

## SOME TENDENCIES IN THE FEDERAL RESERVE SYSTEM

BY E. M. PATTERSON, PH.D.,

University of Pennsylvania.

There is no doubt in the minds of careful observers that the first great economic task before the people of the United States today is production. By this is meant not only the raising of agricultural products, the extraction of ores, and the processes of manufacture but also the transportation of men and materials to our seaboard and to Europe. Our second task is to save from our annual production the amounts needed by our Allies and ourselves in the conduct of the war. If we could increase our production by this amount the saving might be accomplished with no curtailment of our ordinary expenditures and with no lowering of our standards of living. Since a great part of the amount cannot be secured in this manner, there must be a reduced standard or we shall not furnish to our Allies the promised assistance. To secure this saving with the maximum of fairness and in a manner that will not lessen our productivity is our second task. The third is to devise the most satisfactory method of transferring to the government the ownership of the wealth that we produce and save. Congress has made unprecedented appropriations, tax legislation has been enacted, and huge bond issues have been authorized. A vast fiscal program has been evolved and its machinery set in motion.

In the midst of these activities stands our banking system, including many varieties of banks but especially the federal reserve banks and their members, which are for the most part national banks. This structure performs numerous functions three of which are of particular concern in this discussion. (1) The federal reserve banks are fiscal agents of our government while both federal reserve banks and member banks are depositaries of government funds. Through them government bonds and certificates of indebtedness are marketed. They are thus an important part of the government's fiscal machinery. (2) These banks issue various kinds of money for use in the community. From the national banks come the national bank notes and from the federal reserve banks the federal reserve bank notes and the federal reserve notes, while on the

deposit liabilities of all of them are drawn checks and drafts—the most important part of our currency. (3) These banks directly and indirectly make loans to private individuals and corporations, furnishing the financial aid required by our business institutions.

#### IMPORTANCE OF THE BANKING SYSTEM

This paper attempts to analyze the influence of this banking system in performing the three great economic tasks mentioned. Primarily the system is concerned with the third, assisting in the transfer to the government of the ownership of our wealth, but in doing this it may exercise a very important influence upon the other tasks in which we are engaged—the production and saving of wealth. Although only a device for facilitating transfers of wealth, it may greatly affect our whole national budget. A powerful banking machine will either help us to mobilize effectively our economic power, encourage production, stimulate saving and thus increase our wealth for war uses; or, improperly utilized, will retard production, discourage saving, encourage extravagance, and prevent our acquiring the funds we so much need.

The federal reserve system (a term which may be used to include both federal reserve banks and member banks) exists primarily to aid commercial banking as distinct from other financial operations, particularly speculative and investment banking. The national banks have always been restricted in their functions, not being allowed to own or deal in stocks, to acquire real estate (except for their own accommodation in the transaction of business), nor, except to a very limited extent, to lend on mortgage security. Even bonds may be acquired by them only because of a somewhat technical interpretation of the national bank act and, until 1913, savings accounts were not legally authorized. National banks are expected to specialize in commercial banking. Their customers are for the most part the business men of the community who are concerned primarily with transferring goods from producers to consumers. Accordingly their funds should not become imperilled in speculative operations nor be invested in transactions from which they cannot quickly be withdrawn. In other words, the assets of any bank must be safe but those of a commercial bank must also be liquid, *i.e.*, easily converted into cash.

Under the national bank act there was not the desired liquidity

and the entire system lacked elasticity. To remedy these and other defects the federal reserve act was passed in 1913. Its leading provisions need not be repeated here. It will suffice to point out that the entire act places emphasis on the importance of the banks of the federal reserve system having liquid assets. The liabilities of the federal reserve banks, *i.e.* their notes and deposits, are demand liabilities and their customers are chiefly member banks whose liabilities are of the same kind. Therefore the reserve banks must above all things keep their assets liquid. To this end they may discount for their member banks only "notes, drafts and bills of exchange issued or drawn for agricultural, industrial or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes." Further the law specifically excludes "notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities, except bonds and notes of the Government of the United States."

The federal reserve board, which was required by law to indicate more precisely the kind of paper eligible for rediscount, held as follows:

- (a) That it must be a bill the proceeds of which have been used or are to be used in producing, purchasing, carrying, or marketing goods in one or more of the steps of the process of production, manufacture or distribution:
- (b) That no bill is "eligible" the proceeds of which have been used or are to be used:
  - (1) For permanent or fixed investments of any kind, such as land, buildings, machinery.
  - (2) For investments of a merely speculative character, whether made in goods or otherwise.

The general intent of the law and of the rulings is evident. The reserve banks' assets are to be kept liquid in order that these banks may be of the highest possible service as *commercial* banks. To that end only "*commercial*" paper is to be acceptable for rediscounting. Speculative paper and even investment paper are ruled out with the single exception of bonds and notes of the government of the United States. Only a few concessions of a minor nature or of a temporary character are to be found in various sections of the act.

## CONCENTRATION OF THE COUNTRY'S GOLD SUPPLY

Since the passage of the law in 1913, three particularly significant changes have occurred. The first is the concentration of a large part of the gold supply of the country in the possession of the reserve banks. Scattered bank reserves mean a lack of mobility, while concentration brings flexibility or ease of adjustment in financing business transactions. Our former system of decentralized reserves was too rigid and their concentration in the federal reserve banks was a distinct improvement. Greater elasticity of credit transactions has been made possible; funds can now be shifted more readily from one place to another; relief can quickly be granted to sections of the country where it may be needed; and the concentrated gold is placed definitely under the direction of a central body which may control gold exports.

The law as originally passed provided for a gradual shifting of reserves and along with this change a reduction in the reserve requirements of the member banks, but soon the European war brought us so large a flood of gold that it was thought wise to hasten the concentration, and three steps were taken. (1) Reserve requirements for member banks were still further reduced and are now 7, 10 and 13 per cent respectively for the different classes of banks. These percentages may be contrasted with the 15 and 25 per cent requirements of a few years ago. (2) These required reserves must all be kept with the reserve banks, and member banks are distinctly urged to turn over to the reserve banks all of their cash holdings with the exception of such amounts as they think it wise or necessary to hold for daily needs. This too is in marked contrast with our former banking practice under which our national banks were required to hold from 40 to 100 per cent of their legal reserve as cash in their own vaults. (3) At first the law did not permit the federal reserve banks to count as part of the 40 per cent reserve which they are required to hold against their issues of federal reserve notes, the gold and gold certificates in the possession of the federal reserve agents. Since June 1917 this accumulation of gold and gold certificates is to be counted, a change which permits a great expansion in note issues.

These three modifications in reserve requirements are of great importance. On January 2, 1915, there was \$1,875,000,000 of gold

in the United States and on May 1, 1918, only three years later, there was \$3,042,000,000, an increase of \$1,227,000,000. On May 18, 1918, the federal reserve banks held a total gold reserve of \$1,984,000,000, which is more than the entire gold supply of the United States three years ago and over 65 per cent of the gold we now hold. This amount is so large that one cannot easily or quickly grasp its importance.

#### FEDERAL RESERVE NOTES AND REDISCOUNTING

The second significant change that has occurred is in the issue of federal reserve notes. As originally passed, the apparent intent of the law was that notes should be issued on the security of rediscounted paper placed in the possession of the federal reserve agents. It was soon realized that the machinery provided could be utilized as a device for pumping gold out of general circulation and into the hands of the federal reserve agents who would issue federal reserve notes in exchange. Under this plan most of the notes were secured by gold and hence were in effect, though not in name, gold certificates. As recently as about a year ago there were only \$438,000,000 of reserve notes in actual circulation but now there are outstanding \$1,569,000,000 of the notes. During the last year the volume of these notes outstanding has been increasing at the rate of over \$21,000,000 a week.

The third change of importance is the increase in the practice of rediscounting. This practice is a recent one in American banking. Only a few years ago it was viewed with disfavor by most of our bankers and for some time they hesitated to utilize the facilities furnished by the reserve system. On March 4, 1914, our national banks reported only \$8,700,000 notes and bills rediscounted. On March 5, 1917, the amount was only \$49,000,000 but by December 31, 1917, it was \$475,000,000. On May 18, 1918, the federal reserve banks reported bills discounted as \$842,000,000, an amount which is exclusive of any borrowing by member banks from each other. At the outset most of the borrowing from the reserve banks was done by rediscounting commercial paper and could with much fairness be said to have commercial transactions behind it. At present a considerable part is the direct discounting of the member banks' own promises secured by United States obligations as collateral. Much of this borrowing is done on fifteen-day collateral

notes at a rate of only 4 per cent, a rate lower than that charged for commercial paper.

We have enumerated three important changes: (1) Reserve requirements of national banks have been lowered and reserves concentrated in the reserve banks; (2) note issues are increasing and under our amended law may be issued in much larger volume than was at first possible; and (3) the practice of rediscounting commercial paper and of discounting their own direct obligations has been rapidly acquired by our banks and is now extensively employed by them.

The significance of these developments lies in the concentration of power that they indicate. Such concentration is not only desirable but necessary in our war emergency, but it throws a heavy responsibility upon our treasury and banking officials. Wisely used, our conduct of the war will be aided, but if poorly managed great harm may result.

#### INFLATION AND ITS DANGERS

The dangers of inflation have been fully appreciated by our government and reserve bank officials. On April 2, 1917, President Wilson said: "It is our duty, I most respectfully urge, to protect our people, so far as we may, against the very serious hardships and evils which would be likely to arise out of the inflation which would be produced by vast loans."

This same idea was apparently in the mind of Secretary McAdoo in urging a financial program of half taxation and half loans. The ideals of the federal reserve board as to the assets of commercial banks have been frequently expressed, but two quotations will suffice. On November 10, 1914, they declared:

Safety requires not only the bills held by the federal reserve banks should be of short and well-distributed maturities, but, in addition, should be of such character that it is reasonably certain that they can be collected when they mature. They ought to be essentially "self-liquidating," or, in other words, should represent in every case some distinct step or stage in the productive or distributive process—the progression of goods from producer to consumer.

Again in December, 1916, the Board in advising our banks against the acquisition of treasury bills of foreign governments said:

If . . . our banking institutions have to intervene because foreign securities are offered faster than they can be absorbed by investors . . . an element would be introduced into the situation which, if not kept under control,

would tend toward instability, and ultimate injury to the economic development of this country.

Now that we are definitely engaged in the war, increased production and voluntary saving are proving difficult. The federal reserve system is at hand and through it, as fiscal agent, government bonds and certificates are marketed. There is grave danger that this great financial machine which has already performed such valuable service shall be utilized as an engine for inflation on a gigantic scale and with disastrous results. The process has already started and the pressure to continue it is increasing. Several illustrations will make this clear.

#### ILLUSTRATIONS OF THE PRESSURE TO INFLATE

First is the increase in the amount of bonds held by the banks in the reserve system. On June 30, 1914, the national banks held \$1,872,000,000 of all kinds of bonds including United States bonds. By March 4, 1918, this had increased to \$3,935,000,000 (including certificates of indebtedness), an increase of \$2,063,000,000. That all or most of these bonds will be paid when due and are in the long run a safe investment, is unquestionable, but that is not the point here raised. Instead of commercial assets our banks have accumulated large holdings of bonds which are liquid only to the extent that they are salable to the general public. To date they are being acquired more rapidly than they are being sold. Also account should be taken of the increase in collateral loans to the public, as such loans must in the final analysis often be interpreted in terms of the stocks and bonds pledged as security. Unfortunately, we have no statements to help us on this point but can merely say that during the first three years of the war such loans by the national banks in New York City alone were about doubled.

Pressure has come from another direction. It will be recalled that with minor exceptions only short time commercial paper may be rediscounted at reserve banks and that investment paper is definitely excluded as not liquid. In every case the determining consideration is the nature of the transaction behind the paper and not the form of the paper itself. Short time paper issued to finance a permanent investment, the maker expecting to renew the notes from time to time over a period of years, is clearly debarred. Yet within the last year two large well-known corporations, finding it difficult

to borrow to advantage, made a definite attempt to finance their needs over a period of several years by issuing ninety-day notes to be renewed repeatedly, with the understanding that these notes should be acceptable for rediscount at the reserve banks. To this proposal emphatic objection was made and the plan was dropped. It is mentioned here only as another illustration of the pressure upon our system to acquire assets that are not self-liquidating and that are not readily salable elsewhere. Attention may also be called to the act recently passed authorizing the Secretary of the Treasury to issue certificates of indebtedness to the amount of \$8,000,000,000 instead of the former limit of \$3,000,000,000.

A final illustration of the pressure to utilize the federal reserve system as a market for securities and furnish the banks with assets that are not self-liquidating is to be found in the war finance corporation act. This war finance corporation may advance funds "for periods not exceeding five years" either direct or through banks, savings banks, trust companies and building and loan associations "to any person, firm, corporation or association, conducting an established and going business in the United States, whose operations shall be necessary or contributory to the prosecution of the war."

The \$500,000,000 capital stock of the corporation will be subscribed by the United States government and it may issue a maximum of \$3,000,000,000 of bonds. The bonds may be sold to the general public but section 13 of the law specifically authorizes the federal reserve banks "to discount the direct obligations of member banks secured by such bonds of the corporation and to rediscount eligible paper secured by such bonds and endorsed by a member bank." There is little reason to suppose that either the member banks or the reserve banks can easily refuse to accept such paper. Nevertheless it will be based on advances for periods up to five years and it will be strange indeed if many of these loans are not of necessity renewed at maturity. A few conclusions from this analysis may now be stated in a less technical manner.

1. Our federal reserve system was conceived primarily as a commercial banking system with the added duty of acting as the fiscal agent of our government.

2. The effect of the federal reserve act and of its recent amendments has been in general most salutary but we now have a great

financial machine whose operations especially under war conditions will be very hard to control and which may conceivably work a tremendous amount of harm.

3. A survey of its operations especially during the last year warrants the assertion that member banks and reserve banks are accumulating a larger and larger volume of bonds and other assets that are not self-liquidating. As permanent investments for savings banks, insurance companies or private individuals, most if not all of these securities are safe, but for commercial banks they have the serious weakness of not being liquid.

4. Against these assets the banks are increasing their liabilities in the form of note issues and deposits subject to check and draft. If the assets were really short term obligations of a self-liquidating character they would as they matured be paid and the banks could at once be relieved of their liabilities. If they were purchased by the general public the same result would follow. In practice many of these assets are being neither sold nor liquidated and the liabilities remain. Our currency is being inflated and the pressure to continue is becoming greater rather than less.

Reserve notes to the amount of \$1,569,000,000 are in circulation. Rediscounting has been learned with such great rapidity as to raise serious doubts regarding the restraint our bankers may be expected to show in the future. Although the amount of gold held by the reserve banks has almost doubled, the ratio of gold to net deposits and federal reserve notes combined has fallen in the past year from 80.4 per cent to 61.2 per cent.

That the relation of cash holdings to deposits is at present unsafe is not contended. This paper has merely set forth that our banking system permits inflation, that much has already occurred and that the pressure for more is increasing with alarming rapidity. In "perfecting our banking machinery," "mobilizing our resources," and "strengthening our credit," we have changed our laws always in such a way as to make possible more expansion. With this machinery at hand the pressure on our reserve bank officials is nearly irresistible. Demands for rediscounts and direct loans are hard to refuse and our member banks are transferring to the reserve banks their high-grade commercial paper and their own notes secured by United States promises as collateral. Last fall our reserve banks raised their rates but did it only slightly and even now

the rediscount rate on commercial paper is at only three of our reserve banks as high as 5 per cent and in the other ten banks is  $4\frac{1}{2}$  per cent, while the rate for member banks' fifteen-day collateral notes is only 4 per cent with the exception of Cleveland and Richmond where it is  $4\frac{1}{2}$  per cent.

#### EFFECT OF INFLATION UPON PRODUCTION

We are or should be familiar with the effect of all this on the people with small incomes who suffer from the rapidly rising price level. Bondholders whose incomes buy less and less each year as prices rise also are affected though they are less quick to realize it. With a higher price level too our government must pay more for goods and is then compelled to sell still more bonds. But let us pass to other considerations perhaps even more serious in the midst of a war. What is the effect of this rising price level on our industrial production?

1. When the price level is changing there is much uncertainty attached to business transactions. Doubt as to costs of materials and labor causes hesitation, and commitments for a long period of time are entered into with caution. A large steady volume of production is more difficult to secure.

2. At such times many wages lag behind the prices of many of the commodities which are so large a part of the real wages of the worker. Under these conditions malnutrition and inefficiency occur and lowered productivity results.

3. In so far as wages rise, the result is often to divert laborers from one plant to another and then perhaps back again. The rate of labor turnover is high and a reduction in output occurs. Illustrations of this today are numerous.

4. Increasing expenditures for materials and to some degree also for labor creates serious difficulties for our public utilities. With more or less friction, with weakened credit and delayed improvements they are seeking permission to increase their rates, a step that would have been delayed at least for a considerable period had we avoided inflation.

5. Rising prices contribute to labor unrest. The British Commission on Industrial Unrest which reported last year did its work in eight divisions and the eight were "unanimous in regarding the opinion of the working classes, that they have been exploited by the

rise of food prices, as the universal and most important cause of industrial unrest." In the United States we have no similar report to guide us but the indications are that a like situation exists. In so far as this is true we may say that rising prices encourage industrial friction and strikes, with a lessened output. Other influences are at work but we should not blind ourselves to the seriousness of this one. Prices of commodities as recorded by Bradstreet's index number rose 118 per cent from July 1, 1914 to May 1, 1918, of which 44 per cent has been in the last twelve months. Financial machinery which will increase this advance should be kept under control for the sake of those who always suffer in a period of rapidly rising prices and also for the sake of the successful prosecution of the war.

#### OUR DUTY IN THE EMERGENCY

Concentration of banking power during war is a most important part of the mobilization of economic resources. Yet it is harmful to ourselves and unfair to our Allies if this be accomplished in a manner that will retard instead of enhance our effectiveness. The problem is most complex, but our duty in several directions is clear:

1. We should not pass legislation that will permit further inflation and thus place upon our treasury officials and our bankers all of the responsibility for the results. Suggestions have already been offered by numerous irresponsible persons that we may secure more "capital" by lowering further our reserve requirements. Serious proposals to that end will probably be made. Such steps should be resisted with all the energy of which we are capable.

2. Heavy governmental and private borrowings encourage inflation and for this reason if for no other much heavier taxes should be imposed at once. Taxes, more taxes, and still more taxes should be the rule. Our fiscal plans to date have been formulated too hurriedly. A scientific analysis of our needs and of the sources of supply for the next ten years or more is needed. This would take into account both governmental and private needs and furnish valuable aid to the capital issues committee, the fuel administration, the railroads, and other governmental bodies which are struggling with questions of priority.

3. In all of our thinking and talking on the subject of war finance the emphasis should be shifted from our financial machinery

to the need for enlarged production of essentials and to the maximum of economy in both public and private expenditures. Financial machinery is, after all, only a means to an end. There are grounds for concern when we view gold and federal reserve notes as "capital" and fancy that by concentrating the one and by issuing the other we are necessarily aiding production. When we laud the achievements of the United States Steel Corporation for having done more dollars' worth of business in 1917 than in 1916, but overlook the serious fact that its output in tons showed an actual decline of about 5 per cent, our judgment is awry. National budgeting is hindered, not helped, if banking machinery is utilized as a means of inflation.

## THE FALLACY OF PRICE BIDDING

BY SIMON N. PATTEN, PH.D.,

Philadelphia, Pennsylvania.

The law of supply and demand assumes that a rising price tends to increase supply while falling prices lead to a reduced production. The basis of this generalization is an induction from the action of price changes on particular commodities or on a market of limited range. What our ancestors saw was the immediate effect of price changes. They had no means of estimating world phenomena. To us, however, a world economy is a reality and its fact as easily ascertained as are those of localities. As statistics are compiled it is easier to obtain the data of world industry than of local trade. What the trade of Philadelphia or New York is no one knows with the accuracy with which international figures are compiled. Price changes now affect the whole world or at least several nations. We can, therefore, trace their effects with a precision impossible even a generation ago.

Our fathers bid for commodities and saw as a result a flow of increased goods to their locality. They might know where the articles came from but they did not know what effect the withdrawal of these commodities had on the nations sending them. We now have the facts of both sides of the ledger or, better put, we have the ledger of the receiving and losing nation. On these facts