Form F. R. 131

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date June 11, 1937.

To Chairman Eccles

Subject: The 100 Percent Plan

From Lauchlin Currie

LBC.

I do not know whether you still retain an interest in the 100 Percent Plan, but in view of the fact that it is coming to life again politically I thought you might be interested in the enclosed memorandum written at the request of Governor Davis.

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June 9, 1937
Confidential
L. B. Currie

THE 100 PERCENT PLAN

It is only recently that there has been a general awareness that, since the bulk of the money of the country is composed of checking accounts and the reserve requirements constitute only a fraction of deposits, there is a possibility for multiple expansion and contraction of deposits resulting from an increment or decrement in the volume of reserves. The essential idea back of the 100 percent reserve plan is to eliminate this process of multiple expansion and contraction of the community's money supply by private individuals. If 100 percent reserves were required against demand deposits, a bank receiving a new deposit could not increase its loans. A bank losing a deposit would not need to liquidate a loan, since the reserves would be sufficient to meet the withdrawal in full. In most versions of the 100 percent plan no reserves are required against time deposits, since in their handling of time deposits banks are considered to act as investment trusts rather than as creators of money.

I shall first consider the advantages claimed for such a plan over the present system. I shall then take up the various types of plans that have been advanced to secure a 100 percent reserve.

Irving Fisher, who has done more than anybody else to popularize the plan, claims the following advantages for it:

1. There would be practically no more runs on commercial banks.
2. There would be far fewer bank failures.
3. The interest-bearing government debt would be substantially reduced.

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4. Our monetary system would be simplified.

5. Banking would be simplified.

6. Great inflations and deflations would be eliminated.

7. Booms and depressions would be greatly mitigated.

8. Banker management of industry would almost cease.

I shall consider these points in order:

1. No more runs on commercial banks. This advantage must, I think, be conceded. It is widely believed that the insurance of bank deposits will prevent future bank runs. Insurance, however, covers deposits only up to $5,000, and in the Closed Bank Study evidence is accumulating to the effect that the substantial loss of deposits that actually closed banks was in accounts above $5,000. If demand deposits were covered by 100 percent reserves and time deposits were insured up to $5,000, there would be no occasion for bank runs. This advantage, however, could be secured in the present system if deposit insurance were extended to cover all demand deposits.

2. There would be far fewer bank failures. This advantage, which is very close to the one just considered, must also be conceded. Very many banks have failed not because their assets were not good enough to meet their liabilities over a period, but because they could not be liquidated sufficiently quickly to meet a substantial drain. Deposit insurance with complete coverage would do away with drains of deposits arising from fear, but

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would not prevent the substantial loss of deposits arising from an adverse balance of payments of the community in relation to other communities. The only practical solution for the handling of this type of drain is one that is not acceptable to the country, the development of nationwide branch banking. Under such a system what the branches of a bank lost in one section of the country would be made up by what they gained in another section, so that on balance no net liquidation would be called for.

3. The interest-bearing government debt would be substantially reduced. This advantage presupposes a transfer of government bonds from member banks to reserve banks, or a gradual increase in the government security holdings of reserve banks and their subsequent retirement. Although this could be done, the advantages from the point of view of the community as a whole may be fictitious. If banks have to undergo the expense of handling checking accounts while foregoing any revenue from the assets such checking accounts now permit them to acquire, they must be compensated in some other way. If they seek to recompense themselves by the addition of service charges, many checking accounts will be withdrawn in cash and the gain to the government, and indirectly to the former depositors as taxpayers, will be offset by the added inconvenience and risk entailed in paying all bills in cash. On the other hand, if depositors pay much more in service charges these additional charges must be offset against any savings arising from the reduction in taxes consequent upon the retirement of the public debt.

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It might, of course, be argued that depositors should pay the costs incident to the handling of their deposits, rather than that the general taxpayer should bear part of this cost. Banks now doubtless make very little net on the majority of their accounts, which are small. Individual banks probably make the bulk of their profits from the investment and loaning of the proceeds of their few large deposit accounts, since these accounts cost little to handle and the proceeds can be loaned at the current rate of interest. The fact that bank earnings in the past have on the average not been excessive as compared with other lines of business may only indicate that the banks under the spur of competition have provided a lot of free services, have taken excessive losses and have made very large profits on various accounts.

It cannot be denied that any 100 percent plan that permitted the retirement of a substantial amount of the government debt would have a wide popular appeal. One incidental effect of the plan would be to remove the objection to any increase in expenditures that arises from the existence of a large public debt.

A more intensive discussion of this general point will be taken up in connection with the various types of 100 percent plan proposed.

4. Our monetary system will be simplified. At the present time a variety of reserve requirements is in force as between central reserve city, reserve city and country member banks, and

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non-member banks. Consequently, a shift of deposits between these banks has the effect of raising or lowering reserve requirements for the whole country and thus tends to lead to fortuitous expansions and contractions of the money supply of the country. A uniform 100 percent requirement would obviate fluctuations arising from this source. In addition to the disturbing effects arising from different reserve requirements as between banks are those that arise from a change in the composition of our money supply as between demand deposits on the one hand and cash on the other. At the present time a withdrawal of cash from banks is a withdrawal of reserve funds, and unless these reserve funds are made up in some other way demand deposits have to be contracted. Similarly, an inflow of cash into the banks not only creates equal deposits but, in addition, gives the banks excess reserves, so that a net expansion of the total money supply becomes possible. If 100 percent reserves were required against demand deposits the conversion of demand deposits into cash, or of cash into demand deposits, would have no tendency to affect the total supply of money.

Although a 100 percent plan would have distinct advantages over the present system from the point of view of simplifying the monetary system, the disadvantages of the present system of varying reserve requirements may be overcome by sufficiently expert monetary control. Thus, when reserve requirements are being lowered through a shift of deposits from high reserve to low reserve banks and the Federal Reserve authorities do not desire such a lowering of requirements they may offset this development by selling securities

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in the open market. Similarly, a loss of reserves due to a withdrawal of cash may be offset by purchases of securities in the open market.

5. Banking would be simplified. At the present time banks perform two distinct services. They act as financial middlemen for the investment of the community's savings and they furnish the bulk of the community's money supply through their loaning and investing operations. The 100 percent plan would restrict them to the former function.

6. Great inflations and deflations would be eliminated. This claim rests on two assumptions. The first is that it is only possible to have great inflations and deflations if the volume of money is allowed to fluctuate widely. The second is that the volume of money cannot be prevented from fluctuating widely under our present system. The former assumption is probably largely true, although it would be difficult to test it. It is true that all periods of rapid and long-continued price advances and declines have been accompanied by expansions and contractions of the money supply. One cannot reason from this, however, that they would not have occurred if there had not been such variations in the money supply. On the other hand, it appears reasonably certain that a contraction in the volume of money at a time when business activity is declining tends to aggravate that decline, just as an expansion of money at a time when the rate of spending is increasing tends to intensify the upswing.

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The second assumption is more open to question. If we are not bound too rigidly to the gold standard nor by legal reserve requirements the Federal Reserve banks could create enough deposits and reserves by a sustained open market buying program to offset the contraction of deposits arising from the contraction of loans. If banks are put in possession of a large amount of excess reserves there would appear to be little occasion for them to force the liquidation of their loans in order to meet a drain of deposits.

A difficulty, of course, arises from the fact that the excess reserves created through open market purchases may not go to those banks most in need of them but may be concentrated in the large cities. It is still possible under our present system for individual banks to experience heavy losses of deposits and to fail. Moreover, banks may bring pressure on borrowers to liquidate not because they need the funds immediately, but because they are seeking to safeguard the principal of the loans. A further difficulty in offsetting private contraction of credit through Federal Reserve open market policy arises from the fact that the creation of a large volume of excess reserves raises problems as to their ultimate absorption. These problems may bulk sufficiently large in the minds of the monetary authorities to make them reluctant to embark on a vigorous open market buying policy.

We have recently had an illustration of the awkwardness of the present instrumentalities of control over an excessive expansion of deposits. Although the aggregate of excess reserves was sufficient

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to meet the rise in reserve requirements, the actual increase in requirements, in conjunction with other factors, induced substantial sales of securities and an undesired contraction of demand deposits by some $700 million. The advantage of the 100 percent system would be that commercial banks' purchases and sales of securities would result merely in the transfer of demand deposits. Reserve banks' purchases and sales would create and absorb member bank reserves and an equal amount of demand deposits. Since the reserves gained or lost would be exactly equal to the reserve requirements against the deposits gained or lost, there would be no effect on excess reserves.

7. Booms and depressions would be greatly mitigated. Most of the discussion under (6) applies to this point. In general, it may be said that the 100 percent plan would permit of a more nearly perfect control over the volume of money and to this extent would permit of a more effective check upon the severity of booms and depressions than is now possible. The supporters of the 100 percent plan probably overestimate the extent to which even a perfect control over the supply of money could result in a mitigation of the business cycle, since it would still leave great scope for variations in the rate of spending.

8. Banker management of industry would almost cease. Fisher's point here is that many industries fall into the hands of bankers in depressions because of defaults in loans. It is true that there are many cases where banks have taken over the collateral in the case of defaulted loans and thus gained control over different types of business.

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The extent to which this is possible has been somewhat modified by the creation of various government credit agencies and by new bankruptcy laws. Presumably saving bankers and, indeed, creditors of any kind would be in a position to do this in future depressions, just as commercial bankers are now.

Professor James Angell, of Columbia, lists the following as the main defects of the present system that would be remedied by his type of 100 percent plan:

1. The record of bank failures with their attendant losses to individuals and decline in the general money supply of the country.

2. There is little evidence to show that the wide fluctuations in the stock of money in the hands of the general public which the present fractional reserve system entails are desirable and much to show they are harmful.

3. There is no clear evidence that variations in the stock of money which are proportioned to variations in commercial bank assets alone are desirable, and much to show that they are harmful.

4. The system of fractional reserves has not regulated the total quantity of demand deposits in ways which in retrospect seem to have been desirable; in times of stress it has frequently been unable to provide either "liquidity" or "clearance" for the banks, or assured "convertibility" or any other kind of safety for demand deposit holders.

5. Our present monetary and banking system has failed to promote stability in the economic life of the country at large.

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6. Our monetary and banking system has likewise failed to show characteristics indicating that it is amenable to continuous central or other pre-arranged control.

Professor Frank Graham, of Princeton, who has also written on the 100 percent system, emphasizes the impropriety of farming out in private hands a valuable prerogative and responsibility that properly belongs to the Government.

Various versions of the 100 percent plan

Although various proponents of the 100 percent plan are in agreement on the objective of divorcing the issue of money from the loaning policies of individual banks there are considerable differences of opinion as to the manner in which a transition to 100 percent reserves should be made. The various proposals advanced range from taking over bodily sufficient assets from commercial banks to bring their reserves against demand deposits up to 100 percent, to permitting banks to retain all their earning assets and to secure their 100 percent reserves by borrowing on a non-interest bearing note from the Federal Reserve banks. In the one case earnings of banks would be very adversely affected and their ability to make loans severely reduced. On the other extreme they would be affected little, if at all.

Although the Patman group has at the date of writing not incorporated their 100 percent proposal in a bill, a preliminary plan has been worked out. According to this plan banks would be permitted to count their holdings of government securities as of a given date,

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as equivalent to reserves in the Federal Reserve banks. Any further accessions of such obligations, however, could not be so counted.

This particular method of obtaining 100 percent reserves would result in a considerable disturbance to the capital market. A great many banks do not now possess sufficient government securities to enable them to meet the 100 percent requirements. As of March 4 the volume of reserves, and direct and guaranteed Government issues held by member banks amounted to a figure some $3 billion less than their adjusted demand deposits. Since that date they have disposed of more of their Government holdings. If they sought to purchase additional securities they would drive the price up against themselves and expose themselves to the risk of capital depreciation in the future. The only other way in which the banks as a whole could meet the requirement would be to borrow from the Federal Reserve banks or liquidate a sufficient volume of their assets and deposits to reduce present reserve requirements to a level equal to their present holdings of reserve assets.

It is paradoxical that the reserve banks could not, by open market purchases, place the member banks as a whole in possession of sufficient reserves to meet the new requirement. If bonds were purchased from banks, the banks would have no more of what they could count as reserves; if bonds were purchased from individuals, the additional reserve funds would be required against the

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deposits newly created in this way. A certain amount of borrowing or of liquidation of other loans and securities would appear to be inevitable under this plan. It may be noted in passing that in so far as the banks could meet the 100 percent requirement through their holdings of government bonds, no retirement of the public debt would result from the imposition of the 100 percent plan. Moreover, the adoption of the plan in this manner would result in some liquidation, which presumably would not be desired by the particular group supporting this proposal.

In general any plan that would be very costly and inconvenient to banks would furnish them with a strong inducement to persuade their large depositors to classify a substantial volume of their deposits as time deposits.

A further difficulty with this particular proposal is that no provision is made for the tying together of the deposit and the bonds that constitute part of the reserve against the deposit. When a bank loses its deposit to another bank it will meet this loss by securing reserve funds, we will say, by disposing of some of its government holdings. This sets in motion a multiple chain of contraction of deposits. The bank receiving the deposit, on the other hand, has to keep the reserve funds it received intact, so that there is no offsetting multiple chain of expansion. The only way in which this progressive process of liquidation could be prevented would be by tying the government securities directly to deposits. Then there

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would merely be a shift of assets between banks corresponding to the shift of deposits. This, however, would require that banks be permitted to have their holdings of government bonds increase after the date fixed upon and be counted as reserve. It would prove very difficult in practice to work out any means of allowing an increase in bonds received from another bank to count as reserve, while not allowing an increase in bonds derived in other ways to constitute reserves.

Professor Angell's proposal is for the Government to assume the liability for all demand deposits. The reserves would be brought up to 100 percent by a non-interest bearing loan from the Federal Reserve banks, secured by a general lien on the assets of the member banks. He also proposes an arrangement whereby earnings can be shifted from banks that in the future lose deposits to banks that gain these deposits. He makes no provision, however, for any addition to earnings as a result of a net increase in deposits for the system as a whole. This, however, could be done in the following way:

If it were desired to leave commercial banks' earnings unaffected by the 100 percent system it could be provided that the reserve banks should pay the commercial banks whose deposits have increased an amount equal to the sum the commercial banks would have earned if they had been able to invest 80 percent of their increased deposits in government bonds. Similarly, a bank whose deposits had fallen below the level existing at the date the plan went into effect could make a payment to the reserve banks of an

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amount equal to the income which it would have lost if it had had to liquidate government bonds to an amount equal to 80 percent of the loss of deposits. The theory behind this proposal is that under the 100 percent plan a future gain in deposits would entail added expense but no added revenue, while a loss in deposits would entail lower expense but no loss of revenue. The reserve banks' earning assets would presumably increase over a period of time as the monetary authority created new deposits through open market purchases. In case, however, deposits were increased through an inflow of cash into banks or an inflow of gold from abroad, the reserve banks would find themselves obligated to make larger annual payments to member banks while possessing no additional earning assets.

The difficulty of working out an arrangement whereby banks' earnings now and in the future would be unaffected by the adoption of a 100 percent plan is not so much technical as political. It is apparent that part of the political support of the plan rests on the possibility it affords for retiring the government debt and of shifting part of the cost of banking from the taxpayer (via the interest on government bonds held by banks) to the banks and their customers. It is obvious that this objective cannot be attained if banks are reimbursed by a governmental agency for the costs incident to the handling of increased deposits.

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A compromise might be worked out whereby (a) banks would be left with their present volume of earning assets, (b) they could secure the additional required reserves on a non-interest bearing note which need only be liquidated when and to the extent that their deposits declined below the volume existing when the plan went into effect, (c) no provision would be made for reimbursing banks for the handling of an increase in deposits above the level existing when the plan went into effect, (d) interbank deposits could be reclassified as interbank loans with no reserve requirements, (e) banks could be permitted to count their present reserves against time deposits and their vault cash as part of the 100 percent required against demand deposits.

In this way banks would be left with a large "revolving fund" from which they could meet the requirements of local customers; their current earnings would be unaffected by the adoption of the 100 percent plan; the reserve banks could gradually increase the total of deposits by increasing their holdings of governments; and provision could be made for the diversion of the excess of reserve bank earnings over expenses to the Treasury. The loss of earnings arising from the inability to utilize any future accession of reserve funds in making loans and investments could be in part compensated for by the elimination of insurance assessments on demand deposits. Other factors favorable to the maintenance of bank earnings are the fact that interest rates charged on customer loans show only slight reductions from the pre-depression level, the prohibition of the payment of interest on demand deposits, and the establishment of maximum rates of interest on time deposits.

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The question as to how borrowers would fare under a 100 percent plan deserves consideration. If the 100 percent requirement is attained by permitting banks to count a certain amount of Government obligations as reserve, and if, in addition, the volume of government obligations outstanding is progressively diminished through budgetary surpluses and the operation of the Social Security Act, there is a real question whether banks will possess sufficient funds to meet the growing needs of local borrowers. If, on the other hand, banks were permitted to retain their existing volume of earning assets most of them should have sufficient funds to finance local needs. They can, of course, rely upon the continued growth of time deposits. One factor bearing on this question is that under the 100 percent plan banks need not maintain such a liquid position. The reserves would be available to meet a loss of demand deposits. The $5,000 insurance coverage of time deposits is probably sufficiently high to cover the bulk of such deposits and, given safety, there is little reason to expect a substantial shrinkage of time deposits in a depression. Banks could, therefore, safely invest a larger proportion of their funds in local loans.

Conclusion

In general it would appear that certain concrete advantages could be obtained by divorcing the creation of deposit currency from the loaning and investment policies of commercial banks along the lines of the 100 percent plan. It would make deposit currency

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as secure as note currency, lessen bank failures, and would unquestionably facilitate management of the volume of money. On the other hand, full insurance of demand deposits would make deposit currency secure and with certain other changes, such as bank unification or the power to impose the same reserve requirements against non-member as against member bank demand deposits, the degree of monetary control may be sufficient for practical purposes. Any public debt retirement and saving of interest charges that might result would not constitute a net gain for the whole community, but would represent a shift of costs from taxpayers to banks and their depositors.

The merits of the 100 percent plan are closely bound up with the particular version of the plan under consideration. The proposal to permit banks to count their holdings of government bonds as of a certain date as reserve is objectionable. It would result in liquidation and disturbance to the capital market. On the other hand, the device of permitting banks to borrow their additionally-required reserves at no cost to them would make possible a transition to 100 percent reserves with a minimum of disturbance.

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APPENDIX

Earnings and expenses of member banks for the years 1936 and 1935

(In thousands of dollars)

	All member banks	
	1936	1935
Earnings:		
Interest and discount on loans	513,399	498,419
Interest and dividends on investments	487,101	467,217
Interest on balances with other banks	1,207	1,681
Collection charges, commissions, fees, etc.	31,397	28,825
Foreign department	12,165	12,282
Trust department	88,297	77,703
Service charges on deposit accounts	39,415	35,634
Rent received	78,456)	84,888
Other current earnings	19,471)	
Total current earnings	1,270,908	1,206,649
Expenses:		
Interest on deposits:		
Time	175,164	196,490
Demand	7,137	9,298
Bank	2,175	2,695
Total	184,476	208,483
Salaries, officers	135,501)	
Salaries and wages, employees (other than officers)	216,213)	334,468
Fees paid to directors and members of executive, discount, and advisory committees	6,269	
Interest and discount on borrowed money	613	1,230
Real estate taxes	33,970)	63,680
Other taxes	47,175)	
Other expenses	247,897	224,654
Total current expenses	872,114	832,515
Net earnings	398,794	374,134
Recoveries, profits on securities, etc.:		
Recoveries on loans	94,247	71,901
Recoveries on investments	160,318)	277,027
Profits on securities sold	230,698)	
All other	22,808	27,078
Total	508,071	376,006
Losses and depreciation:		
On loans	206,548	252,374
On investments	131,406	198,765
On banking house, furniture and fixtures	38,721	33,586
All other	64,873	53,537
Total losses and depreciation	441,548	538,262

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Earnings and expenses of member banks for the years 1936 and 1935 - (continued)

	All member banks	
	1936	1935
Net profits	465,317	211,878
Cash dividends declared	198,663	186,810
Loans	12,543,829	11,985,150
Investments	18,839,010	16,913,308
Loans and investments	31,382,839	28,898,458
Time deposits	10,660,494	10,181,426
Total deposits	40,129,630	35,694,475
Capital funds	5,209,486	5,118,478

It will be noted that net earnings before recoveries and losses amounted to 7.3 percent of capital funds in 1935, and 7.7 percent in 1936. Service charges increased from $36 to $39 million. Deposits increased by $4.4 billion, while salaries and wages of officers and other employees increased by only $18 million. While only a part of this increase would be attributable to the increased costs incident to handling more deposits, part of the increase in "Other expenses" should doubtless be attributed to this source.

Total assessments on all insured banks for deposit insurance purposes is running around $40 million a year. Of this amount some $17 million is derived from the assessments on time deposits. Consequently, the elimination of assessments on demand deposits would reduce current annual expenses of insured banks by approximately $23 million, or over half the revenues they obtain from service charges.

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