



TREASURY OPERATIONS AND MANAGEMENT OF THE NATIONAL DEBT

Mr. R. Duane Saunders

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Reviewed by: Colonel J. H. M. Smith, 26 November 1962

INDUSTRIAL COLLEGE OF THE ARMED FORCES

WASHINGTON, D. C.

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10 September 1962

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CAPTAIN BOGLEY: I am sure from our economic studies so far that we have learned that money is very important. However, I would like to remind you that there are other things besides money, such as poverty, disease, and hunger. Also I have been told that money won't buy happiness. This may be so, but I can assure you that it will buy a very superior grade of melancholy.

As you well know, our national debt not only represents a great deal of this money we have been talking about but it also plays a very important part in our economic life.

This morning we are going to hear about the operations and the management of our national debt. We are very fortunate to have with us this morning Mr. R. Duane Saunders, Director of the Office of Debt Analysis in our Treasury Department.

Mr. Saunders, it is a very great pleasure to welcome you back to the Industrial College and to present you to the Class of 1963.

Mr. Saunders.

MR. SAUNDERS: Money may not be everything, but there is another aspect of money that is also of some interest, at least to those of us who have to work with it, and that's debt.

This is not really money. It's the obverse side of money. Some of you may be familiar with some aspects of this obverse side of money. You may also have

some particular problem once in a while in trying to manage your own monetary affairs, particularly this debt side.

I have over a period of some 20 years been associated with the management of a somewhat larger block of this type of obverse aspect of money, debt, in the Treasury Department. Although it is a somewhat esoteric form of economics, it is nevertheless a fairly important one as far as our country is concerned.

I'd like to talk to you today on this subject of Treasury debt management and I would like to focus on those problems largely from a technician's standpoint, in other words, to view the mechanics of debt management which have a significant and direct effect upon the whole financial structure of our Nation.

I would like, however, to emphasize that there is nothing really mechanical or static about debt management. Both the policy objectives and the techniques are subject to change and to adaptation as the environment in which we operate varies over the years.

Our objectives, for example, have evolved over a period of time from simply raising the money to pay the bills to a recognition of the contribution that could be made by debt management to economic stability and to a sustained growth of our economy, and more recently in terms of balance-of-payments considerations.

Similarly, on the technique side we are constantly seeking out new means for assisting us in debt management and to achieve our objectives. New types of securities and new ways of issuing securities are constantly being developed, and new marketing techniques. In the last few years we have resorted to a number of new devices, such as the use of advance refunding of issues prior to the maturities,

far in advance of maturity in some cases, to cash refunding rather than offering something in exchange for maturing issues, the sale of short-term Treasury bills in strips, and to the use of longer-term issues and the auction method.

The objectives of Federal debt management as an integral part of our Federal financial policy contain a number of basic policy objectives or guidelines to policy that in some cases can be applied to personal or business finance but in other cases are unique to the central Government's management of its own debt instruments and its own financial operations.

The first objective is to raise the money to meet the bills to operate the Government's fiscal obligations as they arise. This is also true of all of the private-enterprise and individual operations. In this we are exactly the same.

Secondly, like other borrowers, we like to borrow as cheaply as possible, but unlike other borrowers we keep in mind the impact of our borrowing on the financial markets and the economy as a whole. A. T. and T. can go out and issue a security that they want to issue without regard to what the impact will be on the economy. In our operations we have to weigh the impact of our operations on the economy because what we do will have a bearing upon what others are doing as well and may inhibit or facilitate their borrowing operations.

Third, we try to manage the debt in a way that will contribute to, or at least not inhibit, an orderly growth of the economy.

Fourth, we have to take account of a new dimension in debt management that has arisen in the last few years, namely, the balance of payments.

Fifth, and last, but far from least, we try to work toward a balanced maturity structure of the debt. The debt, coming due at various periods in the future, naturally begins to run downhill and to become short-term instruments over a period of time. Sort of like Alice in Wonderland with the White Queen--I think it was the White Queen --you have to run pretty fast just to stay even.

No review of these objectives is complete without pointing out that these objectives are not easily reconcilable. We have had in the last few years since 1961 the apparently contradictory objective of keeping short-term rates reasonably high for balance-of-payments reasons and at the same time trying to keep an adequate flow of funds into the long-term area at reasonable levels of interest rates.

We also have the problem that for normal operations it might be desirable, in periods of rapid expansion, to fund our debt as much as possible and not add to the liquidity in the economy, but, for reasons of trying to pay the bills and simply raise the funds, we frequently find ourselves in the position of actually issuing very short-dated securities at that time.

Similarly, in recessionary times we might not want, for cyclical reasons, to add to the supply of long-term securities but try to increase liquidity, but simply because of the size and scope of our debt maturity schedules we may want to add somewhat to the longer-term securities and do some long-term financing.

As to the debt itself, over the history of this country as an independent nation, we have spent something like 1.5 trillion dollars and have taken in in receipts something like 1.25 trillion dollars since 1789. Almost all of this has been in the current century. The difference between this expenditure and this receipt is about

\$300 billion, and it makes up the size of our debt, which is approximately \$300 billion at the present time.

There is no other way of managing the debt from an increase or decrease standpoint except through having budget surpluses or deficits. There are no bootstrap techniques in debt management. These are rather hard facts to face, and the growth or change in size is related to the kind of budgetary policy that we have.

Size alone, however, is not a measure of the manageableness of our debt. For example, in a relative sense the debt has actually decreased during the postwar period. The debt on a per-capita basis is less than it was at the end of World War II because in spite of the fact that it has grown by some \$30 billion, our population has grown so much faster. Also, in terms of our total output, our debt back at the end of World War II was close to two-thirds of what we produce in a year--no, it was about 120 percent of what we produce in a year. It is now about 50 or 60 percent of what we produce in a year.

The dynamics, however, of debt management are related to change in the amount of debt outstanding, and we have to work with this particular aspect of debt management. Now, at this point any reasonably competent college professor could divide and subdivide the above points and present you with a nice rigid outline structured around Roman numerals and capital letters A, B, and C, and subpoints with subpoints under subpoints. This would make for nice lecture notes, but, although I would be tempted to do so, I'll try to mix it up a little bit and try to show you how all of these aspects, all of these points, fit into an actual operation as we do it in

our practical Debt Management Program.

To do so, let's turn to a recent Treasury financing, that of August 15, which was recently completed, where we had to face some \$7.5 billion of maturities that were coming due on the 15th and had to be either financed or paid off, and we also had to raise some new cash at that time, or reasonably close to then.

In our debt-management decisions we normally use a briefing technique for both our policy-level officials and also for use with our advisory committees from the financial world. I will use on you the same briefing material that we developed for that particular financing.

So, without further adieu, we'll go into a briefing on an August environment.

(Chart)

Imagine yourselves back on July 24 of this year. The fundamental factor on all Treasury debt-management operations is, of course, the budgetary situation of the time. We had just finished with the Fiscal Year 1962, where we had a deficit of \$6.3 billion, which was somewhat less than had been predicted in the period just preceding this. We were entering the Fiscal Year 1963, where we were still carrying an assumed budget balance at that time. It was becoming obvious even then that we were not going to have a budget balance in the Fiscal Year 1963. The major question was really centered on what the size of it was going to be.

It was impossible, however, and still is impossible, to make any kind of an estimate as to what is going to happen in the Fiscal Year 1963. We hope that the deficit will not be too large, but at this stage of the game we are not sure of the developments in the economy. It is not going quite as fast as we had hoped last

January, and, furthermore, there is an awful lot of legislation still on the Hill which has to be passed, and the way in which it is passed will determine the expenditures and to some extent the receipts for Fiscal Year 1963.

However, the environment at the present is related to a more immediate problem, and this is the scope of the operations in the current six months.

(Chart)

The facts of Federal financing relate largely to the picture on our receipts. We normally have a shortfall in our revenue in the July-December half of the year, and we have heavy receipts in the January-June half of the year. Our expenditures roll along much the same month after month, so that even in a year of balanced budget, such as back in 1960, for example, we had a substantial deficit in July-December and a very heavy surplus in January-June. In the fiscal year just finished we had a substantial deficit in July-December and a small surplus in the half-year ending last June.

The current picture really centers around not the July-December number but most of the impact of what is going to happen from congressional action and also from what is going on in the economy. The rate of growth will have its impact on this budget surplus, reducing it somewhat in the January-June period. The July-December budget deficit will be of the general order of magnitude of about \$7 billion. This is what we have to finance.

(Chart)

Another factor in relationship to financing is that the previous environment, the environment just completed for the half-year January to June, with a budget

surplus of a billion dollars, did not mean that the Treasury was out of the market. The Treasury was necessarily in the market financing requirements that amounted to about \$11.5 billion, made up of about a half-billion-dollar payoff on the maturing and savings bonds of the discontinued series, series FTGAK, / we had about \$1 million of attrition on our maturing marketable securities for the holders who elected to take cash rather than the securities offered in exchange and we also were paying off in March and in June \$6 billion of tax-anticipation bills that had been sold the previous fall. We normally have a substantial increase in cash in this half of the year related largely to the fact that the corporations paying their taxes put in a heavy cash flow in the last two weeks in June.

This meant that we had to finance about \$11.5 billion. The budget surplus provided \$1 billion of this total, the savings bonds about a half-billion dollars, and the seasonal surplus in the various trust funds, which normally run a deficit in the fall and a surplus in the spring, provided about \$3 billion. So the Treasury had to be in the market the last six months for a total of about \$7 billion of new borrowing.

We entered the market in January with two operations and in March with another operation, a tax-anticipation bill, and then in April we sold a bond, due out in 1968. Then, in our regular weekly bills, we added amounts in every month of the six months except for January.

(Chart)

Our future needs in our operations are almost always contingent upon the size of our cash balance, the amount of money we have on hand, and the projections of

these amounts determine the fundamental facts of life as to when we have to come to the market and about the amounts that we will have to borrow in addition to our regular refunding operations. We normally will have to carry in optimum size about \$4 billion of available funds to handle the Federal Government's bills. Our expenditures run about \$6 or \$7 billion each month. We can operate as low as about \$2 billion as a bottom limit only before the taxes begin to come in. As a result, when we look forward from the period in mid-July on through the coming months, we find that we have a low point in mid-September and obviously completely run out of cash some time in October.

(Chart)

The financing picture for the full six months shapes up with a heavy requirement of financing a substantial budget deficit. We also have in addition the discontinued savings bonds redemptions as they mature, and about \$1.75 billion of tax bills which come due on September 20, and then, if we have normal refundings, we would expect to have attrition or cash holdouts of about \$1.25 billion on some \$22 billion of maturities during these six months in our marketables. Our trust funds are expected to run about a \$2 billion deficit, adding up to a total financing requirement of \$12.5 billion.

We could finance this by draining down our cash balance to a modest extent, about \$2 billion. Our savings bonds of the regular series will give us a half-billion. But we will be in the market during this six-months period for approximately \$10 billion of new money. Now, \$10 billion seems like quite a large sum of money for which to be approaching the market, particularly when you remember that the

size of most of the corporate offerings are in the \$15, \$25, or \$50 million range, and it's rarely that they get over \$100 million. The total volume of corporate financing in a year seldom exceeds \$10 billion, and the total volume of State and local financing has never reached or exceeded this \$10 billion. Yet the Treasury proposes to go to the market in this six-months period and raise \$10 billion.

(Chart)

It is a large amount, it is true, but it is not out of keeping with the general scope of Treasury operations. This is the volume of our new money operation in each six months going back to 1956. Normally, in the spring we don't hit the market too heavy because this is the period of our seasonal budget surplus, but in the fall we are always hitting the market very heavily, and the \$10 billion for this July-December is not out of keeping with, say, \$10.5 billion last year, July-December, \$7 billion the previous year, \$15 billion back in 1959, and \$12 billion back in 1958.

Also we must remember that a good part of this cash can be borrowed in the form of tax-anticipation issues which are shown in blue here. Normally we would be borrowing a goodly amount, up to about \$6 billion, from corporations as they accumulate tax liabilities and will be paying them off, using the tax-anticipation securities in payment, in the spring months of the year.

(Chart)

This environment sets the stage in which we can consider the maturities that are coming due on August 15. At that time we have coming due to securities a remainder of a 4-percent note that was issued back in 1957, which originally

amounted to about \$2 billion. It was one of those odd-ball issues that was put out in 1957, which in the financial vernacular we call the 2.5 by 5. We had a previous one that we called a 2 by 4. It sounded like a lumber yard for a while. These were securities that were callable at the option of the holder after 2-1/2 years and finally matured at the end of 5 years. We had previously refunded a part of it. This was a small remainder that was still outstanding, coming to final maturity. We had about \$7 billion of 3.25-percent notes that had been issued back in February of 1961. A substantial part of that, however, was held by the Federal Reserve Bank, the Central Bank, and by government investment accounts which normally will roll the full amount of their securities and don't present any serious problem to us. The only part we really had to be concerned about was the \$3.5 billion that was held by public investors.

As you note ahead, most of our operations have typically been centered on quarterly dates, as far as maturity is concerned on the coupon issues. There is August. Then there is a block in November, a block in February, and a block in May. We purposely centered them there on these months and tried to tie most of our coupon operations into one of these quarterly dates.

There are some securities maturing in December on this one, but these are the remainders of issues when we were on a different schedule. They were those that were issued back largely in the war years.

(Chart)

The securities themselves presented a rather interesting pattern as far as their ownership was concerned. We had the August block, and we also included

at that time an October issue, in case we wanted to refund that at the same time, but the critical factor is this \$7.5 billion, and the only part of real concern is the \$3.7 billion publicly held. The ownership of that block was about 52 percent held by commercial banks.

This has been a developing pattern of recent years. The commercial-bank ownership of our maturing issues has been increasing steadily, running in previous periods as low as 30 percent of maturities and now getting up to over 50 percent of the securities held. This means that the commercial banks, not wanting to invest long typically, will be interested in a very short security for their portion of it, and they are the largest holders.

Of the other private non-bank investors, this is a block that can be sold long securities to some extent, the insurance companies and the savings banks. But of this 1.6 percent of other private non-banking investors, a very substantial part is owned by non-financial corporations, which also invest short.

So that the basic environment calls for an issuance of short-term securities, which happens on every single maturity we have had. There was more concentration on short-term holders than had been typical. This has been developing over the last few years. So we would have to refund a good part of this short.

However, the ownership by country banks and Reserve city banks and non-member banks of the Federal Reserve System, largely the smaller banks, was somewhat larger than we had been seeing, and this indicated that these banks, not being money-market banks, particularly some of the country banks and some of the Reserve city banks, could perhaps be baited out to a little bit longer securities than

would normally be the case.

(Chart)

The secondary problem of this financing related to an old question of the tax exemption of various securities. The very last of the tax-exempt securities of the Treasury would be coming up for a possible call on August 15. The security could run until 1965 if we wanted to leave it out there, but we could also call it on August 15 for payment on December 15. These were securities that were put out back in 1938 and were exempt from the surtax--not the normal tax. Therefore we call them partially tax-exempt. This meant they were exempt from 3 percent of tax, as far as individuals were concerned, and 22 percent as far as corporations were concerned. Therefore, they were almost entirely in the hands of corporations, practically all of them held by commercial banks.

In evaluating the advantage of refunding this issue, we could look at the cost in terms of the total cost per year of \$41 million of interest after tax, or the net cost to the Treasury after the corporations paid their tax^{which} was about \$32 billion. What could we replace this with if we put out a 3-year at this time to replace this? We would have to put a coupon on it of approximately 3.75 percent, meaning a total gross cost to us of about \$56 billion. But if we assumed that it was all held by corporations and they paid a 52-percent tax, as corporations do, our net cost would be \$27 billion, as compared to \$32 billion against the standing security.

However, we know that all of our holders are not fully taxable corporations, and we would have to assume in this case that 82 percent of them, effectively, were 52-percent-bracket corporations, to break even on this operation.

As we analyzed the ownership of 3-year securities, this was approximately a standoff, and it was a point of indifference to the Treasury, really, at this time, as to whether you should call this security from a cost standpoint or not call it. In the actual eventuality we did call this security, largely just to get it out of the way. It had been a nuisance thing for years.

(Chart)

Then, in looking forward at where we would place the new issues we were to put out, we have a financing schedule which is much more conveniently shown in quarterly maturities than it is in monthly securities, because you can really see the size of the blocks of securities ahead of you.

We had for the quarter, including the August and the October 1, \$8.1 billion, \$4.3 billion publicly held. Where were we to place any offering? We haven't determined the type of offering yet in our analysis. We can look forward and see that, obviously, if we make a one-year issue as the anchor issue on the financing, we will be adding to about \$4.5 billion of publicly held securities, bringing them up, if that was all that was done, to something as large as these very large maturities coming due in the first and second quarters of next year. These, incidentally, were quite worrisome, and, in our thinking, although we didn't discuss it at that time with the advisory committees, we had in mind getting rid of some of this overhang of these securities that are coming due next spring. We ended this up, as a matter of fact, by offering an advance refunding to those issues of a 5-year security and a 10-year security, just last week. The books are open on that operation beginning this morning. So these are already being financed as a subsequent part of this particular

financing operation. We had it in mind at the time we were doing the August. So this is a sort of rolling process.

The books will close on these securities on our offering on those by midnight, Wednesday night. If any of you want to get involved in that, you can. It's too large a block to have coming due, even though we have a surplus occurring at that time. So we are taking the first bite at them now and reducing the size for the spring.

Obviously we didn't want to create a couple more monstrosities like this, so we could offer a one-year security, maturing here (indicating) but we didn't want all of it to go there. We wouldn't want to move into this area too well, though, as a possibility, because we wanted an anchor issue for this \$7 billion which will add to that. So we not only had to arrange for a short-term anchor but we had to reach out and offer something in advance.

Now, there were some logical spots. There were vacancies largely in 1965 and 1967, out in here, as well as some particular coupons, notably in the second quarter of 1966, where we had some 3-3/4's and out in 1968 where we had some 3-7/8's, where we could offer securities also in exchange, if we decided to do an exchange on the operation. But this was the financing calendar ahead of us.

(Chart)

We also has to face and have to face in every operation the particular level of interest rate that will be paid. We had experienced fluctuations in interest rates that you have heard a lot about in your financing discussions and for Federal securities. To give you the outer perimeters, the outer limits, we have paid as high as

the rate schedule shown on the upper bracket, back in early 1960, paying well over 5 percent on short-dated securities, and recently we have lows as low as those back in the low point of the interest-rate cycle in 1958. But over the last year our securities and our yield patterns have been fluctuating roughly between these two lines here (indicating), the previous financing of the Mays. The yield schedule was here for the August operation in our thinking. We have part of the one for July 19. And it was roughly at that level at the time we did the actual financing.

Between the quarterly financings it has been fluctuating back and forth between these two levels each time, going up and then going down, going up about 30 bases points, which is about 30/100 of 1 percent in the short-term area, and 25 bases points, or about a quarter of 1 percent in the 5-year area between each financing, going up and down the same within this general range.

This was the environment within which we would have to price. We had a one-year rate of about 3.38 percent and a 5-year rate of about 3.83 and a 20-year rate of about 4.05, if we were to meet the market. Now, obviously, as you know, the Central Bank and the Treasury can have some influence upon interest rates, but this is a longer-term operation. When we finance we have to face the level of interest rates that's in the market at that time, and we have to put some small premium or sweetness on our issues to make them go. Otherwise people won't take the securities.

(Chart)

The movement of interest rates, however, had been developing a rather

interesting characteristic in this particular recovery phase from the bottom of the last recession, and although they started relatively high the long-term Treasury bonds have stayed rather flat as opposed to the sharp upward increase in the long-term Treasury rates that occurred from the bottom of the recession in 1958 and the recovery phase through 1959. This was also true of the corporate issues. It was also true of the municipals. This relative flatness of interest rates we think has facilitated the movement of funds into the long-term market, with investors willing to put their money to work and with borrowers, seeing that the rates were relatively flat, willing to go out and borrow.

On short-term rates we had had quite a different impact. We have actually generally had some upward movement in short-term rates, contrary to the pattern of flatness in the long-term rates.

You might also ask why the ~~rates stayed~~ ^{rates stayed} so high in the short-term area during this particular recession and recovery phase, whereas in previous recessions our short-term rates on Treasury 3-month bills would decline as low as 5/8 of 1 percent on a per-annum basis. This is related almost entirely to a new element in debt management, one that's completely new to me and ^{most} others in debt management, and that is balance of payments. We never had to worry about such an animal in the past. As a matter of fact, it was an environment that we were encountering for the first time since the early 1930's, when I didn't have to worry about it at all.

In previous recessions the short-term rates could go as low as the market permitted them to go and as the authorities wanted them to go, to facilitate a flow of funds and to get funds to work in something other than the highly liquid Treasury

markets. But, beginning in 1958, late 1958 and early 1959, we, for the first time since the thirties, had an environment where there were other major currencies that were/convertible besides the U. S. dollar. A person for the first time could move from dollars to pounds sterling to the deutchmark to the French franc and to the Italian lira and expect to be able to move his funds back into dollars at his own option. This was a new, ~~change~~ world.

The result was that, if rates got too far out of line between the United States and foreign countries and there was too much of a premium on putting money to work short-term abroad, funds could move abroad and earn a higher rate and then come back at their option. This was the new environment.

Now, normally there is still a risk of exchange-rates fluctuation, so that the person moving funds abroad will not only buy, say, the British Treasury bills in London but will also buy dollars for future delivery, or enter into a forward exchange-cover contract to protect himself against exchange-risk fluctuations.

So we typically don't look at the raw spread between U. S. bills and, say, the London bills but we look at the spread less the cost of foreign-exchange cover, which sometimes is the significant element.

During 1960, late 1960 particularly, when there was a marked lack of confidence in the dollar, the spread in favor of London was fairly significant and may have contributed to some movement of short-term funds abroad. In 1961 and 1962 we have managed to keep the cost of the spread with foreign-exchange cover to fairly nominal amounts, and it doesn't vary too much.

The reason for this is that in our balance of payments we are inclined to handle

just the overall balance, which had been running around \$4 billion, got to \$2.5 billion last year, in the first quarter of this year was about \$1.9 billion, and now looks for the first half of the year as though it will be about \$1.5 billion. The improvement had occurred in our basic balance and had been occurring from 1959, the basic balance being the surplus on our trade account as offset by dollar military expenditures abroad--not all military expenditures abroad--the untied portion of our foreign-aid program, and long-term investment abroad, going along through the last few years in our basic balance. But our short-term outflow amounted to about \$2 billion in 1960 and another \$2 billion in 1961. In 1960 it was generally attributed to the movement of some speculative funds. In 1960 it was in good part the financing of exports, largely to Japan. It has been reduced even further in the more recent figures.

This objective on short-term Treasury rates has been related in good part to making sure that there is no incentive for short-term money to move abroad for interest-rate differentials. In doing so, however, we have had to increase the supply of short-dated government debt and have been putting out a larger and larger volume of under-one-year debt, going up from mid-1960 to about \$70 billion and to about \$88.5 billion as of June. This, of course, is creating a very large amount of liquidity in the economy and is also creating some potential difficulties for the Treasury on debt management.

(Chart)

To offset this we have worked out the restructuring of the public debt, trying to offset some of the future difficulties, largely in this block of intermediate

securities which will be pouring into the under-one-year debt within the next year or so. We have added to this block of securities but offset the potential trouble by nibbling away at the intermediate block of securities through advance refunding and other long-term lengthening. This was one of the reasons why in the August operation we wanted to extend some of that security, some of that group, out into longer-term securities. We have added actually about \$15 billion of over-20-year debt. Seven and one-half billion dollars of that has been done since mid-1960, and of this \$35.5 billion over \$9 billion has been done since 1960 through the advance-refunding technique.

(Chart)

Measuring this overall in one of the standard mathematical measures, the average weighted length of the marketable debt, we have been able to halt the general downward trend of the average length of the debt, which was over 7 years, close to 8 years, at the end of World War II. It got down to about 4-1/2 years--4.4--4 years and 4 months--at its lowest level, and we have been able to reverse the trend somewhat, not dramatically, but have been able to more than hold our own and have stayed even in the last few years to an average length. At the present time it is about 4 years and 11 months.

(Chart)

This has been done largely through refinancing the issues that are held by longer-term investors, reaching out to securities that are maturing 7 to 10 years hence and putting them out into the 1980, the 1990, and the 1998 areas. Largely they are the holdings of insurance companies which have lengthened their portfolios

of government securities from about 12 to about 20 years. Mutual savings banks also largely increased, and to some extent the savings and loans banks and the commercial banks increased their investments.

(Chart)

The last element in our environment related to the ownership trends that were developing in our Federal debt. Just for illustrative purposes we delineate here how our debt is held--about \$298.5 billion. Close to \$30 billion is held by the Central Bank for money-management reasons. The government investment accounts are about \$56.5 billion, and the privately held portion is about \$212.5 billion. This is the only real element about which we have much concern.

The commercial banks own about \$65.5 billion and other private non-banking investors own about \$147 billion.

(Chart)

Trends in the past six months, as contrasted with trends in the similar six-month period last year, showed that government-investment accounts are increasing faster now. The Federal Reserve, to provide the situation of monetary ease, has bought somewhat more than it did in a normal seasonal movement of this sort. The commercial banks actually were generally liquidating securities, both the Central Reserve, the Reserve city, and the other banks, as opposed to some acquisition by money-market banks in the first six months of the previous year.

This was also a situation where the commercial banks, particularly the smaller ones, were having some difficulty in finding acceptable yields to meet the new Regulation Q on interest rates, where they were proposing to pay 4 percent on

time deposits, and they obviously could not pay that by holding Treasury bills that were yielding around 2.75 percent, so they were reaching out for other higher-yielding securities. This also created an environment where perhaps they would be interested in a Treasury security that might be a little longer-term and would come closer to meeting this 4 percent cost on their time deposits.

Short-term investors, instead of liquidating as they had done last year, were now adding to the level of their holdings of government securities. There are corporations liquidating not much different from last year at this same phase. This is the normal seasonal liquidation by corporations. But the foreign accounts were to their level of securities during this time, as were the other short-term investors, such as State and local governments, dealers and brokers, and non-profit institutions.

The savings institutions, which are the mutual savings banks, insurance companies, savings and loans, and pension funds, were adding a sizable block this year as opposed to practically no change last year.

Individuals were adding less to their savings bonds and had stopped their liquidation of marketable Treasury obligations, largely because they had already liquidated or had paid off these 4.5, 4.75, and 5 percent securities they had bought in previous periods. Individuals are not too attracted to government securities when they pay only 3.5 to 3.75 percent.

We are unique as a government in one respect as far as individuals are concerned in that we are the only government in the world that is foreclosed for all practical purposes from selling government bonds to wealthy individuals, or to

people who would save good blocks of money. We cannot compete effectively with tax-exempt securities, and this is where they go when they want to put their money in dollar obligations. They'll put them in tax-exempt securities, not U. S. Treasury securities. This is a unique environment that we face here, and this is one market from which we are effectively closed out until such time as we put out issues like the magic box.

(Chart)

Well, this is the basic environment. What did the Treasury do in response to this? Here I will finish up with just a brief delineation of what we have finished here. We offered on the 26th of July three obligations. Because we had to raise some cash as well, we didn't want to face the problem of attrition, so we decided to do this on a cash refinancing. We offered securities for cash in excess of the amounts that were coming due and therefore escaped having to pay off about a half-billion dollars of cash attrition, which we would do on a normal write. We also tested the market in several ways.

We offered about \$6.5 billion on one year of 3.5 percent securities coming due in August of next year, which was the logical spot for the anchor issue. We put a generous coupon of 3.5 percent on that for balance-of-payments reasons. Then we offered in addition about \$1.5 billion of 4 percent 6-1/2-year bonds to bait out some of the commercial banks and other investors to an attractive coupon that would help them meet some of their time payments, payments on their time deposits, to see how far that would go. We also, to test the market and see if there was any substantial amount of longer-term funds, put out a 4.25 percent

bond maturing in 30 years but callable in 25 years, and, because we had to put an outer limit on this, we put a block limit on it which we didn't expect to reach at all, about \$750 million on that particular issue.

All of these were offered for cash. We didn't expect to get the three-quarters of a billion dollars in 4.25 percent bonds. We didn't get it, of course. But also to make it more attractive, we required cash payment on the one-year issue and, to facilitate moving out into the longer-term issues, we allowed the banks to pay for the two bonds through their tax and loan accounts, which meant, of course, that they didn't have to develop immediate funds but just had to credit the Treasury account. This gives some added gain to the banks and facilitates any financing transaction.

So we made the longer-term issues quite attractive, kept the rate up on the short issues for balance-of-payments reasons, and tested the level of interest rates as it existed. If we could demonstrate that we could borrow in substantial amounts in this area, we thought it might encourage the private sector of the economy to also go ahead and firm up a lot of their financing plans. In actuality this is largely what has happened. A good block of securities has been coming on the market, and they have been coming on with a fairly firm rate. A lot of uncertainty about rate has been reduced.

We ended up by borrowing \$8.9 billion against a maturity of \$7.5 billion. This with some addition to our regular weekly bills enabled us to retire from the market for new money from the period on clean up to the entire quarter, all the way through September 30. We will be back in the market, obviously again

sometime in the first part of October, and we will be announcing before the end of September, but we are out of the market for this particular quarter and we cleaned it up in one operation.

We made this offering on July 26, and ^{as} it is typical on a cash offering, we opened the books for one day only. In other words, the news goes out at 4:00 o'clock on Thursday. The books are opened the following Monday. The news has to get around to the financial world. The financial world, against an offering that was \$8 billion certain and up to three-quarters of a billion dollars on a long bond, submitted subscriptions to buy amounting to \$27.25 billion. This is in one day's operation.

It was a successful operation. We got the amount of money. We demonstrated to the market that you could borrow at this particular time. We raised the cash and were able to retire from the market. We later called the partially tax-exempts in this environment to again indicate our confidence in the existing level of interest rates. I left on vacation before I knew all the results and wasn't able to find them until I got out on the West Coast, around the 9th or 10th of August. Some of my banker friends out there wanted to know why the heck we called the PTE's, the partially tax-exempts. The banks own them; they like to own those things. They can't replace them with anything as attractive. But we called them again a demonstration to the market that we were confident of the existing level of interest rates.

Then this last week we made our second step. Again it was advance refunding without serious money-market implications. Again it indicated confidence in the existing level of interest rates. We made the advance refunding, or you might call it

a pre-refunding offer, to the May and February maturities which bulk so large in our future picture. The books on those, because it is an exchange operation, have to be opened somewhat longer. They opened up this morning at 9:00 o'clock, and the books will close on those at midnight Wednesday of this week. Early indications are that this will also be a successful operation.

Now, I will admit that this is a somewhat rambling discourse. It isn't the kind of formal lecture that you will get where you can make nice notes, but I think that if you will review it in your own minds you will find that almost all of the principles and the background and the factual material get woven in, not in nice chronological order, not under Roman numerals and letters A, B, C, and D. They get woven in piecemeal and in segments all the way through an operation.

This is done with our advisory committees and with our financing team. In the Treasury we have seven people involved in this, including our top policy level, and we have advisory committees coming in from the financial world to help us out as well. This is the kind of study and analysis we have to make before we come up with the final decision.

I want to thank you. I hope this has been somewhat instructive.

CAPTAIN BOGLEY: Mr. Saunders is ready for your questions, gentlemen.

QUESTION: Is there a practical limit to the size of the national debt? What would you say it would be?

MR. SAUNDERS: This is not an unusual question. I have had it a number of times. I was trying to think of all the varying answers I have given to it. In

actuality there is no limit to the size of the debt. I can remember, and I imagine that a number of you here in this room can remember, that prior to World War II the debt was approaching the level of \$50 billion. I was in school and had some college professors who at that time were looking askance at this and saying, "Well, there's a question whether the country can really stand a debt of \$50 billion." This was also the period of time when our people in finance were looking at the German situation under Adolph Hitler and at Elmer Schatt who was running his financial empire, and were saying that the Germans couldn't possibly have a war because they couldn't finance one.

The actuality, of course, is that we have a debt of \$300 billion and we are in far better financial shape, economic shape, and every kind of shape now than we were in the late thirties in this country. Germany fought a massive war in spite of having a fantastic financial structure. We can stand the kind of debt we think we can stand and retain confidence in our ability to manage and handle it.

This is the clearest answer I can give to you. We have a lot of talk about paying off the debt, but the actuality is that the debt will continue to grow and will grow through our lifetime and probably our children's lifetime. We would hope that the economy would grow faster, so that/as a relative burden might be somewhat decreased.

This is what has actually happened in the postwar years—the debt is less of a problem than it was in 1946. We have grown up to this size of debt. Perhaps the most disastrous thing we could do at the present time to our economy would be to reduce our debt by, say, \$25 billion in one year. This would be the greatest blow

that we could possibly deliver to our economy. Remember that debts seem like a burden to the Federal Government but they are also assets to the people who own them. When you destroy debt you destroy some people's assets. So you can't do this at too fast a clip.

Basically it's a factor of confidence. How much do you think you can manage? So far we seem to be able to live with this and are adjusting to it with a good deal of facility. Our major problem is not size; our major problem is sudden changes in the debt. Our major problem is handling too large a volume of immediately maturing debt which puts us somewhat at the mercy of the market occasionally. We have had some occasions where we have had very serious trouble along this line, notably in the latter half of 1958, when we had a somewhat chaotic situation in the Federal debt.

I might also do a small aside: As far as the debt it concerned, this is a highly active market instrument. You are all familiar with the New York Stock Exchange and think that this is big stuff. The New York Stock Exchange total transactions for a year run around \$50 or \$60 billion. Today there will be traded in an unorganized exchange, an over-the-counter exchange, some place between \$2 and \$3/billion of U. S. Government securities. This is the order of magnitude of operations in this market.

So we seem to be able to live with it. It's a highly volatile thing.

QUESTION: Is it correct to assume that the Treasury Department does not believe that there will be a decline in interest rates for the next three months?

MR. SAUNDERS: I was going to say by profession, but I'd rather say by inclination, the Treasury never forecasts the level of interest rates. This is a normal

attribute of an agency that has to come to the market in large volume. What we prefer to do is to test the market and let the market make its own evaluation. We can indicate our confidence in stability in interest rates, that this is a workable level of interest rates, as we did in August financing, and then throw it to the market to see if they will buy the same idea. In August they bought this idea and said that this was a workable level of interest rates at which transactions could be made in substantial volume.

We are again testing that market in our current operation and it looks as though the market is confirming that this is a workable level of interest rates which seems to indicate that we expect some stability over the near term.

We do not try to forecast levels of interest rates. This would perhaps be the most foolish thing that the Treasury could indulge in. We are not infallible in our own judgments. Obviously, if you look at the economic projections that were made in January and the economic projections now, it is a question of how fallible policy-makers are rather than how infallible. All you can do is just test the situation as it exists and then go ahead on that basis.

The answer to your question is no, we don't forecast.

QUESTION: Each year we have a vigorous drive to sell Series E savings bonds. Would you comment on what the desirable features of this vehicle are, from a deb-management viewpoint, that make it so desirable to the Treasury?

MR. SAUNDERS: Yes. There are several factors in savings bonds that are of interest, not only from the public-relations standpoint of having a form of savings that is readily available to people. There is also the factor that we like to have

the people have an interest in our financial operations. We think that if they own securities they will have an interest in sounder fiscal operations on the part of the central Government. There is also from a technician standpoint a very interesting factor on savings bonds. They are all demand obligations. The E and H series are some \$45 billion that could come due tomorrow. All of them could be demanded in the form of cash tomorrow, except those that were sold in the last two months.

The actual fact is, though, that the average saving bond dollar stays out for seven years. Our marketable debt average length is 4 years and 11 months. So the savings bond is actually a long-term instrument as far as we are concerned. It reduces the amount of issues that we would have in the marketable area by \$45 billion. That is really what it has amounted to. This eases our problem on debt management significantly.

We think also that this security does offer some attraction to individuals, largely those who are learning the habits of thrift through the payroll deduction plan. It is possible to teach people thrift, and this I think is still a valuable attribute in our economy. Only through savings bonds can this be done. There is some compulsion in this as we all know. I have been an Army officer, and I know what you do to the men under you. I also know that, if the guy doesn't cash them in after a while, his gal friend, after she becomes his wife, tries to encourage him to hold on to them quite frequently. So the guy does have a pot of savings which can be used to facilitate operations in the economy when the time comes.

There is another attribute in the instrument that does have some ramifications.

It doesn't operate contracyclically. The sales will increase during periods of recession, or the initial phases. They will decrease during the boom phases. This is exactly opposite of what we would like the instruments to do. But, in the interest of having a long-term program we have to take this particular cost and keep the program going. You can't turn it on and off. It is largely a volunteer organization established throughout the country, with a very small professional staff managing the entire operation.

If we had our druthers we'd turn it on and off, but physically you just can't do this. It's administratively impossible. And it does have the sort of advantage to us of having a large block that we don't have to worry about very much.

QUESTION: Sir, our knowledge has been that the Government trust funds will generate a surplus. Is there a possible point of forecasting this?

MR. SAUNDERS: Yes, there are forecasts made on this every year. It's easy enough to answer this. I don't know whether you'll like the answer or not. If you just take one account, the FOASI, the Federal Old Age and Survivors Insurance Trust Fund, the big one, there are projections made every year on this on an economic basis of moderate growth in the economy, and the variations are running in two demographic trends, what they call a high and a low demographic trend--in other words, population trends. On the high demographic trend they will have in their investment portfolio by the year 2020 under ^{the} present schedule something like \$300 or \$400 billion. They could take up the entire amount of the public debt. On the low demographic trend, they will be broke in the year 1990.

The answer that usually is evolved on this is that they divide it in two and take

an intermediate one, which indicates that they will be running fairly level, going up somewhat and doubling their present size through the year 2020. It's really population trends that determine future growth, as well as changes in law. This assumes a certain economic level. The projections are very, very iffy--if that answers your question.

QUESTION: If Congress did not extend the legal limit of the public debt, would would be your recourse in that case?

MR. SAUNDERS: I can give you Secretary Humphrey's answer when he was asked that question by Senator Byrd back in 1954: "Sir, the first thing I would do would be to stop paying your salary." I personally think that Secretary Humphrey gave the wrong answer. I think that he should have said, knowing Senator Byrd and having visited Berryville and seen some of his holdings: "Sir, I would stop payments at the Navy Yard in Norfolk." I think that would have had more impact.

But, as to the practical operations on this, I don't know what the answer would be. Our lawyers are a little bit confused on this. Fortunately, we have never had to face the issue. I don't think we will ever have to face the issue. We have had occasions when we have been put tight against the limit and have had to resort to certain techniques to get by tight squeezes. I think some of you may remember some episodes in the fall of 1957 on contractual obligations.

I know there's nothing in the Treasury official files. I know there is nothing in the Department of Defense official files on this.

There are devices of this sort which would be standby arrangements which could get you over tight squeezes. But fundamentally, if Congress refused to raise

the limit, we would be up against the gun and would have to decide, I suppose, legally whether the law that Congress passed authorizing the expenditure of funds would take precedence over a debt-limit law. This would be a nice legal question, over which the lawyers are a little bit confused as yet.

In actual fact our debt limit next June 30 reverts to \$285 billion. Next June 30 we'll have a debt in the neighborhood of \$300 billion. So we are going to be quite a bit under what we would reach by June 30, and some action will have to be taken by Congress before that happens. They always take action. Sometimes it is a little delayed. They won't cut off the funds. That I am sure of.

QUESTION: To what extent do the operations of the Central Bank conflict with your operations?

MR. SAUNDERS: This again is an old question, and it's a good question. There are necessarily conflicts between the Central Bank, which is charged with the credit operations of the economy in supplying an adequate flow of credit to meet the economic needs, and the debt manager, who has to put out issues simply to finance the Government's bills. This can come to a head. It did come to a head in August of 1950, when the Treasury did not respond to urging by the Central Bank and it put out a refunding operation of about \$10 billion at a relatively low interest rate because the Secretary of the Treasury thought that we would have to preserve the Government credit and the lower interest rates to finance God knows what that was going to be developed. The Central Bank said that this was wrong and raised the rediscount rate, which meant that the operation was going to be a failure. The Central Bank also at the same time moved in and bought up the entire maturing issue

and exchanged it at the Treasury's interest rate.

So a conflict can arise as it did then. It's not too likely to ever happen that way again. The Central Bank will see that the operation is not a failure, that we don't put the Treasury over the barrel completely. This ended in a resolve that the two agencies should never get into that particular box again. So there is an arrangement whereby there is constant consultation between the Central Bank people and the people in the Treasury.

A group of us, including the Under Secretary, have lunch every Wednesday with the Chairman of the Board, the Vice Chairman of the Board, and 5 or 6 of their top staff. We discuss not an agenda but items of interest in the monetary field and in the debt-management field. The Chairman of the Federal Reserve comes over and has lunch with the Secretary of the Treasury every Monday. Again they discuss issues.

As I said before, people are not infallible. There are varying judgments. The mere fact of having each party aware of what the other is thinking and the reasons why they are thinking this way helps to present accommodation of each to the other's interests. I would think, being a free-enterprise-type man myself and believing in free enterprise in government as well as in the private sector, that one of the most dangerous things I could think of would be to put all the powers for monetary and debt management into the Treasury or into the Federal Reserve. I like to see both looking over each other's shoulders. I have the utmost confidence in the ability of people at the top of both the Central Bank and the Treasury, but I wouldn't want really to let either one of them operate alone without somebody

watching them. This is the old theory of balance of powers. It helps to have some harmonization and some compromise on issues where conflicts do arise.

It's not too likely to ever get to a direct clash again as it did in 1950. I think that may answer at least part of your question.

QUESTION: You said there is no apparent limit to how high the debt could go. I wonder if you would comment on whether or not you feel that there is a level below which our gold could go, in the sense that the gold and the debt are primarily based on confidence. Would you comment on what problem this gives you in refining the debt in relation to the gold reserve?

MR. SAUNDERS: Obviously we would have to take account of the balance of payments and of the gold situation in our financing. We have to retain the confidence and we have to exhibit actions in debt management that are responsible in terms of domestic financial interest, because, with all due regard to all the academic approaches to debt management, we have to find people who will buy our instruments, and they are not academicians. We also have to maintain the confidence of the international community that we will manage our finances well, or else they will run against our gold.

This enters into debt-management decisions. It is a very important ingredient in debt-management decisions. It's something completely new to me. I never even bothered with the thing before 1958, never even thought about it very much. But now there is this whole complex of issues on the balance of payments. I don't pretend to be an expert in this field at all, but I know that great steps are being made to improve both the outward look and the actual operations of responsible financing,

and we are also taking very great steps to improve the basic defect, which is the balance of payments that is running against us. There is every hope in the policy level at the present time that this will be corrected by the end of 1963 and that we will again be in a position of balance.

The amount of gold that is needed? I don't know that I could answer that question any more than I can answer the one on the level of the debt that is bearable by the economy. Again this becomes a matter of confidence. We certainly have as a practical matter a better coverage of our obligations from a gold standpoint than has any other nation in the world. We have about 40 percent of the free world's gold. We also have the situation, however, where the dollar is used as a reserve in the same form as gold, which means that we probably need more gold than does any other country. But it is a supportable level at the present time. The only real thing is that if drains continue to show up for several years why, then there may be some real worries. But certainly \$16 billion, or whatever the current level is, is a supportable level at the present time. Again, it's the order of movement that is the critical factor, and foreign confidence.

There are enough short-term claims against us to make a significant drain. We cannot recoup this, because our claims abroad are largely long-term. We have something, I think, in the order of magnitude of about \$70 billion of long-term claims abroad.

CAPTAIN BOGLEY: Mr. Saunders, I am sorry our time has run out. Thank you very much for a very excellent presentation.