Volume Title: Business Cycles and Unemployment

Volume Author/Editor: Committee of the President's Conference on Unemployment, and a Special Staff of the National Bureau

Volume Publisher: NBER

Volume ISBN: 0-87014-003-5

Volume URL: http://www.nber.org/books/comm23-1

Publication Date: 1923

Chapter Title: Financial Devices for Controlling or Mitigating the Severity of Business Cycles

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Chapter URL: http://www.nber.org/chapters/c4672

Chapter pages in book: (p. 264 - 273)

CHAPTER XV

FINANCIAL DEVICES FOR CONTROLLING OR MITIGATING THE SEVERITY OF BUSINESS CYCLES

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The distinctive evil of the business cycle is due to the abuse or misuse of credit. At some point in the cycle, borrowers and buyers ask for credit which in their own and the public interest should be refused. To do this it is necessary (*a*) to find some practical test or index by which to determine when the time for credit restriction has arrived; (*b*) to devise some process or mechanism by which restriction can be exercised; and (*c*) to select the men or agency of control upon which the responsibility for initiating action may properly be placed. It is primarily to these questions that the proposals discussed in this chapter are addressed.

I. PROPOSALS RELATING TO THE CONTROL OF BANK CREDIT

A considerable measure of responsibility for the regulation or regularization of credit obviously rests upon the banks. Here fortunately the discussion may start with an established principle. It has long been an accepted rule of banking practice that interest rates should be increased when there is danger of a panic; and this rule is commonly interpreted to mean, under existing conditions in the United States, that the Federal Reserve Banks should raise their discount rates sharply when the reserve ratios established by law (35 per cent in lawful money against deposits and 40 per cent in gold against federal reserve notes in circulation) are threatened.

Recent experience seems to show that this rule is inadequate and should, if possible, be amended or supplemented.

As a matter of business experience since the Armistice, the country has passed through a brief period of falling prices; a boom in 1919 and early 1920 which was characterized—to use the descriptive phrases applied by the Federal Reserve Board[1]— by "over-extended business," a "mania for speculation," "unprecedented orgy of extravagance," and a period of painful prostration and reaction. But, it is significant to note, we have passed through the crisis without a panic, without recourse

[1] *Annual Report* of the Federal Reserve Board covering operations for the year 1920, p. 1.

to the emergency note provisions of the Federal Reserve Act, and without material reduction of bank reserves below the legal minima. We have stayed within the established limits, and yet we have suffered. New limits, new rules are obviously desirable.

Investigation seems to show that the introduction and amendment of the Federal Reserve System has resulted in an enormous increase of the amount of bank credit which may be based upon the given reserve of gold, and that the stock of gold in this country has been abnormally swollen as a result of the war. O. M. W. Sprague estimates that "the available supply of credit was more than doubled as a result of the establishment and operation of the reserve banks," and that "all future additions to the stock of gold in this country will provide the basis for at least twice as great an increment to the volume of credit as was possible in the later years of the national banking system."[1]

It is impracticable, within the space assigned to this chapter, to follow in detail either the recent business and banking history of this country, or the analysis which links that experience with the subject here under discussion. They establish, however, in the opinion of the writer, two facts of controlling importance for this chapter:

First, that as prevention is better than cure, any action which may properly be taken to avert over-expansion of credit, should be taken before the legal reserve ratios of the banks are actually threatened; that is, in the boom period or prosperity phase of the cycle.

Second, that under existing conditions in this country, bank credit may become harmfully over-extended while the reserves are still well above the legal minima. Expressed concretely, the present reserve ratios of 35 and 40 per cent are ineffective and misleading indicators of the time or condition at which further extensions of credit should be discontinued.

The proposals to remedy this situation are as follows:

Adjusting discount rates in accordance with index numbers of production, employment, prices, and profits.

The starting point of the recent discussion of this subject is found in O. M. W. Sprague's initial proposal that the discount rates of the Federal Reserve Banks should be sharply raised, regardless of reserve ratios when the capital and labor of the country are fully employed and when, therefore, there can be little or no increase of output in response to the stimulus of additional credit and rising prices. The proposal is based on the thought that credit is over-extended, not when the reserve ratios are threatened, but when production has reached its peak and further credit results principally in fruitless speculation. The suggested method or mechanism is, not that discount rates should be based in any definite mechanical way upon index numbers, but that the Federal

[1] The Discount Policy of the Federal Reserve Banks, *The American Economic Review*, March, 1921, p. 16.

Reserve Banks in the formulation of their credit policies should make greater use than they have made in the past of those statistics which indicate the development and probable culmination of a boom.

It is true that those statistics are imperfect and that our knowledge of cyclical cartography is in dire need of improvement. It is also true that many factors other than index numbers must be taken into account in formulating a sound credit policy. But we should not use these facts as a smoke screen behind which to dodge a question of principle. The country knew with sufficient certainty in 1919 that it was in the midst of an inflationistic boom. We shall probably recognize the next boom when we meet it. When it arrives, will those who control the actions of the Federal Reserve Banks act to restrict credit when credit expansion begins to do its destructive work, or will they wait until the credit of the Federal Reserve Banks shows signs of exhaustion?

The proposal here under consideration has the great merit of stating that issue in an unescapable way, and in emphasizing the responsibility of the Federal Reserve Banks for cooperating actively in the development of what has been called above "cyclical cartography." The proposal, however, is essentially a graphic statement rather than a solution of the problem, and Mr. Sprague now regards it "as a matter of secondary importance, and in peace-time cycles probably, only of cautionary value."[1] As a solution it is not only subject to the limitations noted above, but it exaggerates the power of an increase in discount rates to restrict credit, and suggests a method of regulation which would possibly encounter grave political opposition.

Raising the legal reserve requirements against federal reserve notes and deposits.

If the present reserve ratios are misleading guides to a sound credit policy, because under existing conditions they make possible an over-expansion of bank credit, an obvious suggestion is to raise the ratios. Such a suggestion has been made by Mr. Sprague.

> A reserve ratio of 50 per cent or even 60 per cent would permit much more additional credit expansion than was possible under the national banking system, and quite as much as could be advantageously employed.[2]

This, however, proposes to limit rather than to regulate or control credit expansion, and is only to be considered in the event that more elastic and adaptable measures of regulation are found to be impracticable. Devices which would in effect raise the note-reserve ratio, however, have been suggested by many authorities, and must be regarded as important possible means of restricting credit expansion. Thus, R. C. Leffingwell proposes to restore gold and gold certificates to circulation

[1] From a letter to the writer.

[2] *The American Economic Review*, March, 1921, p. 29.

and thus recreate the "greatly depleted secondary reserve." A similar idea forms an integral part of the important proposal of A. C. Miller, next to be considered.

Increasing the sensitiveness of the deposit-reserve ratios of the Federal Reserve Banks.

A. C. Miller of the Federal Reserve Board proposes not to abandon the reserve ratio, but to make it a safer and more sensitive guide to a sound credit policy. He suggests not a device but a detailed plan of procedure which can be best explained in his own words:

The main change in the published weekly statement of the Federal Reserve Banks that would be necessary would be to report the specific note reserve, held by the Federal Reserve Agent, and the specific deposit reserve, held by the bank. . . .

The existing gold holdings of the reserve banks should be reapportioned between the deposit reserve and the note reserve. To the deposit reserve might be allocated an amount of reserve money equivalent, say, to 45 per cent of their deposit liabilities as of the date when the new form of accounting would become effective. To the note reserve should be allocated all the remaining reserve, and, as the law requires, be in the form of gold.

The reserve thus allocated to the deposit reserve *should be regarded* as the working reserve of the banking or discount department of the Federal Reserve Bank. The banks *should be expected* to conduct their discount operations on the basis of this reserve. Until conditions justified, the amount of this reserve *should not be changed.* Fresh accessions of gold received by the banking department *should be transferred* to the note reserve by way of substitution for other collateral held by the Federal Reserve Agent, or in exchange for federal reserve notes. Withdrawals of gold from Federal Reserve Banks for foreign shipment *should, for the present at least, be taken out of the note reserve* by the presentation of federal reserve notes for redemption in gold or by the substitution of commercial collateral for gold in the security held by the Federal Reserve Agent. . . .

While the deposit reserve under the arrangement proposed above would be constant, the deposit reserve ratio would not be constant, but would fluctuate. Any expansion of the loan account of the Federal Reserve Banks would quickly reflect itself in the diminution of the reserve ratio below 45 per cent; any diminution of their loan account would quickly reflect itself in an increase of the reserve ratio above 45 per cent. In brief, fluctuations in the reserve ratio would reflect quickly and accurately changes in the volume of the reserve banks' discounts.

From time to time the situation of the reserve banks as a whole, and of the several reserve banks individually, should be reviewed in the light of current credit conditions and needs in order to determine whether any reapportionment of reserves should be made; whether, e.g., any given bank should enlarge its deposit reserve at the expense of its note reserve. . . .

As a result, the reserve ratios of the Federal Reserve Banks would have a meaning not now possessed by them. As the banking and business community came to be educated to the new method of stating the position of the reserve banks, primary attention would be paid to the movements of the deposit reserve ratio; that ratio would be the immediate gage of the banking and credit situation. As credit expansion was in process, that reserve ratio would decline much more rapidly than it now does. It would be a faithful indicator of what was going on. It would rise only in reaction to a decline in the rate of expansion or as liquidation was in process. Moreover, as the community came to appreciate the significance of changes in the deposit ratio, that ratio would come to be regarded with heightened interest because of the evident bearing in the logic of reserve banking, of changes in the reserve ratio upon credit and discount policy. And thus would the problem of credit administration also be simplified and its solution be aided by anticipatory action, both on the part of the banks and on the part of the borrowing community.

The note reserve ratio, under the scheme of operation here under consideration, would have real significance as indicating the extent of the gold cover against federal reserve notes. Fluctuations in the note reserve ratio would indicate the increase or decrease of federal reserve notes outstanding, movements of gold into and out of the Federal Reserve System, and reapportionment of existing gold holdings between the deposit reserve and the note reserve.[1]

Mr. Miller's proposal is largely educational in purpose. It eschews mechanical controls and trusts that the deposit reserve, having been disentangled from its present misalliance with the note reserve, public opinion, and the "live judgment" of the federal reserve banker, will do their appointed work of "regulating the flow and volume of credit with regard to the trend of business and the volume of banking."

There is something disappointingly vague about regulation "*with regard to.*" Does it look towards preventing the over-extension of credit or merely preventing the exhaustion of credit? Doubtless we must renounce all hope of finding a neat little clockwork device which will automatically raise discount rates as we approach the crest of a boom, but men, particularly public officials, need the help of rule-of-thumb devices which, like alarm clocks, announce the hour when they ought to wake up. Political exigency may make it impracticable to get up at that moment but the clock is nevertheless serviceable. Mr. Miller shows how the clock, which has not been keeping time accurately, may be repaired. But he does not give it an alarm bell.

The management of the reserves, under Mr. Miller's plan, would involve the exercise of a large degree of discretionary control. Certain aspects of the procedure (italicized by the writer in the quotation) have an air of unreality. A temporary fixity is to be imparted to the deposit reserve, but at indefinite times by indefinite authorities (possibly on the initiative of the Federal Reserve Banks with the approval of the Board), the deposit reserve might be increased by transfers from the note reserve "in order to give the bank an enlarged basis of lending." This feature, if its weakness may fairly be tested by a touch of caricature, seems a little

[1] Federal Reserve Policy, *The American Economic Review*, June, 1921, pp. 203–5.

like play—let us play that the deposit reserve is fixed, it being understood that when the ratio approaches the legal minimum, new reserves will be brought up from the note department. There is virtue in some forms of play (as in discretionary control), but it is doubtful whether this particular device or procedure could secure the legislative sanction which its introduction would probably require. And a similar verdict must be reached with respect to the proposed management of the note reserve. It is avowedly an attempt to approximate the machinery and procedure employed by the Bank of England before the war. Whatever the merits of that procedure, and they are great, the Federal Reserve System has been constructed on a different theory and it is highly improbable that the system could be revised in the approximate future with the purpose of so handling withdrawals of gold that they would exercise the maximum restrictive effect upon the supply of bank credit.

Great importance attaches to Mr. Miller's simple proposal that the specific deposit reserve and ratio be separately stated, particularly in view of his opinion that this is contemplated by the Federal Reserve Act. In addition, it would probably be comparatively easy for the Federal Reserve Banks to compute and publish nearly all the significant figures and ratios which would result if Mr. Miller's plan were adopted. The gold holdings of the banks could be constructively or statistically reapportioned. Thereafter figures could be prepared on this basis and the resulting ratios published with such comment or action as they seemed to require. To the extent that we are to put our trust in the philosophy that to be free we only need to know the truth, the problem would seem to be soluble without fundamental changes in the banking law.

II. PROPOSALS RELATING TO GRANTING OR ASKING FOR CREDITS—SELECTIVE CREDIT CONTROL

While the discount rate of the Federal Reserve Banks "is an indispensable factor in the regulation and control of credit . . . the conditions that make this traditional control effective do not all exist at the present time."[1] And the limitations upon its efficiency are not all temporary. A general elevation of the level of discount rates—even when control by a central banking system is sufficient to accomplish that—is too undiscriminating to serve as a complete or perfect method of regulation. In boom periods, its blanket quality, or its wet-blanket quality, serves properly to discourage or postpone the financing of many projects which under other conditions would be plainly entitled to credit assistance. But it fails to repress the speculator feverishly bent on anticipating an expected jump in prices. Consideration of these serious limitations upon the rediscount rate as an instrument of control has led naturally to

[1] *Annual Report* of the Federal Reserve Board covering operations for the year 1919, p. 70.

proposals for decentralized control or what has been called above "selective credit."

Raising credit tests by commercial banks in periods of business expansion.

This proposal, which also comes from the suggestive pen of O. M. W. Sprague, is that:

> Commercial banks generally in analyzing credit should insist upon an improving ratio between current assets and current liabilities during periods of active business and large profits. In general, the opposite condition has characterized past practice. The average quality of both inventory and receivables deteriorates under the influence of a seller's market and rising prices. If those for whom a ratio of two to one was adequate in 1916 had been required to show a higher ratio, say, three to one, in 1919, it is certain that much of the credit expansion of that year would not have occurred, and the cyclical fluctuations of the last few years would have been less extreme. On account of the large number of banks, this proposal may seem at first sight rather utopian, but it involves nothing more than an extension of familiar practice, attacking the problem concretely and from an angle with which both business men and bankers are familiar.[1]

Interpreted not as a method of external or compulsory control, but as an educational device appealing both to the public spirit and the self-interest of the banks, this proposal appears to have considerable merit. Competing banks operated for profit could hardly be expected to curtail loans in the earlier part of a boom. But it is in the latter part of the boom period that credit restriction is most needed, and at that time it becomes a profitable policy for the banks, or what is the same thing, a policy which looks to the avoidance of loss. The efficacy of the proposal, however, depends upon the success which the economists of the country achieve in demarcating the prosperity phase of the cycle and determining its approximate duration. If the banks can be convinced that within a reasonably definite period a sharp shrinkage of business and values is to be expected, credit expansion will be checked almost automatically.

Adjusting banking to the phases of the business cycle.

In the opinion of the writer practically all of the proposals which have been made to regulate bank credit by a specific financial device or mechanism err through over-simplification of the problem. Specific devices have their value and function, for much the same reason that the wise merchant does not omit to dress the windows of his store even though he realizes that only a small fraction of his wares can be represented there. But the larger view, particularly in view of our imperfect knowledge of the phases of the cycle, is to take not one test, but many tests, of the time to act, and many lines, not one, of remedial action. A more comprehensive description of the tests and remedies (which it may

[1] From a letter to the writer. Compare O. M. W. Sprague, Bank Management and the Business Cycle, *Harvard Business Review*, October, 1922.

be noted are usually implicit in the minds of those who propose specific devices) is given in the following statement by E. W. Kemmerer:[1]

Assume for example, that the evidence at a particular time shows we are several years along on the rising curve of a business cycle, that there has been no substantial liquidation for two or three years, that speculative activity is running high on the exchanges, that prices of the more speculative stocks are rising, that bank clearings are large, that reserve ratios at Federal Reserve Banks and commercial banks are tending downward, call and short-time interest rates and Federal Reserve discount rates rising, the ratios of bank loans to deposits increasing, credit becoming more and more extended, and that commercial failures for some time have been running abnormally low, showing that little dead wood has of late been cut out of the business structure. This, for example, is a substantially correct picture of the year 1906, and of the latter part of 1919, and the early part of 1920.

He adds that a prudent and far-sighted banker in these circumstances would

probably try to get his assets in a more liquid condition. He would sell his less gilt-edged securities while the selling was good, and place the proceeds either in the most gilt-edged securities on the market—the kind that ordinarily suffers least in a period of crisis and that usually alone advances during the early part of the ensuing depression—or he might purchase with the proceeds prime commercial paper of short maturities, scattering well his risks. He would place a larger proportion of his resources in the best commercial paper of concerns outside of his own community whose businesses were of the kinds least affected by crises—concerns whose paper he would have no responsibility to renew at maturity. He would clean up his loan accounts with his Federal Reserve Bank and with his correspondent banks, and strengthen his reserve position. He would get a larger proportion of his paper into short maturities and would bring pressure to reduce his "capital loans," the kind that have formed the "renewal habit."

The general plan of action that he adopted for himself he would suggest to many of his customers. He might be premature in his action; if so, he could console himself with the thought that it is better to be safe than to be sorry, that he moved in the right direction, and that the very prematurity of himself and of others who acted like him contributed towards stabilizing the situation.

Adjusting the commitments and financial activities of business concerns to the phases of the cycles.

The conditions which make it expedient for banks to restrict credit, make it equally expedient in general for business concerns to refrain from seeking or using credit. This obvious aspect of the subject is noted only to record the fact that some American business concerns have found it both practical and profitable to adjust their financial operations to the phases of the cycle. But that topic is covered in other chapters.

[1] *The Business Cycle* (published by the *New York Evening Post*), 1921, pp. 14-15.

III. PROPOSALS TO STABILIZE THE DOLLAR

A complete survey of the devices suggested for mitigating the severity of business cycles would include an examination of various plans proposed for stabilizing the purchasing power of the dollar, particularly Irving Fisher's carefully elaborated plan to adjust the amount or weight of the gold bullion in the dollar in accordance with the deviations from par of an index number of representative commodity prices. These proposals, despite weighty opinion to the contrary, seem to be entirely relevant to the subject here under discussion. If introduced and successfully operated the price level would remain approximately constant; *i.e.*, the range and significance of price fluctuations would be greatly reduced, and in any future period of time the number of rising prices would be substantially balanced by an equal number of falling prices. One of the principal causes of business cycles, the contemporaneous rise of most prices (and the expectancy thereof) would therefore be removed or essentially modified.

A discussion of these plans would carry the present chapter beyond the limits assigned to it. Most of them are described in Mr. Fisher's book "Stabilizing the Dollar" (particularly in Appendices III and VI), and more recent plans will be found in Carl Strover's "Monetary Reconstruction" and in Representative T. Alan Goldsborough's bill to stabilize prices "by controlling the quantity of money and credits in relation to the volume of trade by increasing or diminishing that quantity as the average price level goes down or up."[1] These plans, Mr. Fisher's plan in particular, deserve thorough examination by every person whose mind is practical enough to entertain the belief that some of the deeper sources of cyclical disturbances may by time and thought be removed. But they are impracticable at this time, because people believe them impracticable—if for no other reason. They propose to lay hands upon the economic holy-of-holies, and before they can be acted upon they will require an amount of critical discussion commensurate with that which should be given, say, to a proposal fundamentally to alter the marriage relation.

* * *

A review of the financial devices for controlling or mitigating the severity of business cycles which have been proposed, leads to the conclusion that there is no simple device which it is reasonable to insist shall be employed by business men or by bankers for the purpose in view. As we approach the crest of a boom in any particular trade or industry, it is desirable that buying and commitments should be reduced, and that to this end credit accommodation to that trade or industry should be restricted. Such action, to business man and banker, represents not

[1] From a speech by Representative Goldsborough in the House of Representatives, May 23, 1922, *Congressional Record*, vol. 62, no. 135, p. 8149.

only their self-interest, but their public obligation. But they must first know, with that degree of precision and certainty required for business action, that the trade or industry in question is actually approaching the crest of a boom. The ways and means of controlling credit—financial devices, in short—are thus subordinate to knowledge of the cycle. The clearest duty of business man and banker is to assist in the development of more accurate cyclical statistics. Plot the phases of the cycle, and a combination of self-interest and vitalized public opinion will force the application of the many remedies—not one remedy—which common sense will show to be appropriate. To anticipate the cycle is to neutralize it.