Since it is obvious that most of the serious economic problems we now face had their origin in the war, it is desirable to review briefly what has happened to our economy since 1939. Economists, like credit men, have their own technical jargon. One tool that is useful is what economists call the gross national product and its components. Gross national product is simply a phrase which means the total production or output of all goods and services. It may be divided into three components. The first is governmental expenditures for goods and services. That item is clear as long as we remember that expenditures of both federal and local governments are included. The second item has a forbidding title. It is called private gross capital formation and is made up of the gross amount - that is, allowing nothing for depreciation, etc. - of investment in buildings, machinery, inventories, and net exports. The last item consists of expenditures for consumers’ goods and services.

In these terms the major economic developments of the war were an enormous expansion in the total and a revolutionary change in the relative importance of the three components. Gross national product increased from $89 billion in 1939 to $198 billion in 1944, the last full year of the war. One component, governmental expenditures, accounted for $81 billion of this increase. At the peak such expenditures were half of the
total. In other words, roughly half of the entire output of the country
was purchased by government, both federal and local. In contrast, pri-
vate gross capital formation declined from $11 billion in 1939 to $2
billion in 1944. Consumers' expenditures for goods and services, how-
ever, increased from $62 billion in 1939 to $99 billion in 1944.

Many economists who followed these developments concluded that
this country would be in for a first-class depression shortly after V-J
Day and especially if V-J Day followed sharply after V-E Day. Essentially
they based their conclusion on the answer they gave to one all-important
question. The question was: Who will buy the products when government, a
single customer taking half of all production, reduces its expenditures
from roughly $100 billion a year to, say, $25 or $35 billion a year?
Their answer was: No one. Hence they confidently predicted unemploy-
ment of eight, of ten, of twelve million people within a few months after V-J
Day.

What actually happened? You know in general terms, but it is
worthwhile to review developments quantitatively. First of all, gross na-
tional product last year, the first full year of peace, was $194 billion
or within a few per cent of the wartime maximum. Governmental expenditures
for goods and services declined from $97 billion in 1944 to $35 billion last
year. How did our economic system make up this difference? About half came
from private capital formation which increased by $30 billion. The other
half came from consumer expenditures which increased by $36 billion.

The serious error of prediction is accounted for largely by an im-
portant omission in the analysis—the omission of finance. The mistake is
shown in the way many economists answered the question: Where did the
government got the money that it spent? The answer given by many was based on a different breakdown of gross national product. They said it came from taxes, from savings of individuals and of corporations, and from business reserves. Now there is a sense in which this is true. After the event one can make such a classification if he wishes.

For the problem with which they were dealing, however, I believe it is much more useful to admit frankly that we simply created new money to pay for these expenditures and that such creation of money is something different from what we customarily call savings.

What do we find if we take a financial view of the war? The government spent approximately $380 billion. Of this amount it secured $153 billion from taxes. Now that is a lot of taxes, as we all realize each time we make out our individual income tax returns. But it was only 40 per cent of the amount spent. Another 35 per cent was borrowed from non-bank sources. Together these two account for three-fourths of the total. The remainder, of course, had to be raised somehow. It was raised by selling securities to banks. This method provided something like one-fourth of the cost of the war to the United States. You have heard this to the point of being bored, but it bears repeating that every time a bank purchased Government securities it increased the money supply. This, then, is essentially the way we financed the war: 40 per cent by means of income or taxes for the government; 35 per cent by means of borrowing from people's income or from money that was already in existence; and the remaining 25 per cent by creating new and additional money.

Now, that new and additional money was not blown up as were the things it was used to purchase. In large part it is still with us. Add to
a money supply of about $65 billion which we had when the war broke out
another $95 billion that was created during the war period and I think
you can reasonably expect a strong demand for goods and services. We have
had it. We turned out more goods during the war but unfortunately, great
as was the increase in the real things, it was nothing like as great as
the increase in the money supply. We were more effective manufacturers of
money than of many other things.

Ordinarily one would have expected enormous increases in prices.
During the war the government did not permit that to happen. We had direct
controls over prices, wages, and distribution, so that the evidence of what
we ordinarily call inflation were kept submerged. Even so the cost of
living went up 30 per cent and the wholesale prices went up 37 per cent.
When the controls were taken off we had further spectacular increases in
prices.

Now, what about the year 1946 in banking? We can divide the
developments into a number of parts. The first is the program of the United
States Treasury. It was the financial operations of the Treasury throughout
the war which was the most important single aspect in the whole development.
It gave the drive to these inflationary developments that I have mentioned.
The Treasury happened to end the preceding year with the largest bond drive
in all history. In part because people were quite sure it would be the last
one and the last chance to get securities, the Treasury raised more money
in the December 1945 drive than it had any need for. As it turns out, they
raised some $25 billion more than they needed. A fair share of this, of
course, came from a shift of deposits from private individuals to the
Treasury. A large part came from the creation of new deposits, which had
not been in existence before. What the Treasury did in 1946 was to repay 
excessive borrowings of December 1945. During the year 1946, the Treasury 
repaid $23 billion of securities, and it called down its balance by about 
that same amount. Now it is easy to look at total figures of deposits and 
to say that since the Treasury redemption program has reduced deposits we 
need no longer worry about inflation.

Before we do that, however, we should analyze the entire opera­
tion. Remember that the decline has come in deposits which otherwise would 
not have been spent. Where did the money go? That depends on who happened 
to hold the securities that were redeemed. To the extent that you as com­
cial banks held them, what happened, although not precisely for each 
bank, was that the Treasury drew on its War Loan Account with you, trans­
ferred funds first to the Federal Reserve Bank, and then to you as you pre­
sented maturing security for payment. The net result on your balance sheet 
was a reduction in War Loan Accounts offset by a reduction in your own 
security holdings. It reduced your earning assets, of course, but the War 
Loan Account was a deposit that otherwise wouldn't have been spent.

Part of the redeemed securities were held by nonbanks. In that 
case the owner turned his security in and got his money from the Treasury. 
The Treasury called on its War Loan Account to pay the private individual, 
who deposited the proceeds. That had an effect on your reserves because 
you were not required to keep a reserve against your War Loan Accounts but 
are required to keep a reserve against your private individual accounts. 
So you had pressure on your reserve coming from that source. If one analyzes 
inflation, however, he must remember that whereas the deposit of the Treasury 
was an inactive account, the account of corporations or individuals who held
the security that was redeemed is an active account. Finally, some of the securities were held by the Federal Reserve. A call on your War Loan Account to pay the Federal Reserve produced a corresponding reduction in your reserves as well as in your deposits.

The redemption of securities held by the Federal Reserve and by nonbank investors has produced periodic pressure on your reserves. But it has not been deflationary because whenever you needed reserves you were able to get them by selling Government securities. When necessary, the Federal Reserve purchased those securities.


As one reads between the lines a little, one gets the impression that banks may not have been aware of the importance to themselves of the developments that were taking place. For example, banks did not go into financing the consumer. Even at the end of the last war, they had no consumer's loan to speak of. Instead of that banks financed the institutions created to finance the consumers. Similarly, they would not extend a loan that was a little longer than the ordinary term, but they did buy bonds of long term. We developed in our financial organization new institutions to meet the changing needs that developed in the period 1900 to 1940 and that banks did not meet. I point that our merely as background. It has not been true of banks in the last year or year and a half.
As you know, we at the Federal Reserve have recently asked you to report to us the kinds of loans that you make. One reason for asking for that information is that we thought you would be interested in the results. In the next issue of the Federal Reserve Bulletin there will be an article summarizing the results. I think it is very much worth your while to read that article. The results for the Third District are given in the monthly review of the Federal Reserve Bank of Philadelphia. For the country as a whole the year 1946 saw an increase of $5 billion in total loans. This is the largest increase for any twelve-month period going back to 1919–1920, and even that period wasn't larger; it was as large but not larger. This increase raised total loans to $32 billion, which is the highest volume since 1930.

Now, let's look at the distribution of those loans for a moment. One type, loans on securities, declined. Such loans are far less now than after the First World War, in part because of different financing techniques. Of course at the end of 1945, just after the war loan drive, we had an exceptional volume of loans on securities. In part that explains the decline of $3½ billion. What kind of loans went up? First of all, business loans. Here the increase was widespread, over the entire country and practically every type of business, at small banks and at large banks. What are the reasons, so far as they can be ascertained? First, costs are up. Prices are up, wages are up, and so the costs of doing business have increased; and firms have found it necessary to borrow a little more. Inventories are up, especially price-wise. With the larger volume of business that firms are doing, they find their customers need a little more credit, and so you have some extensions of credit to customers, and an increase in that. Likewise,
loans for modernization and expansion; loans to some firms because their operations have been interrupted by strikes, transportation difficulties, and so on. Now all of these things, unless I read history wrong, are evidences of inflation. They are the very types of things that have occurred every time we have had an inflationary development. In other words, we are in a typically inflationary period, as evidenced by the type of business loan. Consumer loans also are up about 50 per cent over a year ago, a total of $1.5 billion. Real estate loans are also up $2.5 billion, or 50 per cent.

This gives me only a few minutes to go into the quandary about the future, or where do we go from here. What puzzles me about the present situation is this. We have heard a great deal about the danger of banks getting away from their true function. Professor Robertson, an outstanding English economist of the present day, gave a talk to London bankers recently on "Is there a future for banking?" He said that was a dramatic way of asking the question. One thing that made him ask the question was the apparent secular decline in the desire for the type of credit that banks like best to provide. Will the decline continue? Will banks develop new functions and activities? If the only important decisions remaining for bankers a decade hence concern the maturities of the Governments it holds, then you cannot possibly get as much fun out of banking as when you make plans to help build up your community. That is one side of the picture. As I look at it, I say I am all for the extension of risk credit, the extension of private credit by banks, because, in my judgment, that is the way in which you build your communities and perform a real service, an indispensable function. If that were the only side I would be very happy about this development in loans.
Is there another side to it? Why not just be happy about it?

Well, there is another side. It becomes evident when we ask: Where is the money coming from that is being used to make the loans? In much earlier days, if I am informed correctly, bankers usually asked themselves this question before they made a new loan. They thought "If I make this loan, will I have to call a loan from somebody else?" There was an alternative, especially after the establishment of the Federal Reserve System; namely, borrowing, but no one wanted to borrow. You didn't like to show borrowed money on your statements. So you could either borrow or call in some other assets, and there was always the question of where the money was coming from.

It seems to me that question isn't being asked very much any more. It is assumed that the Government securities will be there and all that is necessary is to sell them. That apparent attitude bothers me for this reason: If banks sell their Governments and the Federal Reserve buys them to maintain the market, what we are doing is to add monetization of private credit on top of the great volume of public credit we have already monetized.

My quandary arises from the fact that I would not like to see happen in the short run what I think is desirable in the long run. If banks extend private credit on a large scale now, I greatly fear much of it will result in net additions to our money supply, which is already excessive. On the other hand, if they do not extend such credit now, will they ever be able to recapture this important function?

Some people are disturbed by loan volume because they are afraid we are shortly going to have a business bust. I personally don't think we shall; but, more important, I don't think that is the critical problem. I think that banking is faced with a much more serious problem in the long run, and that is the problem of whether we have a first class inflation
from here on out. If we do, banking is in for really serious trouble.

If, as we extend private credit, we get the money by selling Government securities to the Federal Reserve, that, in my opinion, is exactly what we are going to have. So I am much more deeply disturbed than I would be with an early transitory and not very significant break. I don't think we are going to have that; but even if we did, it wouldn't disturb me nearly as much as this other possible development.

Well, what's the way out? There is no easy answer. I think we as bankers should again ask the question as to where the money is coming from. That is one of the reasons why, for my part, I am steamed-up about the program that the Treasury has just announced to foster the purchase of a bond a month from deposit accounts. I think we should all get behind that program. As individuals buy bonds from the Treasury, the Treasury will have funds with which to redeem securities held by banks and thus reduce the volume of deposits. If every time a loan is made depositors buy an equal amount of Government securities, the total volume of deposits will not increase. In a broad sense, the depositors will provide the funds that the bank lends. On the other hand, if the bonds go to the Federal Reserve Banks, we shall have a further expansion of deposits. To follow this course will, in my judgment, lead to real trouble.

So I would say that when we make a loan we should ask ourselves: Where is the money coming from? We should also do everything possible to see that the Government securities now held by banks are bought by nonbank holders. If we do that, we can have a real transition from public to private credit rather than an addition of private to public credit. If we do it, banks can perform a function not only in building their own communities, but also in protecting the economy against the still serious threat and dangers of inflation.
THE TRANSITION
FROM PUBLIC TO PRIVATE CREDIT

Outline
of talk

by
Karl R. Bopp

before
Philadelphia Chapter
Robert Morris Associates
at the
Union League
Thursday, March 20, 1947
Introduction

1. Substitute
   a. Anton de Haas, Harvard, scheduled
   b. Bob Hilkert, Yale, story
   c. Myself, Princeton
   d. Like bat boy hitting for Babe Ruth

2. Don't know how much I can contribute
   a. Not a Virgil Jordan
      Can't recite incomprehensible numerical abacadabra that will forecast precisely when the Knodratief, Juglar, building, inventory, or fountain pen that will write under water cycles will turn.
      I believe that where we go from here depends on how we behave.
   b. May say things you already know
      - "I'm color blind"
      "Yo sho is!"
   c. My suggestions at the end may sound like those of psychoanalyst.
      G.I. and psychoanalyst
      "Boy, is that guy confused!"
I. Economic developments 1939-1945

A. How the money was spent

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<thead>
<tr>
<th></th>
<th>1939</th>
<th>1940</th>
<th>1941</th>
<th>1942</th>
<th>1943</th>
<th>1944</th>
<th>1945</th>
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</thead>
<tbody>
<tr>
<td>Govt expend. for goods &amp; services</td>
<td>88.6</td>
<td>97.1</td>
<td>120.2</td>
<td>152.3</td>
<td>187.4</td>
<td>197.6</td>
<td>199.2</td>
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<tr>
<td>Private gross capital formation</td>
<td>16.0</td>
<td>16.7</td>
<td>26.5</td>
<td>62.7</td>
<td>93.5</td>
<td>97.1</td>
<td>83.6</td>
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<tr>
<td>Consumer goods &amp; services</td>
<td>10.9</td>
<td>14.8</td>
<td>19.1</td>
<td>7.6</td>
<td>2.5</td>
<td>2.0</td>
<td>9.1</td>
</tr>
<tr>
<td>Some payments to individuals</td>
<td>61.7</td>
<td>65.7</td>
<td>74.6</td>
<td>82.0</td>
<td>91.3</td>
<td>98.5</td>
<td>106.4</td>
</tr>
<tr>
<td>Payments to individuals</td>
<td>70.8</td>
<td>76.2</td>
<td>92.7</td>
<td>117.3</td>
<td>143.1</td>
<td>156.8</td>
<td>160.7</td>
</tr>
</tbody>
</table>

B. Where the money came from for govt. expenditures and private capital formation

1. Customary breakdown
   a. Taxes
   b. Savings of individuals
   c. Savings of corporations
   d. Business reserves

   But that is merely what economists call an ex post truism

2. A more meaningful approach.
   Emphasis on source of Federal Government funds
   - June 1940 to December 1945
   a. Amount raised - $380 bil.
   b. Taxes - 153 bil. - 40%
   c. Borrowing - 228 bil. - 60%

   From nonbanks - $133 bil.
   From banks - 95 bil.
C. Some results
When you add $95 billion to a money supply of $65 billion you are entitled to expect some spectacular results. We got them.
1. Increase in employment, output, etc.
2. Prices and wages held in check by direct controls
3. Nevertheless C. of L. up 30% and wholesale prices up 37% by 1945

D.&E. The dire predictions and the results for 1946

<table>
<thead>
<tr>
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<th>1945</th>
<th>1946</th>
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<tr>
<td>G.N.P.</td>
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<tr>
<td>Govt. expenditures for goods and services</td>
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<td>Private gross capital formation</td>
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<tr>
<td>Consumer goods and services</td>
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<td></td>
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<tr>
<td>Income payments to individuals</td>
<td></td>
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</tr>
</tbody>
</table>

F. The banking year 1946 in retrospect
1. Redemption by Treasury and its meaning
   a. Repaid $23 billion
      ca. equals decline in general fund balance
   b. Effect on reserves and total deposits
      (1) Bank held debt
      (2) Public held debt
      (3) Reserve Bank held debt
F. 2. Banks' loans
a. Long-term development
   (I) Business finance and banking
       Jacoby and Sauliner - NBER
       Bank shifted only gradually from
       commercial loans to financing
       those who finance the consumer
       and then to direct consumer
       financing.
       Also bonds and real estate
b. Developments in the past year
   Post-war revival in bank lending
   March FRB
   (I) Total loans
       In 1946 increase of $5 billion
       Largest in any 12-month period
       since 1919-1920.
       Raised total to $32 billion -
       highest since 1930.
   (II) Distribution of loans
       (A) On securities
           Drop from $7 to $3½ billion
       (B) Business loans
           Increase widespread despite
           large liquid asset holdings.
           Much at long term.
   (1) Reasons - not needed to
       maintain adequate demand
       (a) Costs up - prices and
           wages
       (b) Inventories up -
           especially price-wise
       (c) Credit to consumers on
           large volume of sales
F. 2. b. (II) (B) (1) (d) Modernization and expansion
   (e) Strikes, transportation delays, shortages

   **In summary,** typical of inflationary period

   (C) **Consumer loans**
       up $1 \frac{1}{2} \text{ billion} - 50% 

   (D) **Real estate loans**
       up $2 \frac{1}{2} \text{ billion} - 50%
II. What of the future?
   A. Quandary:
      1. Functionless banks in Governments
      2. Builders of community through wise
         and progressive attitude in extending
         private credit
   B. But where is the money coming from?
      1. Earlier experience
         a. Didn't want to borrow
         b. Hence had to call other loans
      2. Reallocation of resources
      3. Creation of new money - sales of
         Governments to Federal Reserve
         Unfortunately individual bank can't tell
         where money is coming from for particular
         loan.
   C. Reconciliation?
      Aggressive sales of Governments to nonbank
      holders
   D. Remember each time we lend that it may be
      necessary to create the money