

CENTRAL BANKING OBJECTIVES, GUIDES AND MEASURES

Remarks of

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I am surely rash to philosophize about central banking, ^{rather than comment on current events} as Morris Johnson asked me to do, on a program that includes Randolph Burgess and Marcus Nadler. After all, they wrote the authoritative texts that I studied in college. Nevertheless, I accepted the invitation as a means of self-discipline because I find it necessary from time to time to back away from current events to take a larger view of the profession of which I am a part and to subject my thinking to informed criticism. And of course, time passes. Even I shall have to squeeze a year of study, practice or teaching of central banking into each minute that I talk.

It is a pleasure to acknowledge at the outset how much my life and thought have been enriched because so many of you are personal friends. You have helped me return to the road when my thoughts went astray. I must confess, however, that your valiant efforts have not yet equipped my mind with a gyroscope that keeps me unerringly on the path of truth - especially the one spelled with a capital T.

I propose to discuss two topics: first, objectives of policy and related programs, and second, guides to current operations and measures of influence. Both these questions have persisted through the history of central banking and it is important periodically to review our alternatives so that we may arrive at solutions appropriate to our time through the democratic process of informed discussion. I do not bring you final answers to either of them.

I. Objectives of Policy and Related Programs

It should not be surprising that central banks have seldom pursued policies too far out of line with what the public has really expected of them. Fundamental habits of thought usually change slowly and central bankers are influenced by the same forces that affect the population of which they are a part. Serious conflicts have arisen only occasionally when the views of central bankers have been influenced too slowly by heresies that became respectable. During most of their histories, however, central bankers and the great majority of the people have held similar basic views. The public at times has expected too much but more frequently has been charitable when achievement has fallen short of expectation.

Neither the desires of the public nor the objectives actually pursued can be defined precisely, and the rough correspondence between the development of the two is not primarily a matter of deliberate design. By and large, it seems to me that observers have been bolder than the practitioners to innovate. One need only contrast the observations and analyses of Henry Thornton with the practices of the Bank of England under the Governorship of his brother Samuel to see what I have in mind. Before we become too enamored of the observer and too critical of the practitioner, however, we should remember that boldness should come more easily to the outside observer than to the responsible practitioner and that it is not all observers but only those whom subsequent developments have vindicated who might have improved on practice. Contemporary observers have almost always included not only such experts but both reactionaries and crackpots as well. Unfortunately, time is needed to place each into his appropriate

category. ⁽¹⁾

(1)

Perhaps each will be placed into his final category only at the end of time! Consider, for example, the possible changing classification through time of Thomas Attwood, a banker of Birmingham, who testified before the Parliamentary Committee on the Bank of England Charter in 1832 as follows:

- Q. 5639. "Then what you propose as the new standard, is not gold, but a definite quantity of wheat? - If we must have a gold standard, which I think by no means suitable to our artificial state of society, I should think it wise and prudent to adopt such a standard as would preserve such a plenty of money as should keep the bushel of wheat at 10 s.
- Q. 5640. Is not that equivalent to making the standard of value, not gold but wheat? - It certainly has a tendency to bring in new principles in aid of the ancient standard, or rather it creates a new metallic standard of value.
- Q. 5641. Would not those principles entirely subvert the ancient standard? - I think they probably would.
- - - - -
- Q. 5758. Do you consider that so long as there exists a labourer in the country not fully employed, an increased issue of currency may be made with advantage, whatever it be? - As a general principle, I think, unquestionably, that so long as any number of industrious honest workmen in the Kingdom are out of employment, supposing such deficiency of employment not to be local but general, I should think it the duty, and certainly the interest, of Government, to continue the depreciation of the currency until full employment is obtained and general prosperity.
- Q. 5759. What is your test of full employment? - It is difficult to obtain an absolute test.
- Q. 5760. If you have not an absolute test to which you can refer, may not the principle you recommend lead to an indefinite depreciation, since different persons, and different ministers, and different Governments, will have very different notions with respect to what full employment means? - I think not, every one considers that full employment certainly existed in 1825.
- Q. 5761. Were there no persons unemployed in 1825? - I think no honest man.
- Q. 5762. Would you have the depreciation go on as the population increased? - I see no necessity for that, whether we have got the present state of population, or double its number, a just state of the currency would employ them all."
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It is difficult to ascertain the objectives that have actually been sought by central banks. They are seldom announced with precision and must usually be inferred from specific acts. A few outstanding practitioners have developed their thought and conduct systematically and with appreciation of the evolutionary character of central banking. At times, however, central banks like other institutions - including universities - seem to have had no conscious objectives but seem to have acted either on the basis of precedent and routine or empirically as detailed issues pressed for solution. Even when objectives have been announced, the verbal evidence may be difficult to interpret. Real identity of thought may be obscured under variety of expression and significant differences may be covered by identical phrases.

The precise development of central banking policy in the interest of the general welfare has not been planned, systematic, or even orderly. Older central banks were founded to make profit. It was not until the suspension of cash payments at the time of Napoleon that Henry Thornton, whose book on paper credit and speeches and testimony before Parliament and its committees will always remain a monument to his breadth of view, demonstrated that the Bank of England had peculiar obligations because of its unique position in the banking system. The Bullion Committee in 1810 took a similar position, but their views were not popular at the Bank and apparently had little immediate influence on its policy. In 1832, however, J. Horsley Palmer, the Governor, recognized that the Bank of England had responsibilities unlike those of other banks when he said that it should limit its discounting to times of discredit. Nevertheless, the Bank Act of 1844 was based on the proposition that the Bank should have no discretion in its Issue Department and that it would best promote the public interest by seeking its own gain in the Banking Department. There were such interruptions in the development of central banks as public institutions; but by 1873 even that extreme advocate of free banking, Walter Bagehot, admitted that "money will not manage itself."(2)

Everyone who is aware that he is living in the middle of the Twentieth Century ^{now} agrees in general terms that central banks should influence monetary and credit developments so that they may contribute a maximum to the general welfare. Disagreement arises as to how it can best be done. A mere listing of the specific objectives that have been advocated would fill several pages. In choosing an objective, a central bank - or an analyst - is, by implication at least, indicating the conditions under which credit should be eased or tightened.

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The paragraph from which this clause is taken reads as follows: "I am by no means an alarmist. I believe that our system, though curious and peculiar, may be worked safely; but if we wish so to work it, we must study it. We must not think we have an easy task when we have a difficult task, or that we are living in a natural state when we are really living in an artificial one. Money will not manage itself, and Lombard street has a great deal of money to manage."

It was not a willing admission and candor requires me to mention that Bagehot was provoked to write Lombard Street not only by Governor Holland who behaved as a central banker in the Overend crisis of 1866 but also by Thomson Hankey, a former Governor who did not understand - well, which end was up.

Although it may do violence to particular versions, it is convenient to limit discussion to some basic objectives and the related conditions that would call for or permit expansion or contraction. To focus our attention, I have constructed a skeleton of five such objectives and their related programs of action. Such formulations appeal to observers because they promote clarity of thinking; they often annoy practitioners because they leave out so much that is relevant in the complicated world we are trying to understand.

<u>Table 1.</u>			
<u>Objectives and Related Programs</u>			
Objective	<u>Conditions calling for or permitting an easing of credit</u>	<u>Conditions calling for or permitting a tightening of credit</u>	Inherent Bias
1. Convertibility <i>(Redemption of a country's money in gold)</i>	High and/or rising primary reserves	<u>Low and/or declining primary reserves</u>	Contractive
2. Productive credit	<u>Increase in monetary volume of output</u>	<u>Decrease in monetary volume of output</u>	Chain-reaction
3. Stable price level	<u>Declining prices</u>	<u>Rising prices</u>	
4. Full employment	<u>Less than full employment</u>	Jobs in excess of workers	Expansive
5. A fixed rate of interest	<u>When savings are inadequate</u>	<u>When savings are excessive</u>	Chain-reaction

Casual inspection will reveal the general relationships between the objectives listed in column 1 and the conditions itemized in columns 2 and 3. I doubt that there would be serious disagreement in principle on the correlations as tabulated, if allowance is made for the fact that every expositor has his own terminological preferences.

You will note that some of the phrases in columns 2 and 3 are underlined. This is done to indicate that the several objectives do not compel expansion and contraction with equal force. For example, if the exclusive objective is convertibility, the central bank's sole concern is not to issue too much credit. Convertibility sets a limit beyond which the bank dare not expand. The limit to contraction, however, is reached only when the bank's assets consist exclusively of primary reserves - gold. In other words, a central bank is under greater compulsion to contract than to expand. In this sense, one may say that convertibility has an inherent contractionary bias, as indicated in column 4. In the same sense, full employment has an inherent expansionary bias, because a central bank must expand when there is unemployment but is not compelled to contract when employment is more than full.

Productive credit and a fixed rate of interest have self-inflammatory biases that I have labeled "chain-reaction". The most sophisticated formulation of the productive credit idea is the so-called "real bills doctrine". The doctrine involves circular reasoning because it would make the volume of money depend on the monetary volume of trade which is itself influenced by the volume of money. An initial increase in prices for any reason would produce a larger volume of real bills, which in turn would support a larger volume of money, which in turn would stimulate further increases in prices. Similarly, a rate of interest maintained below the equilibrium rate would on the reasoning developed by Wicksell lead to cumulative inflation. Conversely, a rate pegged at too high a level would lead to cumulative deflation.

An objective should not be ruled unwise merely because it is subject to an inherent bias. Objectives with a bias, however, are not usually definitive and must be supplemented to prevent unlimited inflation or deflation. Many advocates of particular objectives are aware of these biases. It may be that some are influenced in their choice of objectives by a desire to take advantage of them. Thus, advocates of convertibility may desire a monetary mechanism with a contractionary bias because they fear inflation more than deflation. Advocates of full employment, on the other hand, may favor an inherently inflationary system because they fear deflation more than inflation.

It should not be implied that the biases inherent in the rationale of the several objectives are an accurate basis for forecasting actual monetary developments in countries that pursue them. For example, the contractionary bias of convertibility would not assure that pursuit of this objective would prevent a run-away inflation should some nuclear physicist invent a method of producing gold in virtually unlimited amounts for a dollar a pound.

I do not wish to infer that a central bank operating alone can achieve all or any of these objectives. I suppose each of us would be satisfied, possibly even happy, if the central bank always moved in the direction appropriate to our particular objective so that all of us might be happy if all objectives pointed in the same direction. There are times when this happens; namely, when all the conditions listed in column 2 or all those listed in column 3 exist concurrently. For example, if unemployment is increasing, the price level is falling, the country is adding to existing large reserves of gold and foreign exchange, and the government is borrowing heavily, all signs would point to an easing of credit.

Suppose, however, that employment is decreasing, that the price level is stable, and that the country is losing gold and foreign exchange in volume. Under these circumstances maintenance of full employment would call for an expansionary program, maintenance of a stable price level would call for no change, and the rules of the gold standard would call for contraction. Consideration of such sets of circumstances indicates that conscious choice among basic objectives is desirable because some choice is inevitable - at least in terms of behavior - since multiple objectives may be irreconcilable and mere hoping will not dissolve conflicts between them. It does not follow, however, that a rational choice must be of the "all or nothing" variety. It may be a combination - and in different proportions over time - of irreconcilables. The actual choice, of course, may be empirical, and it should not be inferred that central banks have always made a conscious choice or that the fundamental issues are always sharply drawn in real life.

As I mulled over alternative objectives, I found myself coming out with a combination of the price level and employment. I am aware that some observers

favor stability of the price level as the exclusive objective, in part on the ground that if action is directed toward that end serious unemployment will not arise. They may be right, but events have a way of exposing hidden errors in even our most cogent reasoning, and I would not close the door to possible action if employment declined seriously despite a relatively stable price level.

So long as employment did not fall too far, the central bank could move in the direction indicated by the price level. Should employment fall too far, even though prices remained stable, the emphasis could be shifted gradually from the price level to employment. The greater the decline in employment the greater the emphasis to be placed on it as an objective.

I shall weasel on the critical level of employment and on the rate of change in emphasis. Though something is revealed, much necessarily remains hidden behind that cold figure "employment". For tabulation purposes, a member of the labor force is either employed or he is unemployed. For the problem at hand, however, the definition and measurement of the labor force, the extent of overtime - and of part-time, the relationship between job openings and unemployment, the rate of flow of individuals through the group who are unemployed, and other aspects are also relevant. For example, a boom period may bring into the labor force people who are not normally employed, and a change to less hectic activity and less pressing demand for labor may cause their withdrawal from the labor force without necessarily involving extensive unemployment among the normally employed. There are, of course, similar questions with respect to the construction of an appropriate price level. Such problems are too complicated to throw magnitudes around as though they had precise meaning.

Faced by a choice between a stable price level and full employment, some observers apparently would emphatically urge the stable price level as the proper objective of monetary policy, while others would just as emphatically advocate full employment. It would seem, however, that there has been a growing realization during recent years of the potential conflict between the two and a widening acceptance of a compromise - high employment without serious inflation or deflation. Here again, however, there is rather wide latitude for differences of definition.

II. Guides to Current Operations and Measures of Influence

In discussing programs to achieve specific objectives, I have talked glibly about expansion and contraction, about easing and tightening credit. Actually the matter is not so simple. Such apparently innocent words curiously have no precise inherent content. Both scholars and central bankers have devoted much effort to devising guides to current operations and measures of the influence being exerted.

Keynes, you may remember, developed in Chapters 2, 25 and 32 of his Treatise on Money the principle that the best guide to current policy in countries such as England and the United States is the volume of member bank reserves, and that the measure of a central bank's influence is its ability to establish such reserves at predetermined levels. A few years after publication of the Treatise, Seymour Harris concluded that "central bankers ought to concentrate their attention on the cash balances of member banks; it alone is the variable to be

controlled if they have any serious intention of exercising control over the money market."(3)

I must confess that I quoted this statement of Harris with approval in a review of his book. As I read contemporary literature, including the publications of the Douglas and Patman Subcommittees, I gain the impression that this view is still widely held.

It now seems to me that it is based on an overly-mechanistic view of central banking, deposit creation, and the flow of purchases. We are told that confession is good for the soul; but I have not introduced this topic merely to confess what now seems to me to have been error on my part. Rather I am interested in your criticisms of the views I now hold after further reflection. I still recognize, of course, that the volume of reserves is an important monetary magnitude. I wonder, however, whether it is the only or even the best guide to current policy or the best measure of immediate results. For one thing, it seems clear that a given change in the volume of reserves can have different effects on the economy via the money market, depending on such aspects as whether it is accompanied by changes in security holdings or by changes in the borrowings of member banks. Indeed, even these categories may be too inclusive to be definitive as to effects.

My real doubt, however, arises from broader considerations. Keynes' reasoning led him to the conclusion that on the Continent before the First World War central bank control was possible only because bank notes were so important as a means of payment.(4) He doubted that the Continental central banks would have had adequate strength had they been operating in a country where deposits were relatively much more important, as was the case in England.

I have just spent a couple of years of my spare time analyzing the operations of the Reichsbank from its foundation to the outbreak of the First World War in the belief that such study might contribute to understanding not only that specific experience but general principles of central banking as well.

Before I give you the results of that study, I would like to recount a fragment of English experience which re-enforced my doubt that any single measure of the quantity of money or of the monetary base is the true lodestar. English experience came to mind because more than a century ago an influential group also focused its attention on such a magnitude to the virtual exclusion of other factors. The Currency School, you may remember, believed that Bank of England policy ought to be simply currency policy. As Samuel Jones Loyd phrased it: "Now a paper currency is nothing more than the substitution of paper notes in the place of what would otherwise be metallic coin, and the rule for the regulation of it seems to be very obvious, viz. that the paper notes ought to be kept the same in amount as the metallic coin would have been." To the Currency School the volume of currency was not only the mechanism by which the Bank accomplished its objectives but also the measure of results of its policy. Incidentally, it is

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S. E. Harris, Twenty Years of Federal Reserve Policy, Cambridge, 1933, p.13. The emphasis does not appear in the original.

(4)

Treatise, Vol. II, pp. 233-234.

tempting to conclude that theory like politics sometimes makes strange bedfellows. Keynes would not have accepted the objectives of the Currency School, but his logic forced him to accept their measure of influence for the Continent under conditions similar to those in England when the Currency School was prominent.

But let us return to the Currency School itself and particularly to their criticism of the Bank of England for its activity in the Panic of 1839. The Bank, no longer limited by the usury laws, increased its rate to an "unexampled" six per cent; it borrowed abroad, and reduced the maturity of bills it was willing to discount. The money market was under severe pressure. But all of this did not satisfy Loyd. He argued that the Bank should have made greater efforts to reduce the amount of its notes because of its loss of gold. Contrast this view with Thornton's earlier discussion or with Bagehot's later famous rules for dealing with panics! An important weakness of the Currency School was that its members thought that the Bank should pay no attention to the volume of its deposits in determining its policy. No one any longer makes that mistake, but may we not now be paying too exclusive attention to the volume of reserve balances?

This brings us to the German experience. We may begin by pointing out that before the First World War the Reichsbank paid virtually no attention to reserve balances and ordinarily did not know what their magnitude was. It did not try to establish their amount at predetermined levels. Furthermore, it was not in position to do so quite apart from any question of controlling its assets because of the magnitude and variations in its other accounts. Finally, German banks did not maintain either their reserve deposits or their total primary reserves at any customary relationship to deposits.

A student enamored of the reserve balances approach to central banking confronted with such a loose-jointed system might be tempted to conclude that the Reichsbank had little power to enforce its will. The impediments to an effective policy seem too formidable. But this conclusion would be premature. The Reichsbank had power to affect the supply of liquidity relative to the demand. At no time were its earning assets less than several times the total primary reserves of the banks even as reported in their annual balance sheets. The banks were fully aware that the liquidity of their portfolios of eligible bills rested on the willingness of the Reichsbank to discount them and that to secure cash they would have to pay the rate established by the Reichsbank. The market as a whole was always indebted to the Reichsbank and had to meet its terms to acquire additional reserves or cash. The Reichsbank had branches throughout the Empire at which credit was available not only to commercial banks but to commerce, industry and agriculture as well. A change in the terms on which it granted credit was quickly felt at many points.

The Reichsbank was in position to pursue an effective policy regardless of the reserve requirements that the banks set for themselves at the moment because it could make cash scarcer or more plentiful than the banks wanted it to be. As a result of a change in terms at the Reichsbank the commercial banks would find it profitable to achieve the degree of liquidity they wanted by adjusting their lending and investing operations - that is to say, by tending to move in the direction desired by the Reichsbank.

Where does this leave us so far as general principles of central banking are concerned? It suggests that an appropriate measure of a central bank's influence is its ability to make "the terms of credit" conform to the "current

needs of the economy". "Current needs", of course, are related to objectives, as I indicated in a general way earlier. The concept "terms of credit" has many related facets but they consist essentially of cost and availability. In the abstract, the two are distinct - one being rationing through price and the other rationing by rules; but in practice they tend to merge. Thus, even if a single price is charged, the effect is similar to rationing against the highest quality of paper.

The tone of the credit market is influenced by many factors. The relative importance of these factors and the procedures employed to establish the tone will vary from country to country and from time to time depending on basic social philosophies, institutional arrangements, and so on. We have a responsibility to develop techniques best suited to our dynamic society. The point I want to emphasize here, however, is that even the most ingenious central banking techniques will not be effective unless they can and are permitted to influence the rate of interest, the availability of credit, or both.

So far as the general credit market is concerned, what the central bank needs is a supply of earning assets that it can use to absorb liquidity and authority to issue notes and create reserves so that it can release liquidity. By influencing the supply of liquidity relative to the demand, it can in effect induce the economy to act in the desired direction by making more attractive the alternative methods of adjustment - which for banks is to change their willingness to lend and invest and for the economy as a whole is to change its rate of purchases.

what I mean is that if we had to have flexible interest rates we shall end up with rather precise rationing of credit and direct controls.

[You may object that my formulation is more complex than that of Keynes. My reply is, first, that the simplicity of Keynes was achieved at the expense of relevance to the real world; second, that conceptually my formulation is still relatively simple even though not all of its aspects are subject to precise quantitative measurement; and third, that even under the formulation of Keynes the practitioner must decide in advance the exact level to which he will push reserve balances - which is not necessarily any easier than determining and measuring the degree of ease or tightness in the money market.]

This last problem of relating conduct to principles is not unique to central banking. General von Clausewitz had this to say about it in his Principles of War: "The conduct of war resembles the workings of an intricate machine with tremendous friction, so that combinations which are easily planned on paper can be executed only with great effort." Although observers are interested primarily in principles and participants in conduct, many individuals are both, and the degree of success that central banks achieve hinges on the quality of the influence that both exert. Speaking from experience, I am tempted to paraphrase another Clausewitz dictum: "The results on which we count are never as precise as is imagined by someone who has not carefully observed a money market and become used to it."

And now I must thank you for inviting me here because although I may have said nothing that is new to any of you, I learned more under the compulsion of putting my thoughts down on paper at this time than I have learned under any self-imposed compulsion in a long, long time.

Table 1.

OBJECTIVES AND RELATED PROGRAMS

Objective	<u>Conditions calling for or permitting an easing of credit</u>	<u>Conditions calling for or permitting a tightening of credit</u>	Inherent Bias
1. Convertibility	High and/or rising primary reserves	<u>Low and/or declining primary reserves</u>	Contractive
2. Productive credit	<u>Increase in monetary volume of output</u>	<u>Decrease in monetary volume of output</u>	Chain-reaction
3. Stable price level	<u>Declining prices</u>	<u>Rising prices</u>	None
4. Full employment	<u>Less than full employment</u>	Jobs in excess of workers	Expansive
5. A fixed rate of interest	<u>When savings are inadequate</u>	<u>When savings are excessive</u>	Chain-reaction

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