

January 2009

# DEBT MANAGEMENT

Treasury's Cash Management Challenges and Timing of Payments to Medicare Private Plans





Highlights of GAO-09-118, a report to congressional requesters

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# Treasury's Cash Management Challenges and Timing of Payments to Medicare Private Plans

### Why GAO Did This Study

A timing difference between cash in- and outflows poses challenges for the Department of the Treasury. Increased volatility of monthly cash flows may lead to unexpected short-term debt issuance and hence increased borrowing. While Social Security payments made at the start of the month will diminish gradually in coming years, start-ofmonth payments to Medicare plan sponsors for Medicare Advantage and Part D benefits are projected to grow. As requested, this report (1) describes how Treasury, the **Centers for Medicare & Medicaid** Services (CMS), and plan sponsors operate under the current payment schedule; (2) identifies timing options; and (3) describes potential implications for Treasury, CMS, and Medicare. GAO analyzed Treasury cash flows, and interviewed Treasury, CMS officials, and plan sponsor representatives.

#### What GAO Recommends

Congress should consider the impacts of payment timing on Treasury's cash management challenges when enacting legislation that specifies payment timing. GAO also recommends that the Treasury and CMS jointly study options to improve Treasury's ability to manage cash flow and reduce interest costs while not unduly increasing CMS's administrative burden. Based on the work done and our discussions with Treasury officials, we believe it is reasonable for this study to be completed by the end of CY 2009. Both Treasury and CMS agreed with GAO's recommendation.

To view the full product, including the scope and methodology, click on GAO-09-118. For more information, contact Susan J. Irving at irvings@gao.gov or James C. Cosgrove at cosgrovej@gao.gov.

#### What GAO Found

Treasury's primary debt management goal is to finance the government's borrowing needs at the lowest cost over time. Issuing debt through regularly scheduled auctions lowers borrowing costs because investors and dealers are willing to pay a premium for liquidity and certainty of supply. In 2006 GAO reported that Treasury faced misalignment of cash flows, with large payments due at the start of the month and large cash receipts occurring midmonth. This misalignment results in increasing cash flow volatility. The volatility leads Treasury to carry higher average cash balances and issue short-term debt outside its regular schedule, which may raise overall interest costs.

Payments to Medicare plan sponsors made at the start of the month have increased the misalignment of cash flows. These payments have more than doubled between 2005 and 2007, and they are projected to continue to grow. GAO developed several options for changing the timing of Medicare plan payments that would facilitate cash management, keep payments predictable, and treat all plans equally. The options include keeping a single payment but making it on a different date or making multiple payments each month.

Treasury officials said that moving some or all of the Medicare payments away from the start of the month would greatly facilitate cash management. CMS expressed concerns about potentially increased administrative burden. Plan sponsors GAO interviewed and CMS's Office of the Actuary indicated that sponsors would generally seek to recoup any loss by raising their Medicare bids, thereby raising costs to the Medicare program and beneficiaries. The overall impact on the federal budget of changing payment timing would depend on the relative size of interest cost reductions and plans' responses.



Average Large Start-of-Month Payments Made by Treasury (CY 2007)

#### Average monthly payment

**Dollars** (in billions)

Source: GAO analysis of Treasury data.

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#### Abbreviations

| AHIP  | America's Health Insurance Plans                     |
|-------|--|
| CBO   | Congressional Budget Office                          |
| CM    | Cash management                                      |
| CMS   | Centers for Medicare & Medicaid Services             |
| CPC   | Center for Drug and Health Plan Choice               |
| FEHBP | Federal Employees Health Benefits Program            |
| FFS   | Fee-for-service                                      |
| HMO   | Health maintenance organization                      |
| MA    | Medicare Advantage                                   |
| MA-PD | Medicare Advantage prescription drug plan            |
| MIPPA | Medicare Improvements for Patients and Providers Act |
| OACT  | Office of the Actuary                                |
| OFM   | Office of Financial Management                       |
| OIS   | Office of Information Services                       |
| PDP   | Prescription drug plan                               |
| PFFS  | Private fee-for-service                              |
| PPO   | Preferred provider organization                      |
| TGA   | Treasury General Account                             |
| TIO   | Term Investment Option                               |
| TT&L  | Treasury Tax and Loan                                |

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United States Government Accountability Office Washington, DC 20548

January 30, 2009

The Honorable Charles B. Rangel Chairman Committee on Ways and Means House of Representatives

The Honorable Pete Stark Chairman Subcommittee on Health Committee on Ways and Means House of Representatives

Congress has delegated to the Department of the Treasury the power to borrow the money needed to operate the federal government and make borrowing decisions subject to a statutory limit. Treasury's primary debt management goal is to finance the government's borrowing needs at the lowest cost over time. To meet this objective Treasury issues debt through auctions in a "regular and predictable" pattern of dates and in amounts across a range of benchmark securities. According to Treasury, because investors and dealers rely upon the certainty of supply of Treasury securities, they tend to pay a slight premium, which lowers Treasury's borrowing costs. Overall, investors are willing to reward Treasury with lower borrowing costs in return for the benefits of liquidity and certainty of supply.

In our work on federal cash management, we reported that a timing difference between large start-of-month payments and midmonth cash inflows from taxes poses challenges for the Department of the Treasury.<sup>1</sup> Because Treasury seeks to issue debt in a "regular and predictable pattern," regular bill issuances cannot be moved or suddenly increased by the amount needed to make the large payments that must be made at the beginning of the month. To make payments, Treasury must raise cash through borrowing, including using short-term securities (cash

<sup>&</sup>lt;sup>1</sup> See GAO, Debt Management: Treasury Has Refined Its Use of Cash Management Bills but Should Explore Options That May Reduce Cost Further, GAO-06-269 (Mar. 30, 2006); GAO, Debt Management: Treasury Has Improved Short-Term Investment Programs, but Should Broaden Investments to Reduce Risks and Increase Return, GAO-07-1105 (Sept. 20, 2008); and GAO, Federal Debt: Answers to Frequently Asked Questions, An Update, GAO-04-485SP (August 2004).

management (CM) bills) issued outside Treasury's regular borrowing cycle that require Treasury to pay investors a higher rate. Treasury's cash needs throughout the year reflect government revenues and outlays. Generally Treasury's borrowing cycles are determined by projections of these cash needs. Maintaining sufficient cash balances allows the Treasury to absorb unexpected low points in receipts or spikes in outlays while limiting issuance of CM bills, but maintaining these balances carries costs for taxpayers. The higher volatility of Treasury's cash flows increases the size of these precautionary cash balances and hence Treasury's overall interest costs.<sup>2</sup>

You asked us to examine the effects of start-of-month payments to Medicare plan sponsors on Treasury cash management and to develop options for better aligning cash flows. Generally, Medicare beneficiaries have the option of obtaining medical or drug coverage from private health plans sponsored by organizations—typically insurance companies—under contract with the Centers for Medicare & Medicaid Services (CMS), the agency that administers the Medicare program.<sup>3</sup> The Medicare Advantage (MA) program offers an alternative to the original Medicare fee-for-service (FFS) program.<sup>4</sup> The Medicare Part D program begun in 2006 offers an outpatient prescription drug benefit.<sup>5</sup> Part D eligible beneficiaries may enroll in stand-alone prescription drug plans (PDP), MA plans, or MA plans that offer prescription drug coverage (MA-PD).<sup>6</sup> Instead of paying providers' claims directly, the federal government pays plan sponsors to provide their enrollees' Medicare benefits. Of the 44 million Medicare beneficiaries, 25 million were enrolled in a Medicare private plan as of

<sup>6</sup> In general, a person enrolled in an MA plan that also offers Part D coverage may not enroll in a PDP. See the Social Security Act, \$1860D-1(a)(1)(B).

<sup>&</sup>lt;sup>2</sup> As discussed later in this report, Treasury's cash management challenges are also complicated by the fact that Treasury needs to hold precautionary cash balances to avoid an overdraft because the Federal Reserve is not authorized to lend directly to Treasury.

<sup>&</sup>lt;sup>3</sup> Medicare is the federally financed health insurance program for persons aged 65 and over, certain individuals with disabilities, and individuals with end-stage renal disease.

<sup>&</sup>lt;sup>4</sup> Medicare FFS consists of Part A of title XVIII of the Social Security Act, which covers inpatient stays, care in skilled nursing facilities, hospice care, and some home health care; and Part B, which covers certain physician, outpatient hospital, and laboratory services, among other services. MA plans operate under Part C of the Social Security Act.

<sup>&</sup>lt;sup>5</sup> The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066, created the Medicare prescription drug program (Part D of title XVIII of the Social Security Act), and changed the name of the Medicare+Choice program to Medicare Advantage.

January 2008. In 2007, Treasury's payments to plan sponsors averaged \$10 billion per month.

Any change in payment timing would affect Treasury, CMS, and the plan sponsors that provide benefits under the MA and prescription drug programs. This report (1) describes how Treasury, CMS, and Medicare plan sponsors operate under the current payment schedule; (2) identifies alternative payment approaches designed to address Treasury's cash management challenges; and (3) describes potential implications of alternative payment timing options for Treasury, CMS, and Medicare, including plan sponsors and beneficiaries.

To address these issues we interviewed Treasury, CMS, and other federal and state agency officials involved with making payments to private health plan sponsors. We interviewed Treasury officials regarding principles and practice of cash and debt management and reviewed relevant literature on this subject. Our analysis of Treasury data predates the turmoil in financial markets in September 2008. In addition, we reviewed statutes, regulations, and agency policy documents governing Medicare payments to plan sponsors. We also spoke with representatives of five Medicare plan sponsors that offer either MA or prescription drug benefits, or both. Although these sponsors were selected to reflect the variety of plans receiving start-of-month payments because we used a selective sample, our reported results cannot be generalized to all plan sponsors.<sup>7</sup>

We developed five alternative payment timing options that met our criteria of making cash management easier and less costly for Treasury, treating all plan sponsors equally, and offering a predictable schedule of payments. Using Treasury data, we developed an illustrative estimate of the potential reduction in interest costs under each option and projected these reductions over the next 10 years (see app. I). We consulted with finance experts at the Congressional Budget Office (CBO) and at the Department of Treasury concerning the assumptions we used for these estimates. As discussed in this report, there are potential offsets to reductions in interest costs (see app. II). We obtained information on them but did not estimate the net impact of changing payment timing.

<sup>&</sup>lt;sup>7</sup> These plans had a range of characteristics. They included a rural plan, a stand-alone drug plan, and two plans that receive Medicare payments exceeding \$1 billion per month each in 2007.

To assess the reliability of data used in this study, we examined the data to look for outliers and anomalies and addressed such issues as appropriate. Where possible and appropriate, we corroborated the results of our data analysis with other sources. On the basis of our assessment we believe the data are reliable for the purposes of this review.

We conducted this work from February 2008 through October 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

### **Results in Brief**

The current timing of payments to Medicare plan sponsors poses challenges to Treasury's cash management; appears manageable but complex and time-consuming for CMS; and may provide income to Medicare plan sponsors. In recent years, increased cash flow volatility and continued misalignment of the government's cash inflows and outflows have contributed to Treasury's cash management challenges. Part of the challenge is related to the growth in payments made at the start of the month to Medicare plan sponsors for MA and Part D benefits. Between 2005 and 2007, average monthly Medicare plan payments more than doubled due to growth in MA outlays and the inception of the Part D benefit in January 2006. Payments to Medicare plan sponsors are the second largest category of Treasury's start-of-month payments. The largest category is payments to Social Security recipients, but an administrative change in that schedule means that those start-of-month payments will diminish over time. In contrast, payments to Medicare plan sponsors are projected to grow.

To make the Medicare plan payments, CMS calculates millions of individual payments and certifies several hundred payments each month. While monthly amounts remain relatively stable during a contract calendar year, CMS must nonetheless recalculate and recertify each month to take into account the new information received from plan sponsors on enrollments and disenrollments. CMS's process for making the monthly payments involves staff in several organizational units and takes about 2 weeks.

Plan sponsors use MA and Part D payments to pay health care providers subject to prompt payment rules—and to meet administrative expenses. Because Medicare plan sponsors are at risk for the cost of providing covered benefits to their enrollees, payments may exceed, equal, or fall short of the actual cost of providing care. If start-of-month payments are received faster than funds are spent, sponsors may accumulate surpluses, which they told us they generally place in low-interest, short-term investments until the money is needed. Sponsor representatives expressed differing views on the extent to which such cash was available for investment and on the importance of any resulting income to their business model. Some sponsors indicated that the income from these investments was an important revenue source; other sponsors said it was not.

We developed several options for changing payment timing, all of which would facilitate Treasury's cash management, keep payments predictable, and continue the current practice of treating all plans equally. The options included keeping a single payment but making it on a different date or making multiple payments each month. Our illustrative estimates of potential interest cost reductions under the options ranged from \$40 million to \$90 million per year depending on the assumptions used.

Treasury officials told us that any change in payment timing that moved some or all of the Medicare payments to a different time of the month would greatly facilitate cash management. They said that better aligning the payments with either mid-month cash inflows from tax deposits or with their regularly scheduled debt issuances on Thursdays would facilitate their management of the government's cash flows. CMS officials expressed concerns about any change in payment timing that would add to an already complex and labor-intensive process. CMS officials indicated that maintaining its practice of preparing Medicare plan payments once per month would have the least effect on its operations.

All of the plan sponsor representatives we interviewed expressed concerns about changes to payment timing. Sponsors generally indicated that they would seek to recoup any loss in short-term investment income by increasing their Medicare bids. This in turn would increase Medicare spending. It would also increase beneficiary premiums or cost sharing, or reduce benefits, or some combination of these. Thus, alternative payment timing options could raise costs to the Medicare program and beneficiaries, depending upon the magnitude of plan sponsors' responses.

Staff at the CMS Office of the Actuary (OACT) said they would expect plan sponsors to respond to a change in payment timing by altering their Medicare bids. The direction and magnitude of any change in bids would depend on which payment timing option was selected. In addition, OACT indicated that the change in bids would likely vary by the size of plan, with smaller plan sponsors seeking to more fully recover any lost investment income. OACT also noted that competition among plans—particularly stand-alone Part D plans—means that some sponsors might be unwilling to raise their bid if doing so risks losing market share. OACT estimated the upper bounds for changes in federal Medicare payments under the various payment timing options, assuming that all plan sponsors reflected all of their revenue changes in their bids. OACT estimates ranged from a \$20 million per year reduction to a \$120 million per year increase in Medicare plan payments. The overall impact on the federal budget of a change in payment timing would depend on the relative size of interest cost reductions and plans' responses.

Even assuming, however, that sponsors increase their Medicare bids sufficient to entirely offset any reductions in interest costs that accrue to the federal government, a case can be made that this would increase transparency about the costs of Medicare programs. Accordingly, we believe that while the potential for higher Medicare spending should be considered, it should not be the sole or determining factor of whether the current timing of payments to Medicare plan sponsors should be changed.

Congress should consider Treasury's cash management challenges when enacting legislation that specifies payment timing; if payment timing is not specified, Congress should direct implementing agencies to consider Treasury's cash management challenges in establishing payment schedules. We also recommend that the Secretary of the Treasury and the Administrator of CMS convene a joint effort to study options to improve Treasury's ability to manage cash flow and reduce interest costs while not unduly increasing administrative burden for CMS. Based on the work done and our discussions with Treasury officials, we believe it is reasonable for this study to be completed by the end of calendar year (CY) 2009. Both Treasury and CMS agreed with GAO's recommendation.

### Background

Treasury's Cash Management Challenges In our earlier reviews we reported that Treasury faces challenges due to a misalignment in the timing of cash flows. Cash outflows for payments in several large programs are made at the start of the month—a time when Treasury does not generally have sufficient inflows to make the payments.

These start-of-month payments represent a large share of Treasury's total cash outflows. About one-quarter of the government's annual fiscal cash outlays (withdrawals excluding debt redemption) have taken place in the first 3 days<sup>8</sup> of each month since fiscal year 2005. Payments for Social Security benefits are the largest single type of start-of-month payment,<sup>9</sup> and the second largest is for Medicare benefits. (See fig. 2.) Payments are also made at the start of the month for civilian and military retiree benefits, military personnel, and veterans benefits. Large cash inflows, however, generally occur at other times of the month, that is, midmonth from tax receipts and on Thursdays from the issuance of regularly scheduled Treasury securities.





This lack of alignment between the timing of large cash inflows and outflows means that Treasury may need to borrow to make payments, and

<sup>&</sup>lt;sup>8</sup> Calendar days.

<sup>&</sup>lt;sup>9</sup> Changes have been made to the timing of Social Security benefit payments for those who began drawing benefits after 1997. The changes are expected to reduce the size of these payments over time. See discussion later in this section.

this borrowing may raise overall interest costs. Our prior work showed that Treasury had come to rely on cash management (CM) bills when Treasury's operating cash balance was low. CM bills are short-term securities issued outside of Treasury's regular borrowing schedule. They provide Treasury the flexibility to raise cash needed to make start-of-themonth payments, but Treasury has paid a premium for doing so in part because of their irregularity and short-term nature.<sup>10</sup>

Our previous work explored two possible alternatives to this borrowing: (1) Treasury could accumulate and maintain higher cash balances and (2) Treasury should explore ways to address the misalignment of cash flows. Each of these alternatives is discussed below.

*Higher cash balances are generally costly and raise issues for monetary policy.* We found that one alternative—accumulating and maintaining higher cash balances in order to make payments—presented problems both in terms of cost and in terms of the implications for the conduct of monetary policy. Maintaining higher cash balances is likely to be costly because Treasury generally faces a negative funding spread. That is, the interest earned on cash balances is generally insufficient to cover the cost of the increased borrowing needed to maintain these balances.

In addition, Treasury has faced capacity constraints in making short-term investments of excess cash.<sup>11</sup> Our 2007 review found that Treasury's ability to invest its excess cash balances above its target balance faced capacity constraints and concentration risk. Under the law in effect in

<sup>&</sup>lt;sup>10</sup> See GAO-06-269.

<sup>&</sup>lt;sup>11</sup> Until October 2008, Treasury was only permitted to invest its excess cash balances in depository institutions and in obligations of the U.S. government. Our review found that Treasury had improved its short-term investment programs but needed to broaden its investments to reduce risks and increase returns. Treasury had three short-term investment programs for investment of excess cash balances: the TT&L (Treasury Tax and Loan) program; the Term Investment Option (TIO) offerings; and limited repurchase agreements (repo). A repo, or repurchase agreement, is a form of short-term collateralized borrowing used by dealers in government securities. Interest in TT&L investments is set at the federal funds rate minus 25 basis points. In 2003, Treasury established the TIO as a permanent program to improve returns. In 2006, Treasury introduced a temporary repo pilot, which allowed it to earn near-market rates of return. We recommended that if provided the authority to do so, the Secretary of the Treasury implement a permanent expanded repo program that could permit Treasury to earn a higher rate of return, expand investment capacity, and reduce concentration risk. Subsequent to the completion of our analysis, section 502 of Pub. L. No. 110-351 (Oct. 7, 2008) amended section 323 of Title 31, U.S. Code, to authorize the Secretary of Treasury to establish a permanent repo program.

2007, Treasury was only permitted to invest its excess cash balances in depository institutions and in obligations of the U.S. government. Treasury's two permanent vehicles—Treasury Tax and Loan (TT&L) notes and the Term Investment Option (TIO) offerings—subject Treasury to high concentration risk and have limited capacity. By capacity concerns, we mean that Treasury's ability to invest all available cash may be hindered because of decreases in the number of participants or insufficient collateral available for depository institutions to secure Treasury's investments on days when Treasury has high cash balances. According to Treasury, at times it has been unable to place all of its cash in part because of a reduction in the number of participants in its investment programs.<sup>12</sup>

Moreover, Treasury's balances can affect the conduct of monetary policy. Treasury can make short-term investments of excess cash: that is, cash not needed to make payments or to meet its target balance in its General Account (TGA).<sup>13</sup> If Treasury's TGA balance exceeds or falls short of its target, the Federal Reserve must neutralize the change in overall reserves through market interventions. If Treasury has greater amounts of short-term cash than can be invested through other investment programs, the cash would have to be deposited into the TGA. If the TGA exceeded its target, the Federal Reserve would have to inject large amounts of reserves into the market. On the other hand, insufficient funds in the Treasury's total operating cash balance could cause the TGA to fall below its target, and the Federal Reserve would have to take reserves out of the system.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> For example, in 2007 we reported that over the past couple of years, Treasury had invested almost half of its TT&L deposits with one depository institution. The TIO shares the same concentration risk and raises capacity concerns in part because through 2006 TIO funds were concentrated in two TIO participants.

<sup>&</sup>lt;sup>13</sup> The TGA is the single account into which the funds that flow through the federal government's accounts are rolled up at the end of the day. The accounts are maintained at the 12 Federal Reserve banks.

<sup>&</sup>lt;sup>14</sup> See GAO-07-1105, appendix III, for a historical overview of these issues. In the mid-1970s, Treasury kept the bulk of its cash in the TGA account. On some occasions the Federal Reserve was unable to offset the large swings in the TGA balance through temporary open market operations, and it had to request that Treasury redeposit funds in its TT&L accounts to avoid having to make outright purchases of securities in the secondary market. Treasury has had statutory authority to invest in TT&L notes with depository institutions since 1977.

Treasury's decisions about how much cash to hold are also affected by the fact that it must maintain a target balance in the TGA large enough to avoid an overdraft. Treasury generally targets a \$5 billion balance in the TGA. An overdraft of the TGA could occur if the anticipated receipts for the day fall short of expectation or if there are unanticipated disbursements. Treasury cannot risk an overdraft in its TGA account because the Federal Reserve is not authorized to lend directly to Treasury, in part to preserve the Federal Reserve's independence as the nation's central bank. Although an account balance greater than \$5 billion would provide Treasury with increased overdraft protection, it could also increase borrowing, which would be costly whenever Treasury faces a negative funding spread.

*Treasury does not have authority to control the timing of all cash flows.* Our prior work also recommended that Treasury explore additional opportunities for closer alignment of cash flows. Treasury, however, is a passive agent; it collects and disburses federal funds at agencies' request. It does not determine when major benefit payments are made or when tax payments are due. For example, the payment dates of civil service and railroad retirement are set by law. Due dates for tax payments are also set by federal statute.

A precedent for changing the timing of Treasury payments was set when the Social Security Administration adjusted the date each month that benefits are paid to new Social Security recipients. These actions will help smooth the payment of Social Security benefits—the largest federal benefit payment. Prior to June 1997, regular monthly Social Security benefits were paid on (or around) the 3<sup>rd</sup> of each month. In 1997, the payment date was changed for beneficiaries filing after May 1997. These new beneficiaries are paid on the 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> Wednesday of the month depending on their date of birth. Social Security benefits paid at the start of the month are anticipated to remain relatively steady for a number of years and then decline. Because beneficiaries receiving their benefits before 1997 continue to receive benefits at the start of the month, our prior work estimated that the large payments for Social Security benefits could last another 10 years. (See fig. 2.)

#### Figure 2: Smoothing the Payment of Social Security Benefits

SSA's decision to change the timing of Social Security payments was one of the proposals made by federal agencies in response to the National Performance Review, an Administration reinvention initiative. SSA sought to improve its customer service and smooth workload peaks associated with paying all benefits on the same day. SSA wanted to reach its goal of minimal wait times for service to customers, e.g., with questions about their Social Security check. SSA believed that service was deteriorating and would deteriorate further as the baby boom generation retired while SSA's resources were reduced. SSA also believed that changing payment timing would benefit the business and banking communities, helping them to better utilize their resources throughout the month that were used to process Social Security payments and to reduce operational risk to these communities due to the large payment file processed to pay benefits.

Under the Social Security Act, the SSA Commissioner was given discretion over the timing of payments. Prior to making the change, SSA's change was published in the Federal Register for public comment. SSA also held 10 focus groups at 5 locations around the country and conducted meetings with stakeholders including representatives from the business community, financial community, other government agencies including the Department of Treasury, the Federal Reserve, the U. S. Postal Service, and advocacy groups. SSA stated that the overwhelming consensus of the meetings was support for payment timing change.

SSA considered changing payment timing for current beneficiaries but rejected this for two reasons. First, changing the payment date would disrupt monthly payment arrangements for current beneficiaries. Second, SSA did not have legislative authority to make a one-time additional payment to current beneficiaries that would cover the period from the old to new payment date.

SSA exempted certain individuals from the payment timing change because they had low incomes: (1) Social Security beneficiaries where the family received income from Supplemental Security Income and (2) beneficiaries whose Medicare premium was paid by the state in which they lived. SSA stated that exemption of this second group had been requested by the Health Care Financing Administration, the federal agency that administered the Medicare program.

Source: Federal Register, Vol. 62, No. 28, February 11, 1997, p, 6114.

Note: The Health Care Financing Administration is now CMS.

| Payments to Medicare Plan<br>Sponsors | In 2007, approximately 288 plan sponsors contracted with CMS to provide<br>benefits under the MA program, the Part D program, or both. <sup>15</sup> Plan<br>sponsors received approximately \$121 billion in Medicare payments from<br>Treasury—about \$78 billion for the MA program and about \$43 billion for<br>the Part D program that year. <sup>16</sup> These payments were concentrated in a<br>small number of plan sponsors; 6 sponsors received about half of all<br>Medicare plan payments. Payments to sponsors are fairly stable from<br>month to month because, generally, beneficiaries may decide on a new<br>plan before the start of each year and have limited opportunities to change<br>their selection.   |
|---------------------------------------|--|
|                                       | Plans in the MA program provide Medicare-covered services and may<br>provide additional benefits relative to those available under traditional<br>Medicare FFS. <sup>17</sup> For each MA enrollee, Medicare pays plan sponsors a<br>fixed amount monthly that is based on a bid and a benchmark. MA<br>sponsors submit bids to CMS that reflect their projected revenue<br>requirements for the medical expenses, nonmedical expenses, and profit<br>margin associated with supplying the benefit package available in the<br>Medicare FFS program. If the sponsor's bid is higher than the<br>administratively set rates, known as benchmarks, Medicare pays the<br>sponsor the amount of the benchmark, and the sponsor must charge<br>beneficiaries a premium to collect the amount by which the bid exceeds<br>the benchmark. If the sponsor's bid is lower than the benchmark, the<br>sponsor receives the amount of the bid plus additional payments, known<br>as rebates, equal to 75 percent of the difference between the benchmark<br>and the bid. MA sponsors are required to spend their rebates on additional<br>benefits, reduced cost sharing, reduced premiums, or a combination of the<br>three. |

<sup>&</sup>lt;sup>15</sup> Several plan sponsors have multiple contracts. The number of payments made each month thus exceeds the number of plan sponsors. According to CMS, over 750 separate contract payments occur each month, and this number will grow to an estimated 900 contract payments in 2009.

<sup>17</sup> See 42 C.F.R.§422.100(c)(2007). Additional benefits may, for example, include coverage for vision and hearing services; reductions in cost sharing—the amount a beneficiary pays for covered services; and reductions in the premiums that many Medicare FFS beneficiaries must pay for coverage for outpatient services and outpatient drugs.

<sup>&</sup>lt;sup>16</sup> Payments for both Part C and Part D include beneficiary premium amounts that are withheld from Social Security benefits. Beneficiaries subject to MA or Part D premiums may choose to either reimburse the plans directly or have the premiums deducted from their Social Security checks. The premiums deducted from the Social Security checks are transferred to the Medicare trust funds and then transferred from the trust funds to the plans.

Plan sponsors in the Part D program provide outpatient prescription drug coverage to Medicare FFS beneficiaries who enroll in stand-alone prescription drug plans (PDP) and to MA beneficiaries through their MA plans (MA-PD).<sup>18</sup> Medicare makes a per capita monthly prospective payment to sponsors based on estimates that sponsors provide in their approved bids prior to the beginning of the plan year. These payments consist of three subsidies: (1) the direct subsidy, which, together with beneficiary premiums, is designed to cover the sponsor's cost of providing the benefit; (2) the reinsurance subsidy, which covers drug costs for beneficiaries who have reached catastrophic coverage,<sup>19</sup> and (3) the lowincome subsidy, which covers premiums and copayments for certain lowincome beneficiaries. The following year, CMS reconciles these prospective payments with sponsors' actual costs to determine whether sponsors owe money to Medicare or Medicare owes money to sponsors. In addition, CMS must determine whether risk-sharing payments are required to account for sponsors' unexpected profits and losses.

Medicare payments for MA and Part D are paid on the first day of each month that is not a weekend or holiday.<sup>20</sup> MA plan sponsors that also provide a Part D benefit receive combined payments that reflect amounts for each program. Part C of the Social Security Act requires that the Secretary make monthly payments to plan sponsors in advance of the coverage provided under MA, while the statute establishing Part D gives the Secretary of HHS more discretion on payment timing for benefits provided under Part D.<sup>21</sup> Thus, HHS is not precluded by the Social Security Act from paying MA-PD plans or PDP plans for Part D coverage on a time frame different than MA plans are paid for Part C benefits.

<sup>&</sup>lt;sup>18</sup> Beneficiaries enrolled in an MA plan that does not offer Part D coverage have limited opportunities to enroll in a stand-alone prescription drug plan.

<sup>&</sup>lt;sup>19</sup> The catastrophic coverage phase begins when a beneficiary's out-of-pocket costs reach \$5,726 (in 2008). At that point, beneficiaries contribute approximately 5 percent coinsurance toward their drug costs, the Part D sponsors pay approximately 15 percent, and Medicare pays 80 percent.

<sup>&</sup>lt;sup>20</sup> When the first of the month falls on a holiday or weekend, payment is made on the previous business day.

 $<sup>^{21}</sup>$  See Social Security Act \$ 1853(a)(1), 1860D-15(a). This schedule for making plan payments reflects historical and standard practice.

#### Plan Sponsors' Payments to Providers

The MA program offers a variety of plans. The three main types of plans are health maintenance organizations (HMO), preferred provider organizations (PPO), and private fee-for-service (PFFS).<sup>22</sup> Generally, each type of plan in the MA program provides services through different arrangements with contracted providers or by purchasing services from noncontracted providers. Medicare Advantage HMOs and PPOs establish networks of physicians, hospitals, and other providers. Typically, HMOs pay providers on a salary, FFS, or capitation basis,<sup>23</sup> and PPOs may pay providers on a discounted FFS basis. In contrast, the vast majority of PFFS plans operate without an established provider network and pay providers on a FFS basis. MA plan sponsors must pay 95 percent of "clean claims"—generally those that have no defect or do not lack any required substantiating documentation—within 30 days of receipt if they are submitted by an enrollee of a PFFS plan or are claims for services obtained from out-of-network providers. For clean claims that are not paid within 30 days, the MA plan sponsor must pay interest. All other claims must be paid or denied within 60 calendar days from the date of the request.24

PDP and MA-PD plan sponsors generally contract with pharmacies to provide Part D covered drugs to enrollees. Sponsors negotiate with pharmacies in order to include a sufficient number and geographic distribution of pharmacies in their networks. Sponsors reimburse the pharmacy for the cost of the drug, plus a dispensing fee. Beginning January 1, 2010, plan sponsors must make payment on all clean claims submitted by pharmacies within 14 days of receipt for claims submitted electronically and 30 days for claims submitted otherwise. If payment for a clean claim is not made within that time frame, the plan sponsor must pay interest to the pharmacy that submitted the claim.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> Other types of plans include provider sponsored organizations, Medical Savings Accounts, and regional PPOs.

<sup>&</sup>lt;sup>23</sup> Under capitation, plan sponsors pay a fixed amount for each enrollee assigned to the provider irrespective of the number of covered services provided.

 $<sup>^{24}</sup>$  See 42 CFR § 422.520. Network contracted providers are not subject to federal prompt payment rules but instead are governed by the payment timing provisions of their contract terms.

<sup>&</sup>lt;sup>25</sup> This requirement will not apply to pharmacies that dispense drugs by mail order only or are located in, or contract with, a long-term care facility. See Medicare Improvements for Patients and Providers Act of 2008, Pub. L. No. 110-275, § 171, 122 Stat. 2494, 2578-80.

| Current Timing of<br>Payments to Medicare<br>Plan Sponsors Poses<br>Challenges for<br>Treasury's Cash<br>Management, Appears<br>Manageable for CMS,<br>And Financially<br>Favorable for Plan<br>Sponsors | The current timing of payments to Medicare plan sponsors poses<br>challenges to Treasury's cash management, appears manageable if<br>complex and time-consuming for CMS, and may provide income to<br>Medicare plan sponsors. Between 2005 and 2007 the size of average start-<br>of-month payments to plan sponsors more than doubled due to higher<br>payments to MA plan sponsors and the start of the Part D drug benefit in<br>2006. The growth in MA payments has widened the misalignment between<br>cash inflows and outflows and increased Treasury's challenges in<br>managing its cash position. Over the same period, the volatility of<br>Treasury's cash balances has also grown, adding to Treasury's cash<br>management challenges. To make the start-of-month payments to<br>Medicare plan sponsors, CMS has developed a process involving several<br>CMS organizational units that allows CMS to calculate, review, and certify<br>hundreds of payment amounts each month to plan sponsors. Plan<br>sponsors we spoke with said they use the Medicare plan payments to pay<br>providers within time frames specified by government regulations. Where<br>payments are not yet needed to meet plan expenses, plan sponsors told us<br>they keep cash in conservative, low-interest, short-term investments.<br>Some sponsors indicated that the income from these investments was an<br>important revenue source; other sponsors said it was not. |
|--|--|
| Misalignment of Cash<br>Flows Continues to<br>Present Treasury with<br>Cash Management<br>Challenges   | The cash management challenges we found in our prior work have<br>continued for Treasury. The volatility of cash flows has increased, and<br>large cash inflows and outflows remain misaligned. Because payments to<br>Medicare plan sponsors for MA and Part D benefits are made at the start of<br>each month, they increase the misalignment between cash inflows and<br>outflows and add to Treasury's cash management challenges. While the<br>start-of-month payments for Social Security will diminish over time, <sup>26</sup><br>payments to Medicare plan sponsors are expected to grow.   |
| Volatility of Treasury's Cash<br>Flows Continued in Fiscal 2007  | Treasury confirmed that it continues to face cash management challenges<br>due to the misalignment of cash flows. Treasury data illustrate the<br>continued misalignment of cash inflows and outflows (deposits and<br>withdrawals) in fiscal year (FY) 2007. (See fig. 3.)  |

<sup>26</sup> See Figure 1.

Figure 3: Net Treasury Deposits and Withdrawals for Fiscal Year 2007



Source: GAO analysis of Treasury data.

Note: These data are net of debt transactions (issuances and redemptions).

In FY 2007, as we found in our prior work, payments Treasury made on the first three days<sup>27</sup> of the month comprised about one-fourth of the total cash payments net of debt transactions. As shown in figure 4, the volatility of Treasury's cash balances increased in FY 2007 relative to FY 2005.<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> Calendar days.

<sup>&</sup>lt;sup>28</sup> As discussed in our 2007 report, the coefficient of variation is one measure of cash flow volatility. This measure is calculated by dividing the standard deviation by the mean, and a larger percentage indicates greater volatility. The coefficient of variation of Treasury's daily operating cash balances was 80 percent in both FY 2006 and 2007, compared to 60 percent in FY 2003.

Figure 4: Treasury Total Operating Cash Balance in Fiscal Years 2005 and 2007



In FY 2008, Treasury's cash management challenges have been heightened by increases in the federal deficit. At the April 2008 meeting of the Treasury Borrowing Advisory Committee, Treasury highlighted the flat growth of individual and corporate income taxes, an increase in outlays of 6 percent, and the impact of the stimulus program enacted in February 2008.<sup>29</sup> Volatility in receipts and outlays as well as debt redemptions and sales by the Federal Reserve resulted in less predictable cash balances, making cash management an ongoing challenge. According to a senior Treasury official, rapid growth in financing needs resulted in an increasing

<sup>&</sup>lt;sup>29</sup> The Treasury Borrowing Advisory Committee of the Securities Industry and Financial Markets Association was chartered under the Federal Advisory Committee Act, as amended, and is comprised of 14 members who represent securities firms, banks, and investor groups. The Committee's members are nominated by the Chairman of the Committee, in coordination with Treasury, are selected in coordination with the Chairman of the Committee and Treasury, and approved by Treasury. Following this meeting, Treasury reintroduced a 52-week bill; regularly scheduled auctions for the bill take place every 4 weeks on Thursdays. For minutes of the Committee's April 28, 2008, meeting, see http://www.treas.gov/press/releases/hp1002.htm (accessed on June 17, 2008).

dependence on CM bills. In the first half of FY 2008, Treasury issued over \$300 billion in CM bills compared with \$267 billion in all of FY 2007.

Payments to Medicare Plan Sponsors are Part of Treasury's Cash Management Challenge The Medicare payments Treasury must make at the start of the month are primarily to MA and Part D plan sponsors.<sup>30</sup> In CY 2007 these payments represented about 25 percent of total cash payments made on the same day.<sup>31</sup> These payments have increased in the past 2 years following the inception of the Part D benefit in January 2006 and increases in MA outlays.<sup>32</sup> Total payments to Medicare plan sponsors made at the start of the month were \$46.7 billion in CY 2005, \$105 billion in CY 2006, and \$120 billion in CY 2007, for an average \$10 billion per month in CY 2007. A senior Treasury official told us that the growing Medicare payments at the start of the month pose cash management challenges.

In contrast to Social Security payments made at the start of the month, payments to Medicare plan sponsors are projected to continue to grow over the next 10 years. Estimates prepared in Spring 2008 by both CBO<sup>33</sup> and CMS<sup>34</sup> show spending for Medicare MA and Part D combined growing at an annual rate of about 10 percent from FY 2009 through FY 2017. However, enactment of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA)<sup>35</sup> in July 2008 is likely to reduce estimated spending growth. In its cost estimate for MIPPA, CBO noted that the act would decrease MA enrollment to about 12.0 million individuals in 2013

<sup>33</sup> CBO's estimates are from its March 2008 baseline.

<sup>&</sup>lt;sup>30</sup> Payments to Medicare fee-for-service providers are made daily as claims are paid, including on the first of the month. In CY 07, a total of \$134 billion Medicare payments were made in first-of-month payments; \$120 billion, or about 90 percent, of this total was made to Medicare health plans.

<sup>&</sup>lt;sup>31</sup> That is, in months where the 1<sup>st</sup> of the month fell on a weekday, in which case the Medicare payments to plans were made on the 1<sup>st</sup>. Where the 1<sup>st</sup> fell on a weekend or holiday, the Medicare payment date rolled back to the immediately preceding workday. Cash payments are net of debt transactions (i.e., debt redemptions and issuances).

<sup>&</sup>lt;sup>32</sup> Medicare spending on the MA program has grown rapidly in recent years due to increases in both payment rates and enrollment. See GAO, *Medicare Advantage: Higher Spending Relative to Fee-for-Service May Not Ensure Lower Out-of-Pocket Costs for Beneficiaries*, GAO-08-522T (Feb. 28, 2008).

<sup>&</sup>lt;sup>34</sup> GAO analysis of CMS's calendar year estimates. This analysis assumes that payments are evenly distributed throughout the year. CMS's estimates reflect the Medicare Trustees' 2008 intermediate assumptions.

<sup>&</sup>lt;sup>35</sup> The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA), Pub. L. No. 110-275, 122 Stat. 2494, became law on July 15, 2008.

relative to CBO's previous baseline estimate of 14.3 million. The estimated effects of MIPPA on MA spending will be reflected in CBO's January baseline and in next spring's Medicare Trustees report.

CMS Calculates and Certifies Payment Amounts Monthly to Ensure Plan Sponsors are Paid at the Start of the Month For MA and Part D payments to be made at the start of a month, CMS's Office of Information Services (OIS), Center for Drug and Health Plan Choice (CPC,) and Office of Financial Management (OFM) work together to calculate and certify payment amounts and transmit this information to Treasury. CMS requires that plan sponsors provide information on enrollment for the payment period and submit these data by a specific date each month, usually midmonth. The agency completes the payment calculation and verification process in approximately 2 weeks.

OIS takes approximately 3 days to calculate MA and Part D payments each month. OIS computes beneficiary-level payments for each plan using enrollment and other data. The number of beneficiaries reported for each plan may vary slightly from month to month, primarily due to enrollments of newly eligible beneficiaries and disenrollments due to deaths or beneficiaries moving out of a plan's service area. For payment purposes, each plan's enrollment is measured as of a cutoff date, generally in the middle of the month, that is specified at the beginning of the contract year. Although beneficiaries' coverage becomes effective the first of the month after they enroll, enrollments processed after the payment cutoff date are not reflected in that month's payment but rather in the capitation payment for the subsequent month. For example, sponsors must submit plan enrollments by the cutoff date of April 16 to receive a May 1 payment for these individuals. If the sponsors submit enrollments after the cutoff day in April (i.e., enrollments submitted to CMS between April 17 and 30), they will not receive their May payments for those beneficiaries until June 1.

Next, CPC reviews and validates the calculations for each enrollee and creates a summary file of plan payments. This validation takes 3 days. CPC then sends a file to OFM that specifies the amounts that will need to be disbursed from the various Medicare appropriations accounts for each payment.<sup>36</sup> OFM notifies Treasury of the totals, certifies the payment amounts, and prepares a formatted file for Treasury with the payments.

<sup>&</sup>lt;sup>36</sup> MA plans provide both Part A and Part B benefits, which are paid from the Hospital Insurance (HI) and Supplementary Medical Insurance (SMI) Trust Funds. Part D benefits are paid from the Part D account in the SMI Trust Fund.

|  | the payment date. OFM staff told us that OFM needs 5 business days to complete its work.   |
|--|--|
| Plan Sponsors Invest<br>Funds Not Yet Needed to<br>Meet Expenses | After plan sponsors receive Medicare payments at the start of each month,<br>plan sponsors told us they use any funds not immediately expended to<br>make short-term investments until drawn down to pay providers and meet<br>administrative expenses. Sponsors receive CMS payments around the first<br>of each month and incur expenses as bills become due. Plan sponsors told<br>us that they keep cash not yet needed to meet expenses invested in low-<br>interest, conservative, short-term instruments such as Treasury bills and<br>certificates of deposit until expended.  |
|  | Medicare prompt payment regulations require MA plan sponsors to make<br>payment for certain claims within a specified time frame on behalf of plan<br>enrollees. MA plan sponsors in our study reported that they usually make<br>capitation payments at the beginning of the month or prior to the first of<br>the month. They noted that once a provider's contract term has begun the<br>timing of sponsors' settlements usually cannot be changed before the end<br>of the contract period. In addition to capitation, HMOs and other types of<br>plans pay providers on a claims basis. MA plan sponsors we spoke with<br>told us that they receive medical claims throughout the month and<br>generally settle within 30 days, although this could vary by provider. |
|  | For drug claims, the timing of Part D plan sponsors' payments to pharmacies is set in their contracts and typically specifies within 30 days from when a claim is filed. A 2007 University of Texas study found that the monthly median payment time for Part D claims processed from March through December 2006 ranged from 27 to 33 days. <sup>37</sup> In May 2006, CMS reported that 18 of the top 20 Part D plans, covering 90 percent of beneficiaries, were paying pharmacies for claims twice monthly. <sup>38</sup> One plan sponsor in our study reported that their Part D claims are batched and then paid once a week.   |
|  | <sup>37</sup> The study determined the time between the date of claim adjudication (the date the plan  |

<sup>&</sup>lt;sup>57</sup> The study determined the time between the date of claim adjudication (the date the plan approves the drug claim is usually the dispensing date) and the date the pharmacy received payment from the Part D plan. See M. Shepherd, K. Richards, and A. Winegar, *Length of Prescription Drug Payment Times by Medicare Part D Plans*, (Austin, Texas: Center for Pharmacoeconomic Studies: The University of Texas at Austin, August 2007).

OFM then sends this payment file to Treasury 2 to 3 business days prior to

<sup>&</sup>lt;sup>38</sup> Remarks of CMS Administrator Mark B. McClellan delivered to the National Community Pharmacists Association 38th Legislation and Government Conference, May 22, 2006.

|  | Because MA and Part D plan sponsors are at financial risk for the cost of<br>covered services provided to their enrollees, payments may exceed, equal,<br>or fall short of the actual cost of providing care. If start-of-month<br>Medicare payments are received faster than funds are spent, sponsors may<br>accumulate surpluses. Plan sponsors we interviewed said they use any<br>unexpended portion of their Medicare payments to make short-term<br>investments until the money is needed.  |
|--|--|
|  | Income from the short-term investment of cash not yet needed to meet<br>expenses can play an important part in sponsors' cash management. The<br>financial gain from such investments is influenced by the timing of<br>sponsors' expenditures and how they invest their Medicare payments. The<br>five plan sponsors in our study varied in reporting the significance of these<br>investments to their business. A small rural plan sponsor and a large<br>nonprofit plan sponsor both stated that earnings from these investments<br>are an important source of revenue. Other sponsors stated that while they<br>use such investments as a revenue-generating instrument, the earnings<br>from short-term investments are not a major source of revenue. |
| Alternative Payment<br>Options Could Help<br>Address Treasury's<br>Cash Management<br>Challenges | We developed several options that would either shift the timing of MA and<br>Part D payments away from the first of the month, and/or divide a single<br>payment into two or more payments. All of the options we explored would<br>reduce Treasury's cash management challenges, retain predictable<br>payments, and continue the current practice of treating all plan sponsors<br>equally. We developed illustrative estimates of the potential interest cost<br>reduction and reductions in Treasury's average cash balances under<br>alternative payment timing options.  |
|  | We developed five options that illustrate a range of approaches to<br>changing payment timing. These options were selected to show<br>alternatives including a single payment per month, two payments per<br>month, and weekly payments.   |
|  | <u>Option 1:</u> Make one payment on the $26^{th}$ of the prior month.   |
|  | <u>Option 2:</u> Make two payments, with half of that month's amount paid on the $1^{st}$ and the other half on the $15^{th}$ .  |
|  | <u>Option 3:</u> Make two payments, with the first payment made on the $20^{th}$ of the prior month and the remainder paid on the $10^{th}$ of the month of coverage.  |

<u>Option 4:</u> Make two retrospective payments with the first payment made on the fourth Thursday of the month and the second payment on the second Thursday of the following month.<sup>39</sup>

<u>Option 5:</u> Make weekly payments on Thursdays, each payment equal to 1/4 or 1/5 of the monthly payment amount, depending on the number of Thursdays in the month.<sup>40</sup>

We developed two sets of illustrative estimates of the potential interest cost reductions based on data from two time frames. One set of estimates was based on monthly Treasury cash flow data covering the period from October 2002 through December 2007. The other set of estimates was based on a more limited period, covering the months after the implementation of Medicare Part D in 2006, January 2006 through December 2007. The longer period yielded a lower range of estimates for the annual interest cost reduction and average monthly cash balances. The (higher) estimate from the more recent sample should be given greater consideration since it includes only the period during which Part D was in effect. For both sets of estimates, for each \$1 billion reduction in average monthly cash balances, we estimated a reduction in annual interest costs of about \$53 million.

We estimated that these options would imply a reduction in the level of Treasury's average monthly cash balance of from \$720 million to \$960 million (lower range) and from \$1.28 billion to \$1.73 billion (higher range).<sup>41</sup> The range of our estimates is summarized in table 1. Applying a 20-year historic average of the interest rates on 3-month bills and 10-year Treasury notes to the estimated reduction in cash balances implies a lower range reduction in annual interest costs of about \$40 million to \$50 million and a higher range reduction of about \$70 million to \$90 million. Over time these reductions would grow, lowering federal interest costs from what they would otherwise be. We projected these amounts over the next 10 years using CBO's baseline projections of outlays for FY 2009 to 2018.

<sup>&</sup>lt;sup>39</sup> This option follows the current payment schedule for community-rated plans in the Federal Employees Health Benefits Program (FEHBP).

 $<sup>^{\</sup>rm 40}$  As discussed earlier in this report, under Treasury's regular auction schedule, bills are settled on Thursdays.

<sup>&</sup>lt;sup>41</sup> Our estimates suggest that making weekly payments on Thursdays yielded the largest potential for interest cost reductions, and the option of paying on the 1st and the 15th yielded the smallest.

# Table 1: Estimated Effects on Treasury's Cash Balances and Interest Costs ofChanging Payment Timing under GAO's Options Rounded to the Nearest\$10 Million

| Dollars in millions             |   |   |
|---------------------------------|---|---|
|                                 | Estimate based on<br>October 2002 through<br>December 2007 data | Estimate based on<br>January 2006 through<br>December 2007 data |
| Annual interest cost reduction  | 40 to 50  | 70 to 90  |
| 10-year interest cost reduction | 500 to 670  | 890 to 1200   |

Source: GAO analysis of Treasury data.

Notes: Estimates do not reflect any potential offsetting effects.

Estimates for the reduction in average monthly cash balances and annual interest cost reductions are on a calendar year basis; estimates for 10-year interest cost reductions are on a fiscal year basis.

The ranges shown in table 1 reflect a gross reduction in Treasury's interest expenses and do not include potential offsetting effects. First, our estimates do not account for any interest Treasury could earn from its excess cash balances in its short-term investment programs. As discussed earlier in this report, Treasury faces capacity concerns in which its ability to invest all available cash may be hindered by a limited number of participants or insufficient collateral available for depository institutions to secure Treasury's investments. The actual impact on interest costs of any changes in payment timing would depend on the level of cash Treasury holds, the interest rate spread, and the timing of investments.

Second, CMS and CBO said they would expect plan sponsors to respond to a change in payment timing, which could result in an increase in costs to Medicare and beneficiaries. Most plan sponsors we spoke with indicated that they would take steps to recoup any lost income by increasing their bids. To the extent that plan sponsors do so, Medicare payments to plans would rise. In addition, beneficiaries could face increases in premiums, increases in cost sharing, reduced benefits, or some combination of the three. These actions would have programmatic effects that could raise the overall cost of Medicare, as discussed later in the report. Our estimates in table 1 do not include a quantification of these effects.<sup>42</sup>

<sup>&</sup>lt;sup>42</sup> See discussion later in this report for the views of CMS's Office of the Actuary on possible plan responses.

| Changing Payment<br>Timing Involves<br>Balancing Treasury's<br>Cash Management<br>Challenges,<br>Administrative Impact<br>on CMS, and Potential | All the options we developed for changing payment timing would facilitate<br>Treasury's cash management, but CMS expressed concerns about effects<br>on its administrative burden. Among the options, Treasury said that better<br>alignment of payments with mid-month cash inflows from tax deposits or<br>with its regular borrowing schedule would do the most to better align cash<br>flows, but any change that reduced the size of the start-of-month payments<br>to plan sponsors would help address cash management challenges. CMS,<br>however, expressed concerns about changing payment timing. For CMS a<br>change that maintained the practice of preparing Medicare plan payments<br>once a month would have the least effect on their operations.  |
|---|--|
| Impacts on Medicare   | Plan sponsors generally were opposed to any change in payment timing.<br>Sponsors told us that any losses in revenue resulting from a change in<br>payment timing would be reflected in their bids. This would increase<br>Medicare costs as well as raise beneficiaries' premiums and/or reduce plan<br>benefits. CMS OACT staff indicated that the impact of the change in<br>payment timing would depend on the option selected, whether some or all<br>sponsors changed their bids, and whether plan sponsors would seek to<br>fully or partially reflect revenue changes in their bids. In general, OACT<br>expected that most of the change in investment income would affect<br>sponsors' bids, but that the responses might vary by size of plan sponsor.<br>OACT noted that large sponsors might be less affected by a reduction in<br>the investment income generated from start-of-month payments and that<br>competition among Part D plans might serve as a disincentive for sponsors<br>to raise their bids. |
| Treasury Favors Payments<br>Closely Aligned with<br>Borrowing Schedule or<br>Mid-Month Tax Deposits   | Officials at Treasury told us that changes in payment that better align cash inflows and outflows by shifting payments away from the start of the month would facilitate cash and debt management. Treasury officials suggested that one approach would be to shift part or all payments to the middle of the month; another approach would be to make multiple monthly payments that align with Treasury's regular borrowing schedule. Treasury suggested payments on Thursdays because regular short-term bills with 4-, 13-, and 26-week maturities are issued on Thursdays. <sup>43</sup> Treasury officials emphasized, however, that any change in payment timing that better aligns Treasury's receipts and payments would reduce the volatility of Treasury's cash flows, leading to improved debt management and lower interest costs.  |

<sup>&</sup>lt;sup>43</sup> Treasury also began reissuing regular 52-week bills in June 2008.

|   | A senior Treasury official suggested that multiple monthly payments to<br>plan sponsors could be made while maintaining CMS's existing process of<br>calculating and certifying payments once each month. In comments on a<br>draft of this report, Treasury said it would welcome the opportunity to<br>review each of its payment systems with CMS to determine which<br>application best met their needs.  |
|---|---|
| Approaches Whereby CMS<br>Calculates and Certifies<br>Payments Once per Month<br>Would Have Least Effect<br>on Its Operations | Asked about alternative payment options, CMS indicated that maintaining<br>the practice of preparing Medicare plan payments once per month would<br>have the least effect on its operations. Given the time required to calculate<br>and certify payment amounts, officials told us that conducting these<br>processes multiple times each month would increase their workload<br>proportionately. For example, processing payments two or four times a<br>month would double or quadruple the number of days devoted to<br>calculating and certifying payments. This increase in workload could<br>require a reallocation of staff to support the additional work. |
|   | CMS officials stated that the option to make the payment date the 26 <sup>th</sup> of the previous month could be accommodated by moving the enrollment cutoff date to earlier in the month. However, it would result in more retroactive payment adjustments made in the month following the initial month of coverage. Because beneficiaries who enroll after the cutoff date are not included in the following month's payment, moving the cutoff date forward would increase the period of time during which a beneficiary could enroll in a plan and not be included in the next month's payment.  |
|   | Similarly, CMS officials told us that the agency could accommodate other options to adjust the timing of Medicare payments as long as they could maintain the practice of calculating and verifying amounts only once each month. Thus, the options to pay plan sponsors on the $1^{st}$ and $15^{th}$ of each month, two Thursdays each month, or every Thursday would have minimal impact on CMS if the options could be implemented in a way that allows CMS to calculate and certify payments once a month as is currently done.  |
|   | In technical comments on a draft of this report, CMS said its payment<br>process would need to begin 2 weeks before the option's first payment<br>date. The earlier the payment calculation date, the earlier the cut-off date<br>for plan enrollment data. As noted, CMS said this would result in larger<br>retroactive payment adjustments because monthly payments would be<br>based on less current enrollment data.   |

Approaches under Which Sponsors Lose Investment Income from Start-of-Month Payments May Affect Medicare Spending and Beneficiary Premiums

Plan sponsors we interviewed generally told us that they would increase or consider increasing their bids to recoup any lost investment income and administrative costs resulting from a change in payment timing. If bids were increased, Medicare's payments to plans would increase. There would be increases in beneficiary premiums, increases in beneficiary cost sharing, reduced benefits, or some combination of the three. Thus, alternative payment timing options could raise costs to the Medicare program and beneficiaries, depending on how plan sponsors reacted.<sup>44</sup>

Plan sponsors we spoke with generally said that they would likely respond by increasing their MA and Part D bids to offset the lost income from their short-term investments. Of the payment alternatives we developed, the option to shift the payment date to the  $26^{th}$  of the previous month was the only one that plan sponsors we interviewed generally did not see as raising issues. However, one plan sponsor indicated that it did not want to receive payments prior to the first of the month, expressing concern regarding end-of-year tax liabilities.

Staff at CBO and the CMS OACT also told us that they would expect plan sponsors to respond to a change in payment timing by raising their Medicare bids to offset any revenue decline. When we asked OACT staff if they could quantify plans' responses to the options, they indicated that the impact of the change in payment timing would depend on the option selected, whether some or all sponsors changed their bids, and whether sponsors would seek to fully or partially reflect revenue changes in their bids. The staff expected that most of the change in revenue would be reflected in plans' bids, particularly smaller sponsors' bids. OACT provided estimates of the impact on federal Medicare payments under each option, assuming that all plans reflected all of the change in their revenue from short-term investment in their bids. These upper bound estimates ranged from a reduction in federal Medicare payments of \$20 million per year to an increase in federal Medicare payments of \$120 million per year depending on the option selected.<sup>45</sup>

<sup>&</sup>lt;sup>44</sup> Because premiums paid by beneficiaries in Medicare FFS are tied to both Medicare FFS and MA program spending, additional payments to MA plan sponsors result in higher premiums for all Medicare beneficiaries.

<sup>&</sup>lt;sup>45</sup> OACT estimated a decrease in federal Medicare payments under the option that would shift all sponsor payments to the 26th of the prior month; and it estimated the largest increase in federal Medicare payments for the option that would make two retrospective payments.

OACT staff said they would expect responses to the alternative payment timing options to be influenced by how plan sponsors pay providers. For example, if sponsors had to make capitated payments to providers on the first of the month but did not receive their Medicare payments on that date, they would need to draw down their reserves. If plan sponsors received weekly Medicare payments, the effect would be more significant; if they received a split payment—with half paid several days early and the remainder several days after the first—there would be no effect.

In addition, OACT staff indicated that a change in the timing of Medicare payments could affect some Medicare plan sponsors more than others. Smaller sponsors and those with significant growth in MA and Part D enrollment would likely experience a more significant impact. However, OACT said that because large plan sponsors have substantial amounts of reserves—which they need to maintain in order to comply with state laws—they would not be affected as much by a relatively small loss in investment income and might not raise their bids. In addition, OACT noted that competition among plans—particularly stand-alone Part D plans—means that some sponsors might be unwilling to raise their bid if doing so risks losing market share.

### Conclusions

All the options we developed for changing the timing of payment to Medicare plans embody trade-offs in terms of their impacts on Treasury's ability to manage the debt, CMS operations, and Medicare plan sponsors. The specific trade-offs vary depending on the specifics of a given option. For example, for purposes of cash management, the option of making multiple payments on Thursdays would facilitate Treasury's cash management by aligning payments with Treasury's regular borrowing schedule, but plan sponsors told us that in response to such a change they would raise their bids to compensate for either a reduction in investment earnings or a need to borrow funds. All of the options raise the question of how and to what extent the Medicare program and Medicare beneficiaries will be affected if actions are taken to address Treasury's cash management challenge. Both the current system and any change raise issues of transparency—what is the cost of the Medicare Advantage and Part D programs and where are those costs shown in the budget.

Changes in timing and/or frequency of Medicare payments to plan sponsors would need to be carefully considered in terms of the near-term impacts on operations of both Treasury and CMS and whatever actions sponsors might take in response that could increase federal Medicare spending and adversely affect beneficiaries. Treasury officials told us that

|  | they will work with CMS to review their payment systems to facilitate an<br>approach that makes multiple monthly payments while still requiring only<br>a single certification by CMS.   |
|--|--|
|  | While implementation issues remain to be resolved, the benefits from<br>changing payment timing might include lower federal interest and debt<br>costs over time from what they would otherwise be if the misalignment of<br>cash flows continues or—as seems likely—increases. To be sure, the net<br>result of a change in payment timing is difficult to determine and would<br>depend on the details of the particular option chosen. Plan sponsors we<br>spoke with generally said that they would increase or consider increasing<br>their bids to fully or partially offset any revenue loss due to a change in<br>payment timing. OACT said that larger plan sponsors would be better<br>positioned to adjust to a change in payment timing that would decrease<br>their investment income. OACT also noted that competitiveness concerns<br>could give some plan sponsors a disincentive to increase their bid. Even<br>assuming, however, that sponsors increase their Medicare bids sufficiently<br>to entirely offset any reductions in interest costs that accrue to the federal<br>government, a case can be made that this would increase transparency<br>about the costs of Medicare programs. Accordingly, we believe that while<br>the potential for higher Medicare spending should be considered, it should<br>not be the sole or determining factor of whether the current timing of<br>payments to Medicare plan sponsors should be changed. |
| Matter for<br>Congressional<br>Consideration | In designing new programs, Congress should consider the nature of<br>Treasury's cash management challenge when enacting legislation that<br>specifies payment timing. Where payment timing is not specified,<br>Congress should direct the implementing agency to consult with Treasury<br>in establishing payment schedules.  |
| Recommendation for<br>Executive Action       | We recommend that the Secretary of the Treasury and the Administrator<br>of CMS expeditiously convene a joint interagency effort to study options<br>identified by GAO and any other options that would improve Treasury's<br>ability to manage cash flow and reduce overall interest costs while not<br>unduly increasing administrative burden for CMS.  |

|                                       | For each option, the joint study should include discussion of   |
|---------------------------------------|---|
|                                       | <ul> <li>operational impacts on and likely consequences for cash management,<br/>CMS, and Treasury operations;</li> <li>plan sponsors' likely responses and the consequences of these for the<br/>Medicare program and beneficiaries;</li> <li>the expected change in federal costs and the distribution of any<br/>increases or decreases;</li> <li>analysis of feasibility and mechanics of varying payment schedule by<br/>size/scale of plan; and</li> <li>what would be needed for implementation, including which options<br/>would require statutory change and if so the specific changes<br/>necessary.</li> </ul> |
|                                       | Based on the work done and our discussions with Treasury officials, we believe it is reasonable for this study to be completed by the end of CY 2009.   |
| Agency Comments<br>and Our Evaluation | We provided drafts of this report to Treasury and HHS. In addition to<br>comments on our recommendation, the agencies provided us with<br>technical comments that we incorporated where appropriate. We also<br>obtained comments from America's Health Insurance Plans (AHIP), a<br>national association representing nearly 1,300 health insurance companies.   |
|                                       | Treasury agreed with our recommendation. The agency said that, given<br>the growth in Medicare payments experienced since 2005 and the<br>projections of continued growth, Treasury is very interested in finding a<br>beneficial solution that improves cash and debt management while not<br>unduly increasing administrative burden for CMS. Treasury also said that<br>it welcomed the opportunity to review its payment systems with CMS and<br>looked forward to finding a solution that is in the best interests of the<br>government. (See app. III.)   |
|                                       | CMS, on behalf of HHS, also agreed with our recommendation. The agency remarked that it understands that a timing difference between cash influx and outflows poses challenges for Treasury that, in turn, raise borrowing and interest costs. CMS indicated that it is willing to work with Treasury to study alternative payment timing options to address the challenges as they relate to Medicare. (See app. IV.)  |
|                                       | AHIP representatives told us that overall the report captured appropriately<br>the views of the health plan industry. They also pointed out that, among<br>the payment timing options discussed in this report, converting to a   |

retrospective system would be particularly problematic for plan sponsors because it would be fundamentally at odds with historic and current practice used by both Medicare and commercial health insurance payers. AHIP representatives reiterated that if a change in payment timing reduced companies' investment income, plan sponsors would take that into account by increasing their Medicare bids to reflect the loss. Additionally, they noted that such a change would likely necessitate revisions in the contracts plan sponsors have with capitated providers to reflect the new payment timing arrangement.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies of this report to the Secretary of the Treasury and the Acting Administrator of CMS as well as other interested parties. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov. Please contact Susan J. Irving at (202)-512-8288 or irvings@gao.gov or James Cosgrove at (202) 512-7114 or cosgrovej@gao.gov if you have any questions about this report. Key contributors to this assignment were Jose Oyola, Rosamond Katz, Linda Baker, Shirley Min, and Christina Serna.

1 loing Susan ~

Susan J. Irving Director for Federal Budget Analysis Strategic Issues

James C. Cosgrove Director, Health Care

# Appendix I: Estimating the Effect of Medicare Payment Realignments on Treasury's Interest Costs

GAO estimated the potential reduction in Treasury interest costs from improving the alignment between Treasury deposits and withdrawals (or, equivalently, its receipts and expenditures) by moving payments to Medicare plans for Medicare Advantage and Part D benefits away from the first of the month. The lower range of our estimates suggests that realigning Medicare private plan payments could reduce interest costs between \$498 million and \$672 million over the 10-year budget window from FY 2009 to FY 2018, depending on the realignment option chosen. The upper range of our estimates suggests that the same options could reduce interest costs between \$891 million and \$1,201 million (\$1.2 billion) over the 10-year budget window.

The first step in our analysis, after compiling monthly values based on daily data from October 2002 through December 2007, was to estimate a relationship between Treasury's average monthly cash balances and the volatility of Treasury's net deposits, where the latter is measured as the standard deviation of daily deposits less withdrawals, excluding those arising from debt issuances and redemptions.<sup>1</sup> The estimated relationship suggests that cash holdings rise in response to increases in volatility and that the responsiveness of cash holdings to volatility became substantially more pronounced after the full phase-in of the Medicare Part D payments program in June 2006. Our lower range interest cost reduction estimates are based on the cash balance/volatility relationship estimated over our full data sample from October 2002 through December 2007 while our higher range interest reduction estimates are based on the relationship estimated over the later part of the sample beginning in June 2006.

Our next step was to develop five different options for realigning Medicare Advantage and Part D plan payments during CY 2007. After the hypothetical redistribution of payments, we calculated the standard deviation of Treasury deposits less withdrawals for each option. All options reduced the volatility of net deposits. We then used the estimated relationship between cash balances and volatility along with each option's volatility reduction to derive the implied reduction in Treasury's average cash balance in CY 2007.

<sup>&</sup>lt;sup>1</sup> We use the terms "net deposit volatility" or "volatility" to refer to the standard deviation of daily deposits less withdrawals.

|   | Finally, to estimate the potential reduction in interest costs during 2007, we multiplied the cash balance reduction by an interest rate of 5.32 percent, which is the average of rates on 3-month Treasury bills and 10-year Treasury notes over the 20-year period from 1988 through 2007. We extrapolated the 2007 interest cost reduction estimate over the FY 2009 to FY 2018 budget window using CBO's projected growth in total federal outlays. <sup>2</sup>   |
|---|--|
| The Analysis Used<br>Monthly Data on Cash<br>Balances, Deposits,<br>Withdrawals, and<br>Other Variables<br>Compiled from Daily<br>Treasury Statements | Our analysis used monthly data that we compiled from Daily Treasury<br>Statements covering the period from October 2002 through December<br>2007. The dependent variable in our analysis was the average monthly<br>cash balance, which includes the effect of debt-related transactions. By<br>definition, the change in Treasury's cash balance equals total cash deposits<br>minus total cash withdrawals. Cash balances are affected not only by tax<br>receipts and payments for goods and services but also by debt issuances<br>and redemptions.<br>The principal explanatory variable in our analysis was the standard<br>deviation of deposits minus withdrawals, which is a measure of payment<br>volatility. The deposit and withdrawal flows used for this purpose<br>excluded debt issuances and debt redemptions. In essence, therefore, our<br>analysis treated debt-related transactions as a byproduct of mismatches in<br>the amount and timing of the underlying nondebt receipts and<br>expenditures. The exclusion of debt issuances and redemptions facilitated<br>our analysis. The shifts in the timing of Medicare payments in our<br>alternative scenarios would affect the timing and amount of debt issuances<br>and redemptions in a way that would be difficult for us to represent. By<br>using measures of receipts and expenditures that exclude debt-related<br>transactions, we did not have to make explicit assumptions about the<br>resulting changes in debt issuances and redemptions. |
|   | We also compiled several other monthly measures for consideration as<br>variables explaining cash balances. Among these were withdrawals—a<br>measure of the scale of outlays—and the rate of interest—a measure of the<br>cost of holding cash. We also created a dummy variable for each month of<br>the year to control for seasonal patterns in cash balances. Apart from the<br>volatility variable, selected monthly dummy variables, and a moving   |

 $<sup>^2</sup>$  Congressional Budget Office, An Analysis Of The President's Budgetary Proposals For Fiscal Year 2009 (March 2008), Table A-1, p. 44.

|  | average error term introduced to eliminate serial correlation of the residuals, no other variable had a statistically significant effect on Treasury's cash balances. <sup>3</sup>   |
|--|--|
| Greater Volatility<br>Leads to Higher<br>Treasury Cash<br>Balances | Table 2 presents the estimated relationship between Treasury's average<br>monthly cash balance and volatility as measured by the standard deviation<br>of deposits minus withdrawals. The results indicate that greater volatility<br>leads to higher Treasury cash balances. Conversely, measures that would<br>reduce volatility, such as realigning Medicare Part D payments, would<br>enable Treasury to hold lower cash balances and thereby reduce the<br>interest cost of holding cash. In addition to contemporaneous and lagged<br>values of the volatility measure, the equations include several monthly<br>dummy variables to control for seasonal patterns in cash balances and<br>moving average error terms to mitigate serial correlation. All of the<br>included variables have coefficients that are significant at or below the .05<br>level, except for the constant term in the equation that was estimated over<br>the full sample period. |

 $<sup>^{\</sup>rm 3}$  The variables excluded from the equation had estimated coefficients that were not significant at the .05 level.

#### Table 2: Regressions Explaining Treasury's Average Monthly Cash Balance

|                                     | Α                   |             | В           |                          |  |  |
|-------------------------------------|---------------------|-------------|-------------|--------------------------|--|--|
|                                     | Full sample         | Full sample |             | Recent portion of sample |  |  |
|                                     | Coefficient         | t-Statistic | Coefficient | t-Statistic              |  |  |
| Constant                            | -4.825              | -1.20       | -32.499ª    | -5.89                    |  |  |
| Volatility,                         | 1.196 <sup>°</sup>  | 7.16        | 1.954ª      | 9.05                     |  |  |
| Volatility <sub>t-1</sub>           | 1.188ª              | 5.37        | 1.759ª      | 7.23                     |  |  |
| Volatility <sub>t-2</sub>           | 0.379 <sup>b</sup>  | 2.23        | 1.229ª      | 11.98                    |  |  |
| January effect                      | 6.426ª              | 3.07        | 13.227ª     | 8.82                     |  |  |
| May effect                          | 11.856 <sup>b</sup> | 2.07        | 25.567ª     | 16.14                    |  |  |
| June effect                         | 8.133ª              | 3.90        |             |                          |  |  |
| September effect                    | 10.776ª             | 4.98        | 14.328ª     | 14.50                    |  |  |
| Moving average error <sub>t-1</sub> | 0.411 <sup>ª</sup>  | 3.38        |             |                          |  |  |
| Moving average error <sub>t-2</sub> |                     |             | -0.961ª     | -24.95                   |  |  |

| Sample (adjusted)                            | Dec 2002 – Dec 2007 | June 2006 – Dec 2007 |
|--|---------------------|----------------------|
| Included observations<br>(after adjustments) | 61                  | 19                   |
| R-squared                                    | 0.718               | 0.976                |
| Adjusted R-squared                           | 0.674               | 0.960                |
| S.E. of regression                           | 5.352               | 2.060                |
| Durbin-Watson stat                           | 2.148               | 1.720                |

Source: GAO analysis of Treasury data.

Note: Estimated using Newey-West heteroskedasticity- and autocorrelation-consistent standard errors and covariance.

<sup>a</sup>Significant at the 1 percent level.

<sup>b</sup>Significant at the 5 percent level.

As the table shows, first we estimated the relationship between cash holdings and volatility over the entire sample for which we compiled data, which runs from October 2002 through December 2007, truncated by 2 months because of the inclusion of two lagged values of the volatility variable. Our estimates suggested that a structural change occurred in the relationship between cash holdings and volatility after the Medicare Part D program was fully operational in June 2006.<sup>4</sup> Accordingly, we reestimated

 $<sup>^4</sup>$  A Chow-test shows that the null hypothesis of no structural break at June 2006 can be rejected at the .05 level of significance (the p-value for the F statistic was .0207).

the relationship using data only for the more recent part of our sample, from June 2006 through December 2007.<sup>5</sup>

The recent-sample estimates suggest Treasury's cash holdings became much more responsive to volatility after Medicare Part D payments were fully phased in. The sum of the coefficients of the contemporaneous and lagged values of the volatility variable was 4.94 in the equation estimated using data from only the more recent portion of the sample compared to 2.76 in the equation estimated using data from the entire sample. We used these two sets of coefficients to derive an upper and lower bound on our estimate of the reduction in cash balances and the associated interest costs that might result from Medicare Part D payment realignments.

Other variables usually hypothesized to affect cash holdings of firms and households were also tested for inclusion in the equation. These included withdrawals—a measure of expenditures—and the 3-month Treasury rate. The estimated coefficients of the other variables we tried were not statistically significant and were therefore excluded from the equation estimates.<sup>6</sup> To address serial correlation of the error terms, we experimented with specifications involving autoregressive and moving average error terms. We found that only one moving average error term had a coefficient that was statistically significant at the .05 level—a first order term in the full sample estimate and a second order term in the more recent sample estimate.<sup>7</sup>

| Interest Cost<br>Reductions from<br>Medicare Payment<br>Realignments | We developed five different options for realigning Medicare Advantage and<br>Part D plan payments. Instead of making these payments on the first of<br>the month, options 1 through 5 would redistribute the payments as<br>follows:<br><u>Option 1:</u> One payment on the 26 <sup>th</sup> of the prior month. |
|--|--|
| Realignments   | <u>Option 1:</u> One payment on the $26^{th}$ of the prior month.  |

<sup>&</sup>lt;sup>5</sup> ADF tests applied to the cash balance and volatility measures allow the rejection of the null hypothesis of a unit root at the.05 level, which indicates that the variables are stationary and that applying OLS to their levels is appropriate.

 $<sup>^{\</sup>rm 6}$  The variables excluded from the equation had estimated coefficients that were not significant at the .05 level.

<sup>&</sup>lt;sup>7</sup> With the inclusion of the MA term in each equation, a Breusch-Godfrey test did not permit rejection of the null hypothesis that the residuals are not serially correlated at the .05 level of significance.

<u>Option 2:</u> Two payments, with half of that month's amount paid on the  $1^{st}$  and the other half on the  $15^{th}$ .

<u>Option 3:</u> Two payments, with the first payment made on the  $20^{\text{th}}$  of the prior month and the remainder paid on the  $10^{\text{th}}$  of the month of coverage.

<u>Option 4:</u> Two retrospective payments, with the first payment made on the fourth Thursday of the month and the second payment on the second Thursday of the following month.

<u>Option 5:</u> Weekly payments on Thursdays, each payment equal to 1/4 or 1/5 of the monthly payment amount, depending on the number of Thursdays in the month.

We then calculated how much each option would reduce volatility, as measured by the standard deviation of Treasury deposits less withdrawals, from the actual volatility level in CY 2007. The volatility reduction was then used in conjunction with the full- and recent-sample equation estimates relating cash balances to volatility shown in table 2 to calculate the implied reduction in Treasury's average monthly cash balance. Table 3 provides the resulting calculations. In long run equilibrium, the reduction in average monthly cash is equal to the change in volatility multiplied by the sum of the coefficients of the current and lagged values of the volatility measure. As noted above, for the estimate using the full sample (December 2002 through December 2007) the sum of the coefficients was 2.76, and for the estimate based on the more recent period (June 2006 through December 2007) the sum of the coefficients was 4.94, indicating that cash balances became more responsive to volatility recently after the full phase-in of the Medicare Part D program. Depending on the payment realignment option chosen, the volatility reductions suggest potential decreases in Treasury's average monthly cash balance ranging from \$.72 billion to \$.96 billion in 2007 based on the full-sample equation estimate and from \$1.28 billion to \$1.73 billion based on the recent-sample equation estimate. (See table 3.)

#### Table 3: Estimated Reduction in Volatility, Cash Balance, and Interest Cost

|   | Option 1 | Option 2 | Option 3         | Option 4 | Option 5 |
|---|----------|----------|------------------|----------|----------|
| Volatility (CY 2007 bil. \$) <sup>a</sup>           | 11.61    | 11.62    | 11.58            | 11.59    | 11.53    |
| Volatility reduction (CY 2007 bil. \$) <sup>b</sup> | 0.27     | 0.26     | 0.30             | 0.29     | 0.35     |
|   |          | Full s   | ample estimate   | 9        |          |
| Cash balance reduction (CY 2007 bil. \$)°           | 0.75     | 0.72     | 0.83             | 0.80     | 0.96     |
|   |          | Interes  | t Cost Reduction | on       |          |
| CY 2007 (mil. \$) <sup>d</sup>                      | 39.7     | 38.1     | 44.4             | 42.6     | 51.4     |
| Cumulative FY 2009 – 2018 (mil. \$) <sup>e</sup>    | 518.9    | 498.0    | 580.2            | 556.7    | 671.5    |
|   |          | Recent   | sample estima    | ite      |          |
| Cash balance reduction (CY 2007 bil. \$)°           | 1.33     | 1.28     | 1.49             | 1.43     | 1.73     |
|   |          | Interes  | t Cost Reduction | on       |          |
| CY 2007 (mil. \$) <sup>d</sup>                      | 71.0     | 68.1     | 79.4             | 76.2     | 91.9     |
| Cumulative FY 2009 – 2018 (mil. \$) <sup>e</sup>    | 928.4    | 890.9    | 1037.9           | 995.9    | 1201.3   |

Source: GAO analysis of Treasury data.

<sup>a</sup>Volatility is the average of monthly values of the standard deviation of daily Treasury deposits minus withdrawals, excluding deposits and withdrawals related to debt issuances and redemptions.

<sup>b</sup>Volatility reduction is each option's reduction from the monthly average actual 2007 level of 11.88.

°Cash balance reduction equals the change in volatility times the sum of the coefficients of the current and lagged values of the volatility terms in the equation estimate in table 2.

<sup>d</sup>Interest cost reduction for CY 2007 equals cash balance reduction times the average of 3-month and 10-year Treasury rates over the 20 years from 1988 through 2007 (5.32 percent).

<sup>e</sup>Interest cost reduction from FY 2009 through FY 2018 was extrapolated from the CY 2007 reduction using the assumption that the annual interest reduction grows at the same rate as CBO's projection of total federal outlays.

Note: Estimates do not reflect any potential offsetting effects.

Treasury's cash balance needs to be financed by a corresponding amount of outstanding Treasury debt. A reduction in Treasury's cash balance thus would permit a reduction in its debt and the associated interest payments. To evaluate the potential interest cost reduction for both samples we multiplied the estimated cash balance reduction by the average of 3-month and 10-year Treasury rates over the 20 years from 1988 through 2007, which was 5.32 percent. We used an interest rate covering a longer term historical period in order to provide a generally representative estimate of the interest cost reduction that Treasury might achieve by reducing payment volatility. Based on the estimated volatility and cash balance reductions in 2007, Treasury's 1-year interest cost reduction ranges across options from \$38.1 million to \$51.4 million based on the full-sample equation estimate and from \$68.1 million to \$91.9 million based on the recent-sample estimate. The (higher) estimate from the more recent sample should be given greater consideration since it includes only the period during which Part D was in effect.

In the final step of our analysis, we extrapolated the 1-year interest cost reduction estimate over the 10-year budget window from FY 2009 through FY 2018 using the assumption that the reduction would grow at the same rate that CBO projects for total federal outlays. The lower range of our estimates suggests that realigning Medicare private plan payments could reduce interest costs between \$498 million and \$672 million over the 10-year budget window from FY 2009 to FY 2018, depending on the realignment option chosen. The upper range of our estimates suggests that the same options could reduce interest costs between \$891 million and \$1,201 million (\$1.2 billion) over the 10-year budget window.

More precise 10-year estimates generated using methods similar to those used in our 1-year estimate are not feasible because 10-year projections of Treasury's daily receipts and expenditures are not available. Such daily projections would be needed to calculate volatility under the baseline and each of the five options over the 10-year budget window. Indexing the 1year interest reduction to federal outlays therefore seemed to be a reasonably conservative alternative way of generating 10-year projections. One justification for this is that we found that there was a significant correlation between our volatility measure and total federal expenditures over our sample period. With CBO projecting that total expenditures will rise about 4 percent annually over the 10-year budget window, volatility should also rise. Similarly, CMS projections suggest that Medicare prescription drug payments should rise about 10 percent annually over this period. Thus, projections for both total federal spending and for Medicare prescription drug payments suggest that volatility should increase in the future. The implication is that the potential size of volatility and interest cost reductions achievable through payment realignments should also increase. As noted, the 10-year interest cost reduction estimates provided in table 3 assume that the 1-year interest reduction increases at the same rate as total federal outlays. A more conservative approach of generating a long-run projection would be to simply multiply the 1-year interest reduction by 10. A more aggressive approach would be to increase the 1-year interest reduction at the rate that CMS projects Medicare prescription payments will increase approximately 10 percent per year.

| Limitations of Our<br>Analysis | In addition to the uncertainty inherent in extrapolations based on<br>statistical estimates, our estimates are subject to the limitation that they<br>exclude potential offsets to interest cost reductions. The estimates<br>represent the gross reduction in Treasury interest costs that could result<br>from a realignment of Medicare payments. However, Medicare plans<br>might raise their bids to CMS under some of the options we proposed,<br>which would raise the overall cost of Medicare. In addition, our estimates<br>do not reflect any of the offsetting interest income Treasury could earn on<br>the additional cash it holds. However, Treasury's cash balance increments<br>cannot always be seamlessly placed in interest-earning vehicles. <sup>8</sup> |
|--------------------------------|---|
|                                | To assess the reliability of data used in this study, we examined the data to<br>look for outliers and anomalies and addressed such issues as appropriate.<br>Where possible and appropriate, we corroborated the results of our data<br>analysis with other sources. On the basis of our assessment we believe the<br>data are reliable for the purposes of this review.   |

<sup>&</sup>lt;sup>8</sup> As noted in our report, following completion of our analysis, section 502 of Pub. L. No. 110-351 (Oct. 7, 2008) amended section 323 of Title 31, U.S. Code, to authorize the Secretary of Treasury to establish a permanent repo program.

# Appendix II: CMS's Estimates of the Impact of Alternative Payment Timing Options on Federal Medicare Payments to Plan Sponsors

The CMS OACT analyzed the impact of the alternative payment timing options we identified on federal Medicare MA and Part D payments. Table 4 below shows the OACT estimates for the change in federal payments to the plan sponsors assuming that all of the change in sponsors' investment income was reflected in their plan bids. OACT noted that, because most of the impact from any gained or lost investment income would likely be reflected in plan sponsors' bids, the impact on federal payments would likely be a significant portion of the amounts shown below.

### Table 4: OACT Upper Bound Estimates of the Impact of Alternative Payment Timing Options on Federal Medicare Payments to Plan Sponsors

| Dollars in millions   |                                    |
|---|------------------------------------|
| Payment Timing Option   | Maximum change in federal payments |
| Option 1: One payment on the 26th of the prior month.   | (20)                               |
| Option 2: Two payments, with half of that month's amount paid on the 1st and the other half on the 15th.  | 40                                 |
| Option 3: Two payments, with the first payment made on the 20th of the prior month and the remainder paid on the 10th of the month of coverage.                                   | 0                                  |
| Option 4: Two retrospective payments, with the first payment made on the fourth<br>Thursday of the month and the second payment on the second Thursday of the<br>following month. | 120                                |
| Option 5: Weekly payments on Thursdays, each payment equal to 1/4 or 1/5 of the monthly payment amount, depending on the number of Thursdays in the month.                        | 70                                 |

Source: CMS, Office of the Actuary.

Note: Positive values represent higher Federal payments and negative values represent a reduction in Federal payments. We have not independently verified the estimates provided by OACT.

# Appendix III: Comments from the Department of the Treasury

DEPARTMENT OF THE TREASURY WASHINGTON, D.C. December 22, 2008 ASSISTANT SECRETARY Ms. Susan J. Irving Director for Federal Budget Analysis Strategic Issues United States Government Accountability Office 441 G. Street, N.W. Washington, DC 20548 Dear Ms. Irving: We appreciate the opportunity to review and comment on the Government Accountability Office's (GAO) draft report entitled, DEBT MANAGEMENT: Treasury's Cash Management Challenges and Timing of Payments to Medicare Private Plans. The report recommends that the Secretary of the Treasury and the Administrator of the Centers for Medicare and Medicaid Services (CMS) expeditiously convene a joint inter-agency effort to study the options identified by GAO and any other options that would improve Treasury's ability to manage cash flow. We welcome your recommendation to work with CMS to review the five options presented in the report to align the payments to Medicare plan sponsors with the government's cash receipts. Given the growth in Medicare payments experienced since 2005 and the projections of continued growth, Treasury is very interested in finding a beneficial solution that improves cash and debt management while not unduly increasing the administrative burden for CMS. We welcome the opportunity to review each of our payment systems with CMS to determine which application best meets their needs and look forward to finding a solution that is in the best interests of the government. We appreciate the professional manner in which you and your team approached this engagement. Sincerely, methe Kenneth E. Carfine Fiscal Assistant Secretary

# Appendix IV: Comments from the Department of Health and Human Services

|  |  |   | DETADY                        |
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| DEPARTMENT OF  | HEALTH & HUMAN SERVICES                          | OFFICE OF THE SEC                             | RETARY                        |
| the ward and a start of the sta |  | Assistar                                      | t Secretary for               |
| Legislation  |  | Washing                                       | ton, DC 20201                 |
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| James Cosgrove   |  |   |                               |
| Director, Health Care  | bility Office                                    |   |                               |
| 441 G Street N.W.  |  |   |                               |
| Washington, DC 20548   |  |   |                               |
| Dear Mr. Cosgrove:   |  |   |                               |
| Enclosed are comments on<br>entitled: "Debt Management   | the U.S. Government Ad<br>nt: Treasury's Cash Ma | ccountability Office's<br>nagement Challenges | (GAO) report<br>and Timing of |
| Payments to Medicare Priva   | ate Plans" (GAO 09-118                           | ).  |                               |
| The Department appreciate  | s the opportunity to revi                        | ew this report before                         | its publication.              |
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|  | - Craig  | Burton  |                               |
|  | Acting   | g Assistant Secretary                         | for Legislation               |
| Attachment   |  |   |                               |
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DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 200 Independence Avenue SW Washington, DC 20201 JAN 7 2009 DATE: TO: Craig Burton Acting Assistant Secretary for Legislation Office of the Secretary my alermo FROM: Kerry Weems Acting Administrator Government Accountability Office (GAO) Draft Report: "DEBT SUBJECT: MANAGEMENT: Treasury's Cash Management Challenges and Timing of Payments to Medicare Private Plans" (GAO-09-118) Thank you for the opportunity to review and comment on the GAO draft report entitled, "DEBT MANAGEMENT: Treasury's Cash Management Challenges and Timing of Payments to Medicare Private Plans." The Centers for Medicare & Medicaid Services (CMS) understands that a timing difference between cash influx and outflows poses challenges for the Department of Treasury (Treasury), which in turn raises borrowing and interest costs. CMS is willing to work with Treasury to study options to address cash influx and outflow challenges, as the challenges relate to CMS. We look forward to working with GAO and Treasury in the future on the issues raised in this report. Our response to the recommendation and other comments on the draft report follow. GAO Recommendation The GAO recommends the Secretary of Treasury and the Administrator of CMS convene a joint effort to study options to improve Treasury's ability to manage cash flow and reduce interest costs while not unduly increasing administrative burden for CMS. CMS Response The CMS agrees with the recommendation that it and Treasury work together to study options to improve Treasury's ability to manage cash flow and reduce interest costs while not unduly increasing CMS' administrative burden.

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