

*my speech to 2016*

THE REDISCOVERY OF MONETARY POLICY

- SOME PROBLEMS OF APPLICATION

Remarks of

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A university centennial is an appropriate occasion to interpret contemporary problems in the light of experience. Certainly the history of monetary policy illustrates a need for perspective. During the past three decades we have seen faith in monetary policy run a full cycle. It reached a zenith in the New Era of the 1920's, plummeted to its nadir in the Great Depression of the 1930's, and has re-emerged rapidly in the 1950's. Perspective should enable us to maintain at least a semblance of continuity of judgment as to the power of monetary policy rather than to be torn alternately by such exaggerated hope and unwarranted despair.

One of our difficulties is that we seem unable to develop an appropriate balance either between vicarious experience and direct personal experience or between successive personal experiences. Every sensitive teacher who has empathy is aware of this in his students though not always in himself. I remember being surprised, when I began teaching, that the knowledge my students had of the depression of 1920-21 was essentially vicarious and secondhand, something learned from books, older relatives and friends. The depression as such had not impressed itself upon them because they were too young to experience it - just as the Panic of 1907 and the founding of the Federal Reserve System were mere word descriptions to me. All of us, however, were experiencing the optimism of the "New Era" in which we were living. We mastered a simple, straightforward, exclusive theory of the omnipotence of monetary policy. We found not only that the theory was intellectually convincing but that experience seemed to be demonstrating its validity. Both the recoveries of 1923 and 1926 and the recessions of 1924 and 1927 were mild relative to earlier fluctuations.

A few college generations later it was almost impossible to convey to the students any real feeling of the new era. We were in the midst of the Great Depression. Experience was interpreted as demonstrating that monetary policy is impotent. Forgotten - in part because the students hadn't experienced it - was the mildness of the recessions of 1924 and 1927. Painful was the depth and length of the existing depression despite a policy of easy money. Compensatory fiscal policy, launched as an extension of open market operations - to put active rather than passive money into the economy, soon took over virtually the whole field. Again, a simple, straightforward, exclusive, and intellectually convincing theory was developed.

Several college generations and a world war later, we demonstrated by experiment the inadequacy of fiscal policy standing alone. We found inflation going merrily on its way despite large surpluses in the Federal budget, because with credit both cheap and plentiful, private sectors of the economy and local governments went into debt more rapidly than the Federal government came out.

The present generation of college students, to whom the depression in turn is, well, a vicarious memory, has seen a revival of monetary policy. The first recession since the famous Treasury-Federal Reserve Accord of March 1951, which marked a return to flexible monetary policy, has been mild. There is a danger that we may again feel that all the dragons have been slain.

In recounting these significant changes in emphasis which seem related to strictly contemporary experience, I do not wish to imply that all teachers or even all students held these shifting judgments. Certain experiences affect individuals more deeply and certain habits of thought persist longer than others. One could almost always find

contemporary advocates for most of the roles that have ever been ascribed to monetary policy. Certainly anyone who has followed recent Congressional hearings can certify that this is true today. The logic of some advocates is cogent, granted their premises, and of others, granted their objectives. I must warn you at the outset that my mind contains no mental gyroscope that keeps me unerringly on the path of truth by compensating for my own ignorance. Fortunately, informed discussion, buttressed by experience, has a way of exposing not only errors in logic but hidden implications of our logical structures as well.

In our zeal for the possibilities of a rediscovered monetary policy,  
we tend to neglect some practical problems that confront a central banker  
who is conscientiously trying to use a flexible monetary policy to foster  
stable economic growth. Since I wish to concentrate on some of these  
problems, I shall discuss only briefly three ultimate objectives of  
monetary policy that might be given the brief titles: a stable price  
level, maximum sustainable employment, and convertibility. For under-  
standable reasons that need not detain us here, a declining price level  
is apt to be associated with declining employment and increases in a  
country's international monetary reserves. Similarly, a rising price  
level is apt to be accompanied by rising employment and decreases in a  
country's monetary reserves. In other words, stable prices, maximum  
employment, and convertibility frequently indicate a common program for  
a central bank.

Unfortunately, however, "frequently" is not often enough.  
What should the central bank do when these three objectives point in different directions? This is not merely a hypothetical dilemma advanced as an exercise in logic. It is exactly what happened in the United States from roughly the middle of 1953 to the middle of 1954.

During that period employment declined by 500,000 (and unemployment rose by 2 million), our monetary gold stock declined by \$600 million, and both the consumer and wholesale price levels varied by only one per cent. Thus an employment objective would have called for greater ease, a convertibility objective would have called for greater tightness, and a stable price level objective would have called for no change. Unfortunately, of course, general monetary policy cannot move in three directions at once.

In analyzing convertibility as an objective, we should keep in mind our general international position. Fortunately, for two decades our international monetary reserves have been so large that we have been able to pursue monetary policy without concern about possible adverse effects on our balance of payments. It seems likely that we shall remain in this position for a long time to come. The chief contribution that we can make to international economic and monetary stability is to maintain stable domestic economic growth.

Our domestic problem in turn is to combine expansion in employment as the labor force grows with reasonably stable prices. Monetary policy alone cannot achieve this combination. Our success depends on complementary fiscal and debt management policies as well as appropriate behavior by many individuals, institutions, and groups. I have time to give only one brief illustration directly related to stable prices and maximum employment. Let us suppose that we have the designated level of employment and that prices and wage rates are in equilibrium. Suppose next that wage rates are increased faster than efficiency. The monetary authorities will be confronted with the choice of permitting the expansion necessary to support the higher costs and prices or not permitting the necessary expansion and thus allowing increases in unemployment.

We have some reason to hope that we can achieve a reasonable combination of objectives, but we will not be successful without taking great pains in many areas.

Students and practitioners differ as to the most desirable objective or combination of inconsistent objectives and the choice is a difficult one to make. Since, however, there is widespread agreement as to the direction in which monetary policy should move to achieve each of the several objectives under prescribed or given circumstances, it is tempting to conclude that our job is over once we have resolved the problem of objectives. But this conclusion is premature because it abstracts from time.

A number of fundamental objectives of policy would indeed become guides to current operations if there were no lags between developments and meaningful knowledge and between an operation and its effect. Suppose, for example, that the objective of policy is stabilization of a specified level of prices. If we had a strictly contemporary and continuous measure of that price level and if the full effect of action of a central bank on it were felt instantaneously, that price level could be objective of policy, guide to action, and measure of immediate results. An initial change in the price level would indicate the direction in which the central bank should proceed and subsequent movements of the price level would indicate whether the specific action was in the proper amount, too little, or too much. It does not follow, of course, that monetary policy acting alone could achieve the stated objective.

Not all objectives would thus merge with guides and measures. Redeemability, for example, would not. If the objective is to maintain redeemability in the long run, the fact that a currency is redeemable today does not of itself indicate to a central bank whether it may

expand, must contract, or do neither. It would appear, however, that many possible objectives would merge into guides to current operations and measures of immediate results if it were not for lags in information and in effects.

Such logical conjecture is helpful to understanding so long as we do not base current operations on the assumption that time is irrelevant, because, of course, it is an inherent aspect of experience. You may remember that in the preface to the first edition of his Principles Alfred Marshall said that time "is the center of the chief difficulty of almost every economic problem." The latest data on price levels, employment, and similar magnitudes are preliminary estimates of conditions in the past and the full effects of today's act will permeate the economy in the future.

It is possible that this impediment could be reduced if we had timely knowledge of an indicator that systematically moved ahead of changes in the magnitude of the actual objective - which had a high predictive value. We cannot be sure, of course, that an indicator with a high predictive value before it was used as such would retain this quality after it is used. It is conceivable that the reaction of the public to its use would change and possibly destroy its value. We need not be too disturbed by this conjecture, however, because we do not have any such indicator.

Among the questions raised by introducing time is: How much emphasis should be placed on expectations as to the future and how much on knowledge of the past? Since we are concerned with influencing developments from here forward, we are tempted to conclude that we should be guided by expectations. But on what should these expectations be based? Even the most desperate need for an accurate forecast will

not somehow produce it.

We have several options as to procedure. First, there is the method of past relationships which is widely used in the physical sciences. Much can be learned in this way about the operation of our economic system. But we cannot get more out of a projection or extrapolation based on past relationships than is inherent in our assumptions and original data. The optimist who claims more might inquire as to the fate of the A, B, and C curves of the Harvard Economic Service - which were popular when I first studied business cycles. Or he might compare projections of changes in population made in the 1930's and 1940's with actual changes since that time. Or he might compare forecasts based on an assumed constancy of the so-called consumption function that was so popular a few years ago with actual economic developments since.

A related method is based on the assumption that current behavior or the direction of recent changes in behavior will continue. Although there are rapid changes in the individual parts of a dynamic market economy, ordinarily measures of over-all economic magnitudes, such as employment and comprehensive indexes of prices, do not gyrate erratically over wide ranges. Many changes in the parts offset each other and produce some inertia in the general measures. Since the emphasis of monetary policy is on general developments rather than structural changes, it is tempting to adopt as guides current or recent experience. But this is less than ideal. If one is guided exclusively by the past, it is clear that he would always be moving after the event and that he would be moving in the wrong direction each time the economy changed direction.

Direction, unfortunately, is not the only problem. Since the



economy may change its momentum and acceleration, the monetary authority must be concerned with magnitude and speed of action as well as direction. A critical weakness of being guided exclusively by the latest data on our ultimate objectives is that there are occasions when this would clearly be a mistake. Illustrations are episodes of great and sudden change, such as a declaration of war or the outbreak of panic or a liquidity crisis. Under such circumstances, responsible officials should not conduct current operations on the basis of the latest available indexes of employment and prices.

A third possible guide to current operations is one based on expressions of current opinion from informed observers: manufacturers, builders, purchasing agents, retailers, and so on. A basic assumption of this approach is that informed observers can, somehow, pierce the veil of the future. I have yet to see the evidence that this assumption is warranted. A technical difficulty is that one must devise a method of combining the wide variety of opinions that are usually held into a single measure that can be used as a guide. I haven't devised such a method, but I have a hunch that when observers are in substantial agreement current objective data will point in the same direction. This method is apt to give us least help precisely when we need help most.

The final method I shall mention is that of securing expressions of current intentions. As you know, periodic surveys are conducted of certain spending plans of business and of consumers. Although the information is helpful in understanding what is happening, these surveys have several weaknesses as precise guides to current operations. There is always the basic question of their accuracy in predicting actual developments. As a guide to day-to-day operations, the surveys now conducted also suffer from their relative infrequency, lag of time

between collection of original data and computation of results, and incompleteness of coverage.

I have pointed out weaknesses in guides to current operations based on both developments of the past and projections of the future. I have not done this to disparage the work that has been done. Much of the initial work and of the post-mortems has been of high quality and has contributed to our understanding of how our complex economy functions. My purpose has been simply to point out that the practicing central banker does not have an infallible guide that he can follow in his daily work. There are no rabbits in the hat. You cannot get more out of a guide than is inherent in the assumptions on which it is based.

This conclusion raises another question. Granted that we have no ideal guide, are we likely in fact to secure better policy by rigid adherence to a reasonable guide or by reliance on the judgment of central bankers? Henry Simons first developed the case for required adherence to a statutory guide in his famous essay on "Rules vs. Authorities in Monetary Policy". One purpose is to eliminate uncertainty from central banking operations. An advantage of certainty is that business decisions necessarily are based on more or less rational estimates and guesses as to future conditions. One all pervasive influence on such conditions is the policy of a central bank. If this policy were defined in detail in advance, the businessman could arrive at better decisions. Even though the precise directive were not ideal, the over-all results of such a program would be better than those resulting from discretionary central banking. Discretionary management runs into hazards. Central banking is a field in which appropriate action is extremely difficult to determine. Central bankers also are not immune to moods of optimism and pessimism. Unless, therefore, a central banker relies on an objective

index, his actions may not be - or at any rate not appear to be - consistent over time.

Professor Simons' deep concern to safeguard the rights of the individual strikes a responsive chord in me, and I must confess that the logical compulsions of his essay have stimulated me on several occasions to reconsider the whole problem of guides to current operations. Several ingredients in his argument continue to trouble me. Simons would elevate his guide into a shibboleth so that the public could distinguish clearly between right and wrong action by the central bank and thus compel it to remain on the proper path. Somehow I do not feel that we as yet comprehend adequately the role of monetary policy in our complicated economic system to establish a final guide. Where would we be if the Gileadites dropped their h's - or the Ephraimites acquired them? In reaching this conclusion, I recall some of the reasoning that seemed so compelling to those who ascribed the role of sovereign to the reserve ratio, the Palmer Rule, the currency principle, and the real bills doctrine - to mention a few.

The acid test of a guide is not the internal consistency of the logic or model on which it is based, but experience. I know of no exercise more damaging to the case for a unique guide than to apply it to experience. Simply select a guide and follow its movement over, say, the past five years and see whether it would invariably have indicated the program that you would now consider appropriate in retrospect. Don't forget to allow for the contemporary lags in information and subsequent revisions in the data.

Incidentally, if you put yourself into the position of a practitioner, you will soon discover that a specific statutory objective or guide will not tell you what to do at 11 a.m. on Thursday. An operational

directive would also be needed to specify exactly what the central bank should do with each of its instruments for every change recorded in the objective or guide.

How can a fallible individual come to a reasonable decision in the absence of a financial litmus whose color would indicate invariably what a central banker should do? I know of no final answer. When we move from a single guide because of its inadequacy we are confronted with combining several guides. If we combine by means of an invariable formula, we are back where we started with a different but still inadequate guide. On the other hand, anything more than a formula involves the use of judgment. I am aware that there is danger in thus leaving room for judgment. An arrival from Mars could say: "It is my judgment that reserve requirements should be doubled." That judgment would be without content - if we assume that Martians know as little about the earth as man knows about Martians. The Federal Reserve System has been organized to meet this problem by bringing group judgment to bear on it. The key group for this purpose is the Federal Open Market Committee. As was stated to the Patman Committee:

"It is in meetings of the Open Market Committee that lines of thought from two directions converge to form national credit policy, as far as the Federal Reserve System is concerned. The one flows from banking, business, and the general public in the various regions of the country through the presidents of the Reserve banks. The other flows from the Board of Governors of the Federal Reserve System. Each member of the Committee, with statutory responsibilities for the determination of national credit policies, brings to the deliberations of the Committee the sum total of his knowledge and experience."

In addition to the information with which members of the Open Market Committee and of its Executive Committee come to meetings, they secure a systematic appraisal of economic developments from the staff of the System. As nearly as is possible the result is an informed judgment

of the monetary policy that is appropriate to the current economic situation. It is a fallible method, but it seems to me that we are likely to get better results from concentrating on the development of competent central bankers than from relying on a formula.

There is a redeeming feature that mitigates the difficulties. It is that at a given moment of time the range of judgment is usually limited. Ordinarily it is a question of a little more or a little less tightness or ease, or even whether doubts should be resolved in one direction or the other.

This decision presupposes some measure or measures of ease or tightness. Since a central bank operates in the money market, the results of its actions will show themselves in the supply, availability, and cost of money and credit. Although the three aspects are related, there are differences of opinion as to the emphasis that should be placed on each as a measure of the tone of the market. If, at one extreme, costs or rates of interest are used as the exclusive measure and the central bank operates to establish them at specified levels, it will lose control over supply because the market will determine how much it wishes at that rate. If, at the other extreme, supply is used to measure results, the central bank will lose control over cost because the market will determine how much that supply is worth. Since the behavior of the other participants in the market - technically changes in the demand for liquidity - cannot be predicted accurately in advance, the action of a central bank will be influenced by its choice of measures.

In terms of procedure, it is more difficult to operate on supply with incidental effects on the rate than on the rate with incidental effects on the supply. To begin with, it is necessary to construct an appropriate definition of supply. Occasionally a financial

article features the mere fact that the Federal Reserve System has bought, sold, or redeemed securities. There are times, of course, when this may be significant, as when it occurs following a considerable period without change. Even at best, however, this is an inadequate measure.

Since the purpose of changing the supply is to influence the flow of expenditures in part by inducing banks to expand or contract, the more common definitions are written in terms of the reserves of member banks. The key relationships are those between actual, required, and borrowed reserves. A bank with excess reserves has an inducement to expand; a bank in debt is under pressure to contract. Frequently used measures of supply, therefore, are the volume of excess reserves and of free reserves. Free reserves measure the net position of the banking system as a whole relative to the Reserve Banks. They are equal to excess reserves minus borrowings and may be negative.

If other things remain equal, an increase in excess or free reserves increases the inducement of banks to expand, and a decrease of such reserves increases the pressure to contract. Unfortunately, however, other things seldom remain equal. Banks vary widely in their sensitivity to inducement and pressure. As a consequence, the net expansionary effect of a given volume of free reserves is less if the excess reserves are concentrated in insensitive banks and borrowings are concentrated in sensitive banks than if the excesses are held by sensitive banks and the deficiencies by insensitive ones. The distribution of excess reserves and of indebtedness is apt to be particularly important in assessing the effects of a change in reserve requirements. In determining the level of excess or free reserves that will produce the desired degree of ease or pressure on the money market, allowance must be made for the distribution of excesses and debts among the member

banks. The total amount may have to be varied to maintain a given tone in the market.

Once the level or range of excess or free reserves has been determined, the practitioner has the problem of trying to establish or maintain that level. A student of central banking who has read the chapter on open market operations is apt to believe that this ought to be easy. Since purchases, sales, and redemptions enable a central bank to establish its portfolio at predetermined levels, they should also enable it to maintain excess or free reserves at a figure specified in advance. Actually, however, the volume of reserve balances is influenced not only by the size of the System's portfolio of Government securities but, since reserve balances are a liability of the Reserve Banks, by the size of all other asset and liability accounts as well; and it is determined by the size of all the other accounts. The volume of excess reserves in turn is equal to actual reserves minus requirements and that of free reserves is equal to excess reserves minus borrowings.

The logical and common answer to this difficulty is that allowance should be made for changes in the other accounts in determining the size of the portfolio needed to produce the desired level of excess or free reserves. Unfortunately, however, the changes for which allowance must be made are not known in advance. As a result it is necessary to estimate the expected net effect of all these changes on excess or free reserves. We know a great deal about the movement of the relevant accounts. Currency in circulation increases greatly as Christmas approaches; float increases toward the middle of the month, and so on. But a great deal of knowledge is not enough to predict changes in these magnitudes from day to day. Permit me to give you just one illustration. An increase in float (uncollected cash items minus deferred availability

cash items) puts funds into the market. A grounding of airplanes occasioned by an unpredicted storm will slow the collection of checks and increase float by an unexpected and possibly very large amount. By the time we have the necessary knowledge it may be too late for offsetting action. Most Government security transactions are completed "regular way", that is, with delivery and payment on the day following the transaction. Cash transactions mitigate the difficulty but do not eliminate it, because it takes some time to complete the transactions and make delivery. Repurchase agreements, though a further aid in rapid movement, do not solve the problem completely.

One result of these difficulties is that you will find large changes in the volume of free reserves from week to week with no change in the direction of monetary policy. The general level around which the magnitude is fluctuating, however, is important.

In terms of procedure it is easier to establish or maintain a specified rate than the level of free reserves at a predetermined level. The rate structure and changes in it are important measures of the tone of the money market. Unfortunately, however, it does not follow that the tone of the market has not changed merely because there has been no change in the rate. Let me illustrate. Suppose a corporation decides temporarily to invest the proceeds of a very large bond issue in Treasury bills. To maintain existing rates on such bills the System would have to sell. But these sales would absorb reserves and tighten the market even though - or rather because - the rate was maintained.

Another measure of the tone of the market is availability of credit. As I indicated in discussing measures of supply, indebtedness puts pressure on banks to contract. The immediate response to an increase in indebtedness, however, may not be to ask higher rates for loans



but to screen applications more carefully, thus expanding what has been called "the fringe of unsatisfied borrowers". This tightens the market even though there has been no change in either rates or the supply. Availability is closely related to the structure of rates, particularly the position of the discount rate in the galaxy of market rates.

In a sense we may say that the tone of the money market has three facets: supply, availability, and cost. Although they are related, they are not synonymous, and a central banker must somehow combine them to establish the tone that is appropriate and to measure the effects of his actions.

The burden of my remarks so far is that a central banker does not sit before a panel with his eyes glued to a pointer and his hand on a push button that shoves reserves into the market or withdraws them. As Ralph Hawtrey once said, "regulating credit, in fact, is an exceedingly delicate operation." I do not, however, wish to leave you with the impression that a central banker cannot approach his problems systematically but rather that his approach should be comprehensive. I know from experience that it is tempting in classroom discussions of central banking to emphasize strategy rather than tactics. It is because I cannot offer you anything new on strategy that I have today deliberately reversed the emphasis. In strategy we speak of objectives; in tactics we become concerned with procedures to determine the tone of the money market that will promote the desired objectives in a dynamic market economy and with measures of the actual tone in the market. Before brushing aside tactics as mere practical details, it is worth considering the possibility that the real content of central banking policy is not something abstract but simply what the central banker actually does from day-to-day and moment-to-moment.