal policies; serving as a financial agent for the U.S. government; enforcing laws under the jurisdiction of the Secret Service and other Treasury agencies; and overseeing the production of coins and currency.

The Mint and BEP report to the Secretary of the Treasury through the U.S. Treasurer and the Assistant Treasury Secretary for Management and Chief Financial Officer. The Office of the Treasurer of the United States was established in 1777 and was originally charged with the receipt and custody of government funds, but these functions have been assumed by different Treasury bureaus. The Treasurer is also consulted on policy issues affecting the Mint and BEP, is a member of Treasury's Advanced Counterfeit Deterrence Committee, acts as a spokesperson to the public for Mint and BEP issues such as currency redesign, and promotes the sales of U.S. savings bonds.

Federal Reserve System

The Federal Reserve System was established in 1913 as the nation's central bank to establish a safe and flexible monetary and banking system. In addition to setting monetary policy for the nation, the Federal Reserve, which consists of a Board of Governors and 12 Federal Reserve Banks and 25 branches around the country, obtains new currency and coins from BEP and the Mint and distribute them to the public through depository institutions. The Federal Reserve Banks also identify counterfeits and destroy currency that is unfit for circulation, provide wire and automated clearinghouse transfers of funds and securities, and process domestic checks.

In 1996, expenses related to coin and currency, including paying and receiving, processing, and currency destruction, were estimated at $190 million, or about 9 percent of the Federal Reserve's nearly $2.2 billion budget. The Federal Reserve also spent $403 million on new currency in 1996.[12] If the cost of new currency is included in the Federal Reserve's budget, coin and currency costs would represent 23 percent of its total annual costs.[13]

Congress

Congress has treated coins and currency differently in the law. While Congress has specified the denominations of coins that may be minted as well as their size and metallic composition, it has authorized the Secretary of the Treasury to decide which currency denominations to issue, provided that they are at least $1 in value.

Production Processes

The Mint and BEP produce coins and currency in the amounts ordered by the Federal Reserve, which are driven by demand for various

[12]Of the $403 million in new currency expenses, $389 million was charged by the BEP for printing currency. The remainder was for shipping new currency to Federal Reserve banks and other related expenses.

[13]The Federal Reserve does not include the cost of printing new currency in its operating budget. According to a Federal Reserve official, new currency costs are considered separately to avoid being driven by Federal Reserve Bank operating budgets.

denominations conveyed through the banking system. The Mint, rather than the Federal Reserve, estimates how many coins to produce, while the Federal Reserve determines the level of currency production. The Mint uses an economic model to make a projection, with input from the Federal Reserve's economic forecasts.

The Mint has two contractors that supply metal blanks for stamping of pennies and two suppliers of clad strip metal, which is blanked and stamped by the Mint for nickels, dimes, quarters, and half-dollars. Coins are produced by means of a multistep process involving (1) punching out round disks called blanks from metal strips, (2) heating the blanks in an annealing furnace to soften them, (3) sorting out blanks that are the wrong shape or size, (4) raising a rim around the edges of the blanks, and (5) striking the blanks in a coining press with designs and inscriptions to make them U.S. coins.

The BEP's Washington, D.C., currency production facility was built in 1914 (the annex was built in 1938) and is a multifloor manufacturing plant used for both currency and postage stamps. The Fort Worth facility, built in 1991, is a single-floor, modern facility used solely for currency production. BEP has one currency paper supplier. One contractor provides the Bureau with most of the ink used for the production of currency. BEP also produces some ink at its Washington, D.C., plant.

BEP produces currency using intaglio printing, which involves the engraving of images below the surface of printing plates to provide a raised image on the notes. Engraved designs are made into dies, which are transferred to printing plates. The plates are used to print the currency on high-speed presses. The backs of the notes are printed with green ink and are allowed to dry for 24 to 48 hours before the faces are printed with black ink.

After production, coins and currency are transported to the Federal Reserve System for distribution to depository institutions.

Coin and Currency Usage in the United States

According to the Federal Reserve, a 1995 telephone survey that it commissioned indicated that cash (coin and currency) transactions account for 20 percent of the expenditures of the average adult in the United States, compared with roughly two-thirds accounted for by checks and 12 percent by credit and debit cards. A 1995 Federal Reserve System survey indicated that 67 percent of U.S. families have bank credit cards;

that 40 percent of families have an outstanding balance on a credit card; and that 15.1 percent of families do not have checking accounts.[14] A 1996 CBO report estimated that cash payments represented approximately $1 trillion of annual consumer expenditures, or about 20 percent of the total consumer expenditures of $5 trillion.[15]

[14]In the survey, reported in "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances," Federal Reserve Bulletin, January 1997, families were defined as households, which includes single people.

[15]Emerging Electronic Methods for Making Retail Payments, Congressional Budget Office, June 1996.

Mint and BEP Money Production

Table III.1: Mint Coinage Production, Fiscal Years 1992-1996

Numbers in millions

Denomination	1992	% of total	1993	% of total	1994	% of total	1995	% of total	1996	% of total	total	% of total
1¢	9,007	74.8	11,282	79.7	13,459	70.0	13,419	68.7	13,669	67.6	**60,836**	71.4
5¢	903	7.5	655	4.6	1,450	7.5	1,623	8.3	1,740	8.6	**6,371**	7.5
10¢	1,294	10.7	1,177	8.3	2,521	13.1	2,365	12.1	2,801	13.8	**10,158**	11.9
25¢	806	6.7	1,009	7.1	1,752	9.1	2,070	10.6	1,955	9.7	**7,592**	8.9
50¢	35	0.3	30	0.2	38	0.2	42	0.2	70	0.4	**215**	0.3
Total	**12,045**	**100.0**	**14,153**	**100.0**	**19,220**	**100.0**	**19,519**	**100.0**	**20,235**	**100.0**	**85,172**	**100.0**

Note: Some percentages do not total to 100 due to rounding.

Source: U.S. Mint.

Table III.2: BEP Note Production, Fiscal Years 1992-1996

Number in millions

Denomination	1992	% of total	1993	% of total	1994	% of total	1995	% of total	1996	% of total	total	% of total
$1	4,090	48.4	3,577	44.5	4,563	48.9	4,787	48.1	4,167	44.1	**21,184**	46.8
$2	0	0.0	0	0.0	0	0.0	0	0.0	51	0.5	**51**	0.1
$5	787	9.3	877	10.9	1,005	10.8	1,069	10.7	1,158	12.3	**4,896**	10.8
$10	1,037	12.3	826	10.3	794	8.5	672	6.7	1,011	10.7	**4,340**	9.6
$20	1,760	20.8	2,170	27.0	2,253	24.1	2,553	25.6	1,363	14.4	**10,099**	22.3
$50	557	6.6	259	3.2	115	1.2	147	1.5	442	4.7	**1,520**	3.4
$100	218	2.6	323	4.0	605	6.5	730	7.3	1,251	13.2	**3,127**	6.9
Total	**8,449**	**100.0**	**8,032**	**100.0**	**9,335**	**100.0**	**9,958**	**100.0**	**9,443**	**100.0**	**45,217**	**100.0**

Note: Some percentages do not total to 100 due to rounding.

Source: BEP.

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