

What is Debt Management All About?

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An early program for these meetings entitled my paper, "Emerging Problems in Debt Management." I would like to put my remarks in a somewhat broader context, namely, to consider the question, "What is debt management all about?" Clearly there are a number of possible answers; some would be of interest primarily to market participants; others to academicians; still others to a more general audience. It seems to me that from the standpoint of the Treasury many of our objectives in debt management revolve around a continuing effort to ensure that the U.S. Government security remains the best in the world. It is in this context that I believe we must consider the various technical and special policy aspects of debt management.

From a practical standpoint of course, making these securities the best in the world means that buyers will pay a relatively high price for them with consequent savings to the taxpayer. This in turn requires that a smoothly functioning secondary market must exist wherein investors and traders can move freely into and out of them, from one to another maturity area and from issue to issue with a minimum of transaction cost. The combination of high quality and liquid secondary markets in turn allows the Treasury to achieve a maximum degree of flexibility in the amounts, timing and maturity of the issues it sells.

Potentially we can use this flexibility to help promote economic stabilization. Henry Wallich's paper considered a number of aspects of this question. It seems to me that in one important sense debt

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management is less important than it used to be: Treasury's borrowing operations are no longer the dominant force in the total U.S. credit picture, although the growth in agency borrowing and Federal credit programs are offsetting some of this relative decline as Bruce MacLaury points out.

Nonetheless, I believe that Treasury borrowing operations and debt management policies may continue to play a role in overall economic stabilization policy. Our choice of maturity and the timing of our borrowing operations can still have an influence on the flow of credit and relative interest rates in financial markets and therefore on the economy.

On a day-to-day, year-to-year basis maintaining and improving the quality of U.S. Government securities is a continuing job requiring flexibility and adaption of new initiatives in our operations. I would like to address myself to the following questions: What have we done to accomplish our objectives? Have we been entirely successful? What are some of the problems we have faced and are likely to face in the future?

Achieving the Objectives

Of the significant changes in Federal financing activities in recent years it is clear that some have been forced upon us by the changing character and scope of Federal financing and the general U.S. financial environment, some have come from our own initiative. Realistically, not all of the changes in the environment in which we work have been entirely beneficial to the market, to orderly debt management or to flexible Federal financing.

For the most part, however, we hope the changes we have made have led or will lead to a better meshing of Federal financing operations with the market demands of other borrowers and to a continuing improvement in the functioning and efficiency of the market for Federal and federally sponsored obligations.

The major changes that we have initiated in direct Federal financing over the last few years have been:

- (1) the greater use of auctions;
- (2) an increased reliance on cash as opposed to exchange financings;
- (3) an increased emphasis on long-term securities; and
- (4) a continuing effort toward greater regularization of Treasury financing operations.

The possibility of auctioning Treasury coupon-bearing obligations had been discussed by economists in and outside of the Treasury for a number of years. There were a good many reasons why we did not make great use of auctions until recently, not the least of which was the normal conservatism of all debt managers. In addition to this, however, few borrowings in the note and bond area were for cash; price experience with the cash offerings was good; and there was concern about market reaction to a cash auction since — whatever the facts — the Treasury's limited experiment with syndicate bond auctions in the early 1960s had left a sour taste in the mouths of many market participants.

As the 1960s ended the situation was somewhat different. There was a greater need for cash financing due to large budget deficits, part of which we felt should be in the coupon area. While the problem seems to me easily exaggerated, a considerable body of opinion concerned with the difficulties for monetary authorities in maintaining a so-called even keel during periods of Treasury financing felt that auction techniques could ameliorate these difficulties. Moreover, security prices had become more volatile, increasing the attractiveness of auction sales as a means of achieving close pricing of new issues, while at the same time eliminating the uncertainties inherent in guessing allotment percentages in fixed-price offerings.

We undertook our first tentative steps toward establishing note and bond auctions as a routine option for our borrowing operations in late 1970 with the sale of a 6¾ percent, 18-month note auction. Since then, auctions, in both the traditional and uniform-price forms, have become the major method of pricing new Treasury notes and bonds.

In the process of developing and refining the auction technique, we have experimented in the sale of very long-term maturities, where the price fluctuation risk is greater, with so-called "Dutch" auctions. We have also now had experience in auctioning long notes under a variety of market conditions. The "Dutch" auction in which all subscribers receive the security at the same price, and thus far there have been only two, were thought to have both advantages and disadvantages. The major advantage cited for the Dutch auction is that it would provide a basis for greater confidence in bidding and thus attract a greater volume of bidding and more interest by non-professional investors. On the other hand a supposed disadvantage of the technique is that it would short-circuit the professional underwriters by removing any dealer spread that they may gain.

Results of Auctions

The results of the two auctions which we have held, admittedly a small sample, indicate an interesting response. First, there is only scant evidence that the Dutch auctions attracted a significantly different type of bidder from what would be expected of any sale of long-term maturities. Second, professional dealer interest in both of these auctions was substantial, accounting for 45 percent of awards of the 6¾s and over 60 percent of the 7s. Third, interest by other investor groups who might be attracted to the securities by the smaller price risk was in fact small. Total coverage in both auctions was substantial indicating that the Dutch auction *keeps* the professional and *may* attract other bidders. Distribution following the auction was effectively accomplished with minimal price change implying that, in fact, the dealer did perform his traditional underwriting role. The pattern of bidding may have been different from some of the hypothetical expectations, but the resulting yield established on the securities was in both cases pretty much in line with general expectations at the time of bidding. Nonetheless, our experience with Dutch auctions is still limited, and it may well be too early for us to reach much in the way of a firm conclusion on the relative success of the Dutch auction.

On the broader subject of long-term issues, the 4¼ percent interest-ceiling restrictions and the rise in the level of market rates forced the Treasury to discontinue any financing through long-term bonds after the mid-1960s. As a result, the market for long-term Treasury issues has in recent years become undesirably thin. Quotations are often only nominal, as many of you know, and trading is spotty. Not only was the Treasury's borrowing flexibility constrained by this change, but stabilization operations in the long market by both the Treasury and the Federal Reserve were necessarily limited. In a general way this was not in keeping with our desire to have the best security in all maturity areas.

The \$10 billion authority granted to the Treasury in the spring of 1970 to sell long-term securities outside of the 4¼ percent ceiling provided us with the opportunity to regain our flexibility in financing and to begin the revitalization of this segment of the market. To date, we have issued some \$8.5 billion of these securities. Most were in the intermediate-to-long area where market response was more predictable and the risk of undesirable rate pressures less, but \$1.2 billion were sold in the 20-25 year area. This is admittedly a small, slow beginning; and many of the issues have found their way into Government account and Federal Reserve hands. But it is a beginning

and caution and prudence are needed if we are to continue the process of reestablishing the market for these issues in an orderly way without producing undesirable rate increases for other borrowers.

We hope the Congress will see fit to provide us with the authority for another tranche of long-term issues outside of the 4¼ percent ceiling and thus give us the flexibility we need to further expand our long-term borrowing activities, to give investors a broader choice of long-term Treasury obligations, and to restore at least some possibility of stabilization operations in long markets.

The third facet of direct Treasury borrowing in which I believe we have initiated significant changes in recent years is in the regularization of those activities. For many years the bill offerings and the quarterly refunding have been our only regularly scheduled borrowing activities. But in the last year alone there has been a considerable advance toward a greater variety of issues being sold or dated on a regular schedule. For example, the nine-month and one-year bill offerings, which used to come at varying points near the end of the month, have been converted to a cycle of 52-week bills which will be sold every four weeks on a regular basis when the original cycle is completed. Not only will this procedure establish a regular pattern of sales, allowing for a more orderly distribution of the bills, but it will also provide a more regularly timed instrument for investors' cash management.

Last fall we also introduced a degree of regularity in part of our note financing with the offering of two-year notes on a maturity schedule which will eventually result in a quarterly cycle. These securities, we hope, will meet the needs of both the market and the Treasury for a cash-management instrument outside the bill area. As you know, we quickly ran into problems in establishing this cycle of notes when sales of special issues to foreigners this spring resulted in a sharp runup in our cash position, obviating the need to issue the two-year securities at the end of March and June.

A Problem of Regularization

While we will fill in these gaps in the cycle later, either on quarterly or off-quarterly dates, the postponement of these issues points up an important problem in seeking greater regularization in the timing and maturity of Federal financing activities. This is the increasing difficulty of projecting the absolute size of our cash needs. We may be doing better in our projections and the relative size of the

errors may be smaller, but as the size of Government receipts and expenditures have risen, the absolute size of projection discrepancies has also tended to increase. It is this type of error that causes problems when one is trying to determine market-borrowing requirements. Of course in the last year, the changing tax picture and the unpredictable reactions of the tax-paying public to revisions in tax regulations — especially the now-famous overwithholding situation — have posed a special problem. In addition, we have had the problem of providing Treasury issues for foreign official investment of dollars acquired in foreign exchange support activities.

To some extent, these particular aspects of our cash projection problems may lessen as time goes on. Nonetheless, the Federal sector is likely to become more rather than less complex in coming years and our basic problem is not likely to go away.

All of this does not say that regularization in our borrowing activities is doomed to take a back seat. It does suggest, however, that we cannot tie down our debt-management strategy too much. Greater regularization of the timing of our operations must be accompanied by new flexibilities in other aspects of our financing which recognize that our needs themselves are not regular and, with the growing complexity of government, those needs may be subject to a greater number of unpredictable and sizable variations.

Direct Treasury borrowing operations are only one aspect of Federal finance. More and more the growth in agency needs requires us to look at the whole Federal financing pie if we are to maintain the quality of our securities and insure the flexible, efficient operation of our market. At the end of fiscal 1970, \$35.7 billion of issues by the Government-sponsored agencies were outstanding. In addition, there were some \$12.5 billion of securities of the agencies included in the budget. While only small changes have occurred in the volume of securities issued by the budgeted agencies, borrowing by the sponsored agencies has risen markedly. Bruce MacLaury went into these developments in detail, so I will not review them here.

However, I do want to make several points with respect to the subject. First, the Treasury takes its responsibilities of coordinating agency needs seriously. We consider it our responsibility to recognize that in the area of Federal finance, all participants, including the Treasury, must be viewed as part of the whole. Secondly, we would be delinquent in exercising our responsibilities to the market place and the agencies were we not to recognize the need for coordination of approach to the market by each agency so that all can share equitably in their ability to be financed. In the function of debt

management we do not, and are not entitled to, view our prerogatives of financial advisor, coordinator, and "traffic cop" as allowing us to censor program responsibilities of the agencies; nor do we view ourselves as having the right to set priorities as between programs through the vehicle of accessibility to the marketplace. Therefore, it is incumbent upon us to treat each agency with full awareness of their needs and objectives. To this end we have added a new office to the staff of the debt management team. The major function of this position will be to make an overall appraisal of agency needs and ensure that each financing request can fit into the overall objective of keeping Federal securities as the premier credit instrument in the world.

Changes in Agency Financing

To be sure a number of changes in the Federal agency financing picture are likely when the Federal Financing Bank gets underway. In particular, it should provide us with a means of achieving better coordination of the borrowing activities of the agencies so that their increased needs for cash will be better absorbed by the market. But even with the Financing Bank eventually in operation the rise in the dollar volume of Federal agency borrowing over time and the institutional changes that are going on must be recognized as adding a new dimension to Federal finance and debt-management policy. And aside from the purely technical considerations which are likely to cause some problems, the size of agency financing and the widening needs for direct Treasury financing bring into question a number of aspects of traditional Federal financing theory and debt management.

In the past, agency borrowing was largely considered a necessary, but nonetheless small, part of Federal finance. As such the needs and the effects of that borrowing on the market could be thought of as marginal. With the agency needs growing rapidly, the Treasury can no longer view its own financing needs in isolation. As I have said, we have to look at the whole Federal finance pie. Among the more important questions this has raised is whether the Treasury can look at the traditional theory of Federal debt management and merely expand that philosophy to embrace the agencies. Should it avoid in its own financing activities the maturity areas needed most by agencies? This would clearly limit our borrowing flexibility. And it would undoubtedly affect the efficiency and operation of our market and the attractiveness of our securities as well. However, the

agencies, and therefore the Treasury in coordinating agency financing activities, have a responsibility, implied in the Federal Financing Bank itself, to borrow on terms consistent with their program characteristics and asset structure. This factor somewhat limits our discretion in using the entire maturity spectrum to achieve market or stabilization goals. In light of these factors the Treasury increasingly needs to consider its own borrowing patterns in the context of agency maturity characteristics. It is the overall structure of Federal obligations that is really important, not Treasury or agency debt taken singly.

From the Treasury's cash management standpoint, of course, a greater concentration of borrowing in the short-term area could be desirable. The market for short-term securities is highly resilient and can take sizable additions or repayments of securities with a minimal interest-rate impact. Because of the market's resilience, announcement of new borrowing needs can be made on relatively short notice. Thus, swings in our cash needs, especially if unexpected, could be met with relative ease. Very likely a concerted movement in this direction for our cash-management borrowing requirement would necessitate some changes in our current bill offerings. I am sure that a number of alterations might be suggested; two that come to mind readily are more frequent changes in the size of the weekly bill auctions to match our particular cash needs and, perhaps as a supplementary measure, the increased use of bill strips.

There are a number of other developments that have arisen in connection with changing institutions and market arrangements which bear careful watching if we are going to insure the continued high quality of our securities and the efficient functioning of our market. From the technical point of view, the possibility exists that we will extend the book-entry system beyond its current limits. In the market we see the rise of bond funds, the development of trading accounts rather than portfolio investment accounts at a number of banks and securities houses, nationwide brokerage services in Government and agency securities, etc. This broadened interest is in some ways beneficial — speculation has a valid function. However, I cannot help but feel that some of these recent developments are based on a presumption of consistent success in outguessing the market and it is safe to assume that not everyone is going to be uniformly successful in that game. We do not need to oversell our market. Our basic interest must be to satisfy the needs of the prudent investor on the one hand and the market-making professional on the other — the groups upon which we must rely in the long run for an effective market for our securities.

Conclusions

Altogether, then, I believe that the last few years have witnessed a rather remarkable set of changes in the profile of Federal financing activities. We have not innovated for innovation's sake, of course; but we have not shrunk from new ideas where the needs of the Government and the functioning of the market for our securities could be improved by their adoption.

The changes which have taken place have certainly not come without some problems. But, in turn, the problems which have arisen — both in the sense of the general problems of debt and cash management and in the sense of the needs of particular segments of the market — have themselves led to introduction of new ideas and techniques.

I hope that this process of evolution will continue, and in fact there seems little doubt that it can do otherwise. Direct Federal financing needs are becoming increasingly complex, and the projection of those needs is more and more difficult. The growth of the agencies' needs poses further problems. And the entire market and financial environment is always changing. Each and every one of these will lead to problems and opportunities for Treasury debt managers, and from those problems and opportunities I expect will come further shifts and innovations in our borrowing and debt-management policies.

In the final analysis our guiding consideration in dealing with any of these questions must be the integrity of our securities and of our marketplace.

DISCUSSION

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Managing the Federal debt in a way that keeps the cost low and the holders happy, while at the same time managing the debt so as to affect the level and structure of interest rates according to the changing needs of stabilization policy, are two central and conflicting objectives for Treasury debt managers. These conflicting goals cause the Treasury to have a schizophrenic view as to the kind of government securities market they would like to have as well as a schizophrenic position as to the manner in which they should act — given the market they seem to have. Ed Roob's paper presents several examples of these tensions and conflicting images within the Treasury. I do not want to give the impression that the Treasury seems to be alone in its confusion and inner conflict. As I hope to make clear, both the academicians and the market practitioners represented by us here also share in this two-faced view of the Treasury objectives and the market's reality.

When considering its objective of financing the Federal debt, the Treasury wants its securities to be seen by participants in the markets as the "best" of securities sold in the "best" of markets. In this light, the government market should contain a broad range of maturity alternatives with a sufficient depth of demand at any maturity, or enough substitutability among maturities that the prices of securities of different maturities are unaffected by volume of new issues or of secondary trading. In fact, the Treasury feels constrained to place new debt issues in those maturity areas not well represented by outstanding issues in order to foster this perfection and substitutability. Moreover, the Treasury seems to consider the lack of an active market in long governments, which is caused in large part by the ceiling on interest rates on bonds, to be a significant limit on its flexibility and a major weakness in the market as a whole.

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A consequence of such a broad and fluid market that seems of great importance to the Treasury is that the better the market in these terms, the lower is the cost to the Treasury of financing the debt.

When debt management is the objective at issue, however, the preferred market structure would seem to be quite different. The primary objective of debt management is to affect the level of expenditures or demand by affecting the level and/or structure of interest rates in the government market and thereby the level and/or structure of all interest rates. This objective can be achieved through changes in the volume of government securities outstanding in different maturity classes only if the government-securities market is segmented and imperfect and only if other security markets are similarly segmented and imperfect. If the impact on rates of the volume of new issues of governments does not affect prices to any significant extent, then the market is as the Treasury would like it to be in order to attract investors and keep debt charges low, but it is ineffective for achieving stabilizing interest rate objectives through debt-management activities.

This inconsistency in the objectives for the structure of the market is mirrored in an inconsistency between the objectives of low cost and effective stabilizing debt management. The Treasury seems to act as if the imperfections in the long government market pose a problem for it. Should the Treasury try to extend the maturities for which there is significant volume of securities outstanding (assuming Congress permits this) the current imperfect structure of the market is likely to cause significant increases in long government rates in response to such an increase in outstandings. This increased cost seems to cause the Treasury to avoid these maturities. On the other hand, the greater the imperfections, the bigger will be the impact on rates or "bang-per-buck" the Treasury would get from security sales or purchases made in these maturities for debt-management purposes.

For example, if the overall stabilization objective argues for higher long-term interest rates to assist in reducing some demands, an imperfect long government market implies that a sale of long governments would lead to a significant rise in long government rates and increased interest payments by the Treasury. However, as long corporates and tax-exempts responded to these increases, as private placement yields rose, and as households switched from deposits to governments, corporates, bond funds, etc., the Treasury could have a significant impact on the overall level of rates and thereby on economic activity.

The conflict between attempts to manage the debt at reasonable cost and attempts to affect the structure of rates without consideration of cost to the Treasury (because the costs are better measured by more inflation rather than interest cost to the Treasury) clearly drives the Treasury in opposite directions. Attempts to act in ways which stabilize the market so as to make it as attractive as possible to investors at times have to be undone by actions meant to surprise the market, alter rates and use the market to attempt to achieve stabilization objectives.

This inconsistency within the Treasury is broadly reflected in this meeting at Bald Peak. The academicians among us feel more and more that the empirical evidence is consistent with the view that the government security market is a highly-efficient market. In this view, the maturity distribution of the outstanding Treasury debt, and possibly even the maturity distribution of new issues, has little, if any, lasting impact on the level and structures of rates. According to this view, as other forms of short debt grow to larger and larger amounts, the Treasury's effects on short rates have been continually blunted. Duesenberry and Bosworth suggest that if there is any effect of maturity on interest rates it is the impact of all short or long debt and not just Treasury debt. Henry Kaufman has documented the relative decline of Treasury debt as a fraction of total debt outstanding. To this group, Federal debt management is a dead issue.

At the same time, some of the older academics and, I would guess, all of the market practitioners feel the the Treasury's maturity and volume choices are of enough significance to give it great attention in our assessment of the outlook for rates. As to the issue, of the perfection of the market, many of us here make our living from its imperfections. In fact, it is my guess that those of us who earn a living from the market's imperfections live better than those who earn a living trying to document its perfection.

If we outside the Treasury must live with all these inconsistencies, perhaps we should be cautious before being too hard on the Treasury as it deals with them as well.