THE 1981 PER JACOBSSON LECTURE

Central Banking with the Benefit of Hindsight

Jelle Zijlstra Albert Adomakoh



FOREWORD

The 1981 Per Jacobsson Lecture, entitled "Central Banking with the Benefit of Hindsight," was delivered by Jelle Zijlstra, President and Chairman of the Bank for International Settlements, in the Atrium of the International Monetary Fund building on Sunday, September 27, 1981. A commentary on the subject was provided by Albert Adomakoh, former Governor of the Bank of Ghana. William McChesney Martin, Chairman of the Per Jacobsson Foundation, presided over the meeting, and J. de Larosière, Managing Director and Chairman of the Executive Board of the International Monetary Fund, welcomed the participants to the meeting and to the Fund.

The Per Jacobsson lectures are sponsored by the Per Jacobsson Foundation, which was established in 1964 in honor of Per Jacobsson, the third Managing Director of the International Monetary Fund. The lectures are held annually to promote informed international discussion of current problems in the field of monetary affairs.

These lectures are published in English, French, and Spanish and are distributed by the Foundation without charge. Through the courtesy of other institutions, other language versions are also issued from time to time. Further information may be obtained from the Secretary of the Foundation.

CONTENTS

F	Page
Opening Remarks	
William McChesney Martin	. 1
J. de Larosière	. 1
William McChesney Martin	. 2
Central Banking with the Benefit of Hindsight Jelle Zijlstra	4
Jene Zijistra	. 4
COMMENTARY Albert Adomakoh	20
BIOGRAPHIES	31
THE PER JACOBSSON LECTURES	32
FOUNDING SPONSORS, BOARD OF DIRECTORS, AND OFFICERS OF THE FOUNDATION	

Opening Remarks

William McChesney Martin

Ladies and gentlemen: It is my privilege as Chairman of the Per Jacobsson Foundation to convene this eighteenth annual lecture meeting. We are delighted that the Managing Director of the International Monetary Fund, Jacques de Larosière, is with us today. He is our host for this meeting and, in spite of his busy schedule, has found time to say a few words of welcome.

I. de Larosière

Mr. Chairman Martin, Mr. President Zijlstra, ladies, and gentlemen: I am extremely happy to be able this time to be with you and to welcome you to the International Monetary Fund for the eighteenth session of the Per Jacobsson Foundation.

Before I turn you over to the speakers you will be hearing this afternoon, I would just like to say that I am extremely honored, as Chairman of the Executive Board of the International Monetary Fund, to be able to greet you here today, Mr. President Zijlstra.

I am particularly happy to do so because the Fund and the Bank for International Settlements, which Mr. Zijlstra has chaired for, I believe, nearly 15 years, have developed over time a very active and fruitful collaboration. In the recent past, this collaboration has been even more active, if I may say so, than earlier. We have indeed been taking the greatest possible advantage of the professional expertise and banking competence of the BIS in a number of operational fields. With the assistance of the BIS, we have been investing our Trust Fund money in SDR-denominated investments.

This collaboration has been essential not only to maintain the value of our assets pending their utilization for lending but also as a way of effectively promoting the utilization of the Fund's special drawing right unit.

More recently, we have been continuing this collaboration. As you perhaps know, the Fund has been making drawings under the large lines of credit that it has with lenders. These drawings have been made in advance of the specific need for the funds in the knowledge that a number of programs with our member countries will be coming into effect shortly. In these matters also the BIS has actively engaged in interim investment operations with its usual skill and competence.

Recently, the BIS also participated as a lender to the lines of credit that have been organized by the Fund for the financing of our enlarged resources. The bulk of that finance came from the Saudi Arabian Monetary Agency, but besides this loan of SDR 8 billion, more than SDR 1 billion—SDR 1.203 billion to be exact—came from central banks and the BIS.

Without the collaboration of the BIS and, in particular, without the personal involvement of President Zijlstra—without his extraordinary ability to make things go, to get things done, and his inventive way of looking at things—we might not have achieved such a significant and balanced set of borrowing arrangements. Thus, perhaps of greater importance than the actual loan of SDR 1.2 billion has been the extremely useful support of the central banks of the industrial countries under the stimulus and inventiveness of the BIS and of its President.

If only for that reason, I think you will understand why I tried my utmost to escape for a few minutes from the meetings scheduled for me today. I would have liked to have been able to stay for the whole afternoon. You are very fortunate to be able to hear from a man who has been Minister of Economic Affairs and Finance for many years, President of one of the most important central banks in Europe, the head of the BIS for nearly 15 years, and one who has been Prime Minister of his country. You will be able to hear from him about his experiences in the course of his extraordinary career. I may add that he is also a theoretician of note and is well known for his writings on the velocity of money and similar subjects. We are very gratified to have him amongst us today. I welcome you all warmly and extend my best wishes for the success of this noteworthy occasion. Thank you.

William McChesney Martin

Thank you, Mr. de Larosière, for your gracious words of welcome.

We are all very appreciative of our association with the Fund and of the facilities the Fund provides for our use.

Let me begin by saying a word about the Foundation. Our Honorary Chairmen, Eugene Black and Marcus Wallenberg, take an active interest in the work of the Foundation and guide us in our endeavors. Unfortunately, they could not be present at this meeting, although Marcus Wallenberg is represented here by two of his grandsons and will be attending the Fund-Bank Annual Meetings later on this week. Likewise, the Directors of the Foundation are continuing to participate in the work of the Foundation, and we are in touch with them frequently. The Foundation is solvent and is carrying on its activities in a highly satisfactory manner. In this context, the contributions of Randolph Burgess in furthering the purposes of the Foundation comes to mind. He was instrumental in founding this organization, and his work is now being ably carried on by Frank Southard, our President, with the assistance of the other Officers—Al Gerstein and Gordon Williams, our Vice Presidents, Joe Lang, our Secretary, and Graham Perrett, our Treasurer. If you have any suggestions regarding our activities, please feel free to talk to one of our Officers or Directors.

I recall that at last year's lecture meeting, I mentioned a remark made by Per Jacobsson many years ago-an observation that had made quite an impression on me. At the risk of being repetitive, I would like to mention it again. Per had said that central banks could print all the money that they wanted but that they could not print capital. Capital came from savings and investment. I shall always remember that.

There is very little that I can add to Jacques de Larosière's introduction of Dr. Zijlstra, and the program gives brief biographical sketches of both of our speakers. I have known Jelle Zijlstra for quite some time, as many of you have, and he is certainly one of the leading monetary statesmen in the world today. He is experienced in every phase of government, business, and banking, as well as being a renowned academic, and has made an enviable contribution in all of these fields. In a sense this is his farewell speech since he is due to retire from the BIS at the end of the year. We are indeed extremely fortunate to have him here today, and I know we will all benefit from what he has to say. Thank you very much.

Central Banking with the Benefit of Hindsight

Jelle Zijlstra

It is well-nigh indisputable that the present time is far from easy for central banks and their governors. Not only must they do their work under difficult circumstances but they are also subject to a degree of public and political interest which does nothing to ease their burden, let alone make it pleasurable.

My intention in this lecture is to discuss this subject against a background of nearly 15 years' experience as President of the Netherlands Bank and of a similar period as President of that remarkable institution, the Bank for International Settlements (BIS) at Basle.

But, first, allow me to give you some details of my career before I entered central banking; as you will see, this may be useful for a proper understanding of some of the points I wish to make.

After completing my university studies, I was appointed professor of economics at the Free University of Amsterdam in 1948. During my studies I had observed that the academic world in general had little sympathy for central banks. Even now, this is often the case. I could give colorful examples of what I mean, but I shall refrain from doing so because I do not wish to damage the reputations of the persons concerned. However, I cannot possibly resist the temptation to give you one example. It is from an interview with Professor Galbraith, which appeared in *De Haagse Post*, August 15, 1981:

The people who man the central banks are nice men, and in our case one woman; well spoken, well tailored and of good personal hygiene. I would be kind to them and keep them in business in a minor way, but I would not for a moment rely on them. One of the mysteries of monetary policy in the U.S. has always been how one becomes an expert in it. You can have a man in high political position in Washington, who has difficulty balancing his checkbook and keeping within his family budget. But one day the President appoints him to the Federal Reserve Board and all of a sudden he is a monetary wizzard. That is a form of magic that I have long admired.

Well, I don't want to be too harsh on those people, but I certainly don't want to rely on them for the management of anything so complex as the modern economy.

To some extent the tension that exists between economics in an academic context and the actual policy pursued by the central bank is natural and understandable. After all, on the one hand we have the builders of abstract models who are not confronted daily with real problems, and on the other hand we have those persons whose overfull diaries sometimes prevent them from reflecting on the fundamental relationships that could provide solutions to some problems in the longer term. I have had experience of both these worlds. In retrospect, I am somewhat amazed at the carefree way in which the young professor of yore told his students how central banks should behave. In my present position I have several times been surprised by the unworldly suggestions that are occasionally directed at central banks by academics.

In 1952 I became a member of the Dutch cabinet: first as Minister of Economic Affairs, and later, until 1963, as Minister of Finance. In this latter function I naturally learned much about the central bank. There are specific areas of friction between the minister of finance and the president of the central bank which are not the result of theory versus practice but are a consequence of the division of powers between the monetary authorities; these powers are vested in part in the ministry of finance and in part in the central bank. I am assuming now that the central bank is to a certain extent independent of the government, whether de jure or de facto (or both). By this I mean that it has its own powers either based on statute or on the authority it has in the eyes of the public. It is clear and also inevitable that differences of opinion will arise from time to time. which may lead to open conflicts and have in practice also done so. In saying this I am not thinking of the Netherlands because in that country such a situation has not yet occurred. As Minister of Finance I realized at an early stage that my office would benefit most by achieving the best possible relationship with the central bank with full recognition of its powers and authority. After all, the finance minister is badgered from all sides by the ministers of the spending departments, who will always conspire to spend more money than is iustified by a sound financial policy. In this struggle he is inevitably alone and consequently lonely. If the relationship is good, his best ally is the central bank. A government is sorely tempted to try to solve its problems by resorting to so-called monetary financing, but without the active cooperation of the central bank this is possible only for a short period and within narrow limits. Therefore, in the world in which we live, with its deep-seated inflationary tendencies,

there is an immense need for a close alliance between these two parties. I felt this at the time and I acted accordingly. It also made me bold enough, when the roles were reversed in 1967, to try and impress this philosophy upon successive ministers of finance.

As I have already said, I joined the Netherlands Bank in 1967, a year in which the serious problems that would give rise to grave concern at the central banks were already apparent.

I intend this afternoon to examine—looking back and sometimes ahead—three problems which have engaged us so fully in past years and which will also confront us in the future:

- (1) the exchange rate system;
- (2) international reserves; and
- (3) monetary policy in theory and practice.

First, we shall take a look at the exchange rate system. In the 1960s the existing international monetary system was subjected to increasing pressure. Fixed exchange rates, which could only be changed when there was a so-called fundamental disequilibrium, proved to be insufficiently flexible in the increasingly severer financial climate. Nor was this all. The Bretton Woods system was based on the principle of maintaining or restoring equilibrium in the current accounts of the balances of payments. Movements of capital were given no or only slight attention, because it was assumed that they were relatively unimportant or that they would not really disturb balance of payments equilibrium. If need be, restrictions could and should be placed on capital movements. Last, but not least, the 1960s saw a growing disequilibrium in international payments, consequent on the deficit in the U.S. balance of payments. The dollar became overvalued and the United States found it increasingly difficult to meet its obligations to convert the dollar (into gold). It is my firm conviction that a devaluation of the dollar combined with a substantial increase in the price of gold (as provided for in Article IV of the then Articles of Agreement of the International Monetary Fund) would have meant a real improvement of the situation. The stability of the international monetary system would have been considerably strengthened. As a result it would not have been necessary to conclude, too early, that the Bretton Woods system could not be maintained, as was done in 1973 on the eve of the great oil crisis. In other words, the shock of the oil crisis would have encountered a much more stable system. This does not mean that a system of fixed exchange rates would have been stable enough, even if it had been strengthened by the two measures I mentioned above,

to survive this shock. But the resulting chaos would have been significantly less.

The discussions about the best system of exchange rates will probably never lead to a definite answer. Too much depends on the actual time and place. There is a time to peg and a time to float. However, a closer analysis is called for. In my speech to the Annual Meeting of the BIS on June 15 of this year I said, and now I quote:

Obviously, there is no question of going back to a par value system on a worldwide basis-to mention only two obstacles, the OPEC surplus and the dispersion of inflation rates rule it out. But, if the domestic price of money is not to be disregarded, why should its external price be? Or, to put it another way, what would happen if we were to disregard both for any prolonged period? We cannot safely adopt as a principle that exchange rates should be left to their own devices. The exchange rate is too important a macro-economic variable to be relegated to the position of a residual item, in the way that the money supply was in some countries until not so long ago. We have therefore to pursue a middle course between the Bretton Woods system of fixed exchange rates and a hands-off policy in the exchange market.

But it will not be easy to find the middle course. I hope that in the turmoil of rapidly changing conditions which seriously hamper the realization of any new exchange rate system, it will be possible at any rate to achieve a greater degree of consistency of views and policies. Let me give an example. After a period of what was succinctly, but not entirely accurately, termed "benign neglect," the U.S. authorities in 1978 changed direction sharply. President Carter announced a massive support operation for the steadily weakening dollar. As this happened fairly recently I need not go into the details. At present, the policy is again one of nonintervention on principle, and the value of the dollar has risen very sharply. Should we speak of an asymmetrical policy? Intervention when the dollar weakens, nonintervention when it strengthens? Or, expressed in slightly malicious terms, does the philosophy behind the policy depend on the circumstances? How should others respond? My own answer is a paraphrase of Walter Bagehot: "rates of exchange will not manage themselves," or "rates of exchange are too important to be left alone."

The principle contained in that answer is explicitly recognized in the Bretton Woods type arrangements which exist within the European Monetary System (EMS) for fixed but adjustable rates of exchange, with narrow margins of permitted market fluctuations between the currencies of the participating countries. These arrangements have, in my view, provided a useful zone of relative exchange rate stability in Europe and I very much hope that they will

continue to do so. For that to be possible, two main conditions will have to be fulfilled: first, there must be sufficient harmonization of economic policies within the EMS to allow a reasonable degree of exchange rate stability; and second, changes in exchange rates, when these become necessary, must be made more promptly than was sometimes the case in the Bretton Woods system. To sum up what I believe about the application of my exchange rate philosophy under our current arrangements, I would say the following: we need sufficient management of floating rates to avoid movements of currencies that are erratic or completely unrelated to fundamentals; and we also need, within the EMS system, sufficient flexibility to maintain a realistic structure of rates between participating currencies.

Central banks play very different roles under different exchange rate systems. Our life was relatively simple under the Bretton Woods system of fixed parities. The rates were fixed or they were changed by government decision, often on the advice of the central banks. Within the Group of Ten and Switzerland, our activities at the time were especially the organization of support for currencies under threat. Our friend Charles Coombs was the ideal salesman in such support credits. How shocked and sad we are today that he is no longer amidst us.

Yes, we were experts at gathering millions in a very short time. In this respect, some of you here this afternoon will remember the slightly chaotic Group of Ten conference of Bonn in 1968. Ministers who were unable to reach agreement about anything far into the night, and the central bankers who in a single hour succeeded in organizing large-scale support operations for the pound sterling and the French franc. For the rest, they were ignored. It is a pity that there are no newsreels showing the frustrated and irritated central bank governors roaming through the rooms and passages.

Under a system of floating rates, especially one of "clean floating," the task of the central bank is also easy. The work is done by Mr. Market. However, I fear that it is not as simple as that as I shall show when I discuss monetary policy. The control of the money supply, as well as the levels of the exchange rates and of interest rates, influence each other in such a way that one cannot afford to ignore any one of them. We are willy-nilly caught up in a triangle with the points called money supply, exchange rates, and interest rates. The life of a central banker has truly become more difficult.

In the period I am discussing, it was not only exchange rates but

also the problem of international reserves which played a major role. It will be remembered that the Bretton Woods system, besides providing fixed exchange rates based on gold parities, was also a system in which the ultimate reserve asset was gold. It is true that, in practice, it was mainly the dollar which constituted the actual reserve asset, but owing to its convertibility the link with gold was defined. In August 1971 all this came to an end. The Second Amendment of the Articles of Agreement of the IMF, which became effective in 1978, settled the problem in a basically different manner. Gold and reserve currencies would gradually have to make way for the SDR. How far have we progressed in that direction? At present, the principal gold-holding central banks refuse to give more than a moment's thought to parting with their gold reserves and thus effect a de facto demonetization, either by selling gold in the market against foreign exchange or by placing it in a-not yet existing-substitution account within the IMF against the receipt of SDRs. The dollar has remained the most important reserve currency, although some room has had to be made for other currencies, such as the deutsche mark and the Swiss franc. Their joint role as reserve currencies has not been reduced in favor of the SDR, as provided for by the Articles of Agreement of the IMF. What has happened to gold? During the period described here, gold was often at the center of attention. It would be interesting to repeat here in detail the many different statements about gold made at the various international meetings since 1971. I shall refrain from doing so, but I should like to touch briefly upon those aspects of the history of monetary gold which would seem to be significant for future developments. It all started at that remarkable gathering of the participants in the gold pool in Washington on March 16-17, 1968, which led to the end of the gold pool. The result was a two-tier system, providing for a separate development of the gold price in the free market as distinct from a fixed price for monetary gold, then \$35 per troy ounce. The communiqué of that meeting included the following sentence: "They no longer feel it necessary to buy gold from the market." During the meeting this sentence had been the subject of heated discussion. Some of the participants, including myself, opposed it, as we felt it could be interpreted as an undertaking that the central banks would never again make market purchases of gold. Thus, the combined holdings of monetary gold would have to be regarded as fixed, serving merely as an instrument of settlement among the monetary authorities. Newly produced gold could then be sold on the free market only. The counterargument which was advanced, stressed that the sentence could be most useful as it would have a calming effect on price movements in the free market and would, hence, check speculation. It was this argument which finally swayed the opponents. However, no sooner had the communiqué been issued than the first interpretation was widely accepted. Yes, indeed, so it was stated, the central banks had decided never again to buy gold from the market. Interested parties and especially the U.S. authorities kept a close watch to check whether the central banks adhered strictly to this supposed undertaking.

All this is now far behind us. Step by step, not always painlessly, the freedom of central banks to effect transactions in gold, whether among themselves or in the free market, has been restored. The present Articles of Agreement of the IMF merely forbid a new official gold price. How times have changed may be illustrated by the example of the monetary mobilization of part of the gold holdings of the central banks participating in the EMS. How times have changed may also be illustrated by the Act signed by President Carter on October 7, 1980 approving an increase in the U.S. quota in the IMF and including the provision that the Secretary of the Treasury shall establish and chair a commission which shall conduct a study to assess and make recommendations with regard to the policy of the U.S. Government concerning the role of gold in domestic and international monetary systems and shall transmit to the Congress a report containing its findings and recommendations not later than one year after the date of enactment of this Act. At least, gold is no longer a dirty word.

Nevertheless, the present position cannot be termed satisfactory. The central banks of the principal countries hold vast reserves of gold. The Netherlands Bank, for instance, has gold holdings which, at current market prices, account for 66 per cent of its total reserves. It is most frustrating that, sales in the market against foreign exchange apart, there is no systematic manner in which this reserve component can be used. I feel that it is necessary for us, within the Group of Ten and Switzerland, to consider ways to regulate the price of gold, admittedly within fairly broad limits, so as to create conditions permitting gold sales and purchases between central banks as an instrument for a more rational management and deployment of their reserves. On the occasion of the annual meeting of the IMF in Belgrade in 1979 this was brought up, but regrettably, insufficient agreement could be reached to make even a modest start

with regulating the gold price in the free market. It is my firm conviction that relatively small-scale interventions, though not forestalling the subsequent explosion of the gold price, would at least have reduced it to more manageable proportions. Now that the turbulent emotions seem to have quietened down, we would be wise to reflect anew and without prejudice on these subjects.

Finally, I should like to give some attention to the SDR, the pivot of a new international monetary system. All of us are supposed to want the new system and are thus under a moral obligation to further its realization to the best of our ability. However, those taking part in the many discussions which are devoted to the SDR do not, in my opinion, always evince an adequate insight into the problems we will face if the SDR is actually to become the pivot of a new international monetary system. Such a new system requires that two conditions be met. First, greater exchange rate stability is essential. If exchange rates are left to be dictated by market forces, reserves are basically unnecessary. In the fullness of time the SDR will have to be the full-fledged instrument of settlement. If no settlements take place, or if this is done erratically or unsystematically, there is no need for a fundamental instrument of settlement. Second, and in connection with the first condition, convertibility will have to be restored. In an orderly international monetary system, in which the SDR is given the role formerly played by gold, major currencies, including the dollar, must be convertible into SDRs. Whoever truly wishes to make the SDR the pivot of a reformed international monetary system and yet refuses to accept convertibility into SDRs deceives others and perhaps even himself.

All this is not of course feasible at present, so that the role of the SDR will continue to be a marginal one for some time to come, even though its significance as a unit of account is on the increase. This also means that there will be no substitution account in the near future and that the allocation of SDRs will have to remain limited.

We now come to my third subject, viz., monetary policy in theory and practice. When, in 1967, I entered the world of central bankers, monetarism had not yet become a political slogan. Of course, Milton Friedman was not unknown. His monumental work, A Monetary History of the United States, was rightly renowned, and not only in academic circles. His lecture in 1970 on the monetary counterrevolution was an exceedingly lucid exposition of what is now termed monetarism. But it was only as a result of the inflationary waves of the 1970s that monetarism broke out of the confines of the

world of the professors and spilled over into politics. Ministers of finance, heads of government, and even heads of state must cudgel their weary brains over the secrets of M_1 to M_x , the monetary base, and the money multiplier. In passing, it is interesting to note that something comparable happened to Keynesianism which was widely taught as an economic theory at all universities after 1936 but did not become the basis of the economic and financial policy of nearly all the important countries until after the end of the Second World War.

In examining the many problems involved here, it is necessary to be aware of the fact that monetarism, like Keynesianism, has many variations and nuances. Some stylization, perhaps even simplification, is necessary to provide, in the short time at my disposal, a typecasting of what I should like to term the *typical* monetarist. My typical monetarist's creed has three articles:

- (1) a politico-economic or, in other words, an ideological one;
- (2) an analytical one; and
- (3) one on the techniques of monetary policy.

I shall examine each of these briefly. Our monetarist is convinced that the public sector is relatively unstable and that the private sector is relatively stable. The instability of the public sector is related to the fact that it is much too large in most countries, as well as that politicians frequently make irrational decisions based on insufficient knowledge of complex social and financial problems, whereas private sector behavior is, in principle, ruled by rational expectations and rational reactions to the impulses from the market economy.

In the typical monetarist's analysis, the control of the money supply is both necessary and sufficient for an effective macroeconomic control of the national economy. Naturally, this instrument may not be perfect but it is by far the most efficient instrument we have at our disposal.

Finally, in order to control the money supply the use of the socalled monetary base is necessary and sufficient. It makes it possible to control the money supply continuously and with the required precision.

To a central banker, the three afore-mentioned points vary in importance and each carries a different weight: the view one takes of the relative stability or instability of the public and the private sector is often rooted in the individual's economic philosophy. Phrased differently, this view is ideologically flavored. My own opinion is that a great deal depends on the concrete circumstances of

time and place. In the 1930s the private sector was undoubtedly comparatively unstable and it is not surprising, then, that traditional Kevnesianism is based on the relative instability of the private sector, which needs to be corrected by government measures; consequently, this line of argument assumes a relatively stable public sector, which must support the shaky private sector and save it from collapsing. In present times, this is no longer quite so. In many countries the public sector is overburdened and in danger of being crushed by a multitude of tasks and responsibilities. As a result, the possibilities of using the public sector to stabilize the entire economy have become substantially smaller. An added factor is that in the postwar years the private sector has shown a high degree of resilience, even in the face of heavy external shocks. Ideological bias aside, the purely pragmatic conclusion is warranted that the balance between stability and instability within the public and the private sectors, respectively, has shown a distinct shift since the 1930s.

The second article of the typical monetarist's creed brings us closer to the central banker's job. We are concerned here with analysis, leading to the thesis that for controlling the economy as far as possible the monetary policy instrument is both necessary and sufficient. All other instruments, fiscal policy in particular, are erratic and have a procyclical and, hence, destabilizing effect. In this view, wage and price policies are doomed to fail. It is solely the control of the money supply by the monetary authorities, in the form of inflexible monetary expansion targets published in advance. which is capable of stabilizing the private sector and of preventing or eliminating inflation. This is demonstrated with the aid of that famous equation MV = PT. In the longer term, the volume of transactions (T) is governed by nonmonetary factors, the velocity of circulation (V) is, likewise in the somewhat longer term, stable, so that the level of prices (P) varies in proportion to changes in the money supply (M). If governments are sensible enough to keep or reduce the growth of the public sector within acceptable limits, adequate macroeconomic control of the economy is feasible. This line of reasoning is further strengthened by the theory of rational expectations. Those in charge of the public sector, the politicians, often act irrationally and unpredictably. Those taking part in the economic process in the private sector are guided by rational expectations, especially as regards inflation. They have learned to see through the money illusion. Firm standards for the growth of the money supply aimed at preventing or eliminating inflation dissipate

inflationary expectations and thus constitute, by themselves, an essential contribution to the fight against inflation.

As to this major issue in past and present discussions, I should like to give a brief outline of my own views before we come to the technique of monetary policy.

In my opinion, as an instrument for adequately guiding the economy, control of the money supply is necessary but not sufficient. Fiscal policy plus wage and price developments cannot be dispensed with or ignored. In theory, but in theory alone, it can be maintained that control of the money supply is sufficient. Any borrowing requirement can be covered by nonmonetary means, provided that one is prepared to accept any interest rate level and any degree of crowding out of private investment. Any discrepancy between wages and productivity can always be eliminated by sufficient stagnation of output and employment. But, let me repeat, this is pure theory. There is a size of the borrowing requirement and there is a degree of discrepancy between productivity and nominal wages which simply precludes any possibility of conducting an effective monetary policy. The reverse is, of course, also true.

The foregoing can also be phrased in a different fashion. Monetary policy, fiscal policy, and wage movements commensurate with productivity are each other's constraints. In this framework, an effective monetary policy aimed at controlling the money supply is necessary but not sufficient.

Finally, in addition to the ideological and the analytical problems, there remains the technique of monetary control, which is one of the most relevant issues for central bankers. In the reasoning of our monetarist, the money supply can be adequately controlled by controlling the monetary base, which consists of the banks' credit balances with the central bank and the banknotes held by the public. Both these items appear on the liabilities side of the central bank's balance sheet and both can therefore be controlled by the central bank. This possibility of control flows from the assumed predictability and stability of the money multiplier, which relates the money supply to the counterbalancing free and required reserves held by the banks with the central bank. It is, furthermore, assumed that there is a workable definition of the money supply. In the monetary literature we often come across the term of narrow money, M_1 , consisting of banknotes and demand deposits. But its use is not strictly necessary. In monetary policy practice in the United States, for example, various measures of the money supply are distinguished (M_{1a} , M_{1b} , M_2 , M_3 . . . M_x), each with its individual money multiplier. In the United Kingdom a relatively broad definition of the money supply is employed, M_3 , which also includes savings deposits with the banks. Before going on let me briefly summarize the various elements of the monetarist creed.

Our true-blue monetarist believes:

- (1) that the central bank is able to control the monetary base;
- (2) that the money supply is thus controlled through a stable money multiplier:
- (3) that the level of prices is thus controlled assuming a stable velocity of circulation;
- (4) that the private sector is thus adequately stabilized; and
- (5) that, if the size of the public sector is kept within certain limits. a reasonable degree of macroeconomic control is thereby ensured.

The many discussions about monetarism center not least on the techniques used. They have become political issues and have even made their way to the lofty heights of the summit meetings of the political leaders of the world. Do not we, central bankers, at times stand somewhat helplessly on the sidelines? Have the central bankers among themselves come to a consensus as to the best, the most adequate monetary techniques? Let me briefly dwell upon this point.

It would appear to me that there is at any rate a large measure of agreement about one important aspect. Monetary policy is, by its very nature, a policy as to quantity. In the past many central banks pursued a policy directed toward one or more interest rates so as to achieve or maintain a certain interest rate level. The resulting money supply was accepted as a dependent variable. It is clear that such a policy cannot be expected to produce that money supply which must be considered proper from the point of view of the stability of the economy and of the maintenance of the value of money. This does not mean, that in pursuing a policy aimed at controlling the money supply, interest rates can be neglected—I come to that later on. The question now before us is this: in what manner can the money supply be controlled by the central bank and what are the pros and cons?

The customary variants of a policy aimed at controlling the money supply fall, roughly speaking, into two main categories, viz., direct and indirect methods. Under the direct method, some sort of ceiling

is imposed upon the activities of the banking system so as to ensure that money-creating lending operations remain within the limits set. Not all central banks have the powers to do this. In the Netherlands and in France, for instance, the central banks have, and are currently exercising, these powers. Under the indirect method, the central bank seeks to control the money supply by controlling other variables which are assumed to bear a sufficiently fixed relationship to the money supply. Here the interest rate level is of major significance as an essential part of the transmission mechanism which maintains or restores the relationship. The so-called monetary base method is the principal example of the techniques in question. You will allow me to analyze briefly the most frequently used monetary technique with the aid of the variant employed in the Netherlands. In my country we have for many years had at our disposal the instrument of credit ceilings, known in French as encadrement du crédit. If the expansion of the money supply threatens to assume unduly large proportions, the Netherlands Bank can impose restrictions on the volume of lending by the banking system. In the past, this power was exercised repeatedly; the last restrictions were imposed as from 1977. They were suspended recently, as the banks' lending had remained below the prescribed ceiling for a sufficiently long period. The system works as follows: a certain maximum percentage increase is fixed for the total assets of the banking system, except for short-term paper issued by the public authorities (an exception which may be canceled in the future). However, longterm funds raised or received by the banks, or in other words, genuine savings may be used for lending without restriction. The room allowed for the expansion of lending is thus increased by the amount of such long-term funds. Expressed differently, lending by the banking system is restricted to the extent that it is money creating, and is not restricted to the extent that it is financed from long-term funds. The result is that any demand for credit over and above the volume allowable from a monetary point of view is shifted to the capital market and may thus push up capital market rates. Experience has shown that the monetary instrument employed by the Netherlands Bank results in fairly effective control of the money supply and is attended by a distinct effect on long-term interest rates.

An additional instrument of the central bank in the Netherlands is aimed at controlling the liquidity of the banks—money market policy. Whereas for other central banks this is the instrument for

attempting to control the money supply, this is not the case in the Netherlands. The Netherlands Bank controls the liquidity of the banking system in such a manner that short-term interest rates are in normal proportion to long-term rates, due attention being given to the exchange rate. This policy is implemented with the aid of semipermanent borrowing quotas available to the banks, complemented, where necessary, by an open market policy. This means that, in exceptional circumstances only, and especially in the event of heavy speculation against the guilder, a tightening of money market policy will cause short-term interest rates to rise temporarily to well above capital market rates.

Put differently, the basic monetary policy designed to control the money supply effects this control on a medium-term basis, influences long-term interest rates, and thus also, of course, contributes to achieving overall equilibrium on the balance of payments. The money market policy is a short-term and complementary one, it avoids whenever possible major fluctuations in short-term interest rates and, hence, also tries to prevent exchange rate movements which are not a reflection of the underlying position and development of the balance of payments.

Does this technique of monetary policy merely have advantages and no drawbacks? It has one major drawback. The allowable credit expansion for each individual bank must be based on figures from the past. If credit restrictions of this kind are continued for too long, they tend to have stifling effects on competition, counter to the fundamentals of the market economy. Consequently, a number of years of such restrictions must be followed by a sufficient number of years without them. It will be clear that in times of persistent inflation, as we are witnessing now, such a break is far from easy to effect.

The monetary policy now being pursued in the United States aims at controlling the money supply by regulating the liquidity of the banking system. I need not go into details about the precise technique used. Let me just say that it is based on an assumed stability of the relationships between the various components of the money supply $(M_1, M_2 \ldots M_x)$ and their respective required reserves. This cannot but lead, as it has proved to do in practice, to wide fluctuations in short-term interest rates and at times to very large differences between short-term and long-term rates. This may also cause substantial exchange rate movements. Recently, this monetary policy has been subject to severe criticism. To a certain

extent, this is understandable. A monetary policy which gives rise to prime rates of 20 per cent at a rate of inflation of around 10 per cent. which pushes up the exchange rate to a level far out of line with the underlying balance of payments position, and which thus has serious dislocating effects internationally, simply asks to be called into question, apart even from the preoccupation with weekly money supply figures which it calls forth and the destabilizing expectations thus arising with regard to interest rates in the money and capital markets (in this context, Alexandre Lamfalussy uses the term pig cycle effect, known from economic theory). I find it hard to believe that this technique of monetary policy is the best conceivable one. Yet, this criticism needs to be qualified. The fact that in the United States the fight against inflation is waged with consistency and a strong sense of purpose deserves our warm approval. It is only with regard to the monetary techniques used that doubt is possible, but even this doubt must be seen against the background of the frequent failure of the critics to suggest suitable alternatives.

I outlined these two types of monetary policy to illustrate the point that, as far as the question of the optimum policy for an effective control of the money supply is concerned, we as central bankers unfortunately have to speak of unfinished business. I also encountered this in the circle of the countries participating in the EMS. A multitude of instruments, differing from one country to the next, makes a harmonization of policies extremely difficult. However, here we are in an area at the heart of central banking. In this very area we are under criticism from political and academic quarters, and increasingly so in my opinion. In the future, we shall have to intensify our discussions on this subject, for instance in Basle, so as to reach greater clarity on this issue, if only to save our hides.

Let me conclude this lecture. After the Second World War. the central banker's life was, comparatively speaking, fairly simple. Fixed rates of exchange, the absence of inflation or at most a very low rate of inflation, small public sector deficits in many countries, and often trade unions open to reason. Under such conditions, controlling the money supply is a relatively simple matter. However, somewhere in the mid-1960s and in subsequent years, many of these comfortable certainties disappeared, the storm broke, and we have not come out of it unscathed. We are now facing the formidable challenge to regain in the last two decades of this century some of what we lost on our way. By trial and error we will have to find our route. Where should it lead? To renewed stability of exchange rates and to the breaking of the backbone of inflation also through an appropriate monetary policy. The central banks are faced with a difficult task. In performing that task, they will not invariably receive support from the world of politics and politicians. In his brilliant Per Jacobsson lecture of 1979, The Anguish of Central Banking, Arthur Burns was candid on this subject; after complaining that the Government is so often busy "to enlarge the flow of benefits to the population at large. or to this or that group" (page 15), he described why it was so difficult politically for the Federal Reserve System to keep the money supply under control (page 16):

If the Federal Reserve then sought to create a monetary environment that fell seriously short of accommodating the upward pressures on prices that were being released or reinforced by governmental action, severe difficulties could be quickly produced in the economy. Not only that, the Federal Reserve would be frustrating the will of Congress to which it was responsible—a Congress that was intent on providing additional services to the electorate and on assuring that jobs and incomes were maintained, particularly in the short run.

No, life is not going to be easy for central bankers in the last two decades of the twentieth century. But however difficult it may prove to be, we central bankers should remain intent on what I see as our primary task—irrespective of the many differences in our statutory positions—to be the guardians of the integrity of money, the integrity of money so dear to Per Jacobsson, in whose honor this lecture is given.

MR. MARTIN: Thank you, President Zijlstra, for a most stimulating address. I know that we will want to read it carefully and study

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Our commentator today is Albert Adomakoh, and we are very pleased to have him. His interests range from economics to law, and his experiences cover banking, business, and government. He has held many important positions, and he is a former Governor of the Bank of Ghana and has also been the Minister of Agriculture. Mr. Albert Adomakoh.

Commentary

Albert Adomakoh

Mr. Chairman, ladies, and gentlemen: I feel truly honored to have been asked to participate in this series of lectures honoring the memory of a great man. I am grateful for that and also for the opportunity that it gives me to share the same platform with Dr. Zijlstra, of whom I had heard so much but had never met.

In the last few days several friends have expressed surprise that I was going to talk about hindsight. "What good is it? We want foresight not hindsight!" they exclaimed. We are often told that hindsight is child's play—in other words—it is easy to be wise after the event. Well, the nuance is clear, but perhaps one should recall the poetic philosophy of T.S. Eliot, and I quote:

Time present and time past
Are both perhaps present in time future,
And time future contained in time past.
"Burnt Norton," Four Quartets

After the very stimulating lecture we have heard from Dr. Zijlstra, I am sure no one has been left in doubt about the fact that hindsight can be a noble pastime. It is, at first, perhaps revealing to note his observation when he was a professor, that academic economists generally have little sympathy for central bankers, and the example he cites in support of this certainly comes from an astute and influential source. But, then, we are also reminded of a saying attributed to Lord Norman—an equally astute central banker—when he was Governor of the Bank of England, that if he employed economists, he expected them not to tell him what to do but to explain why he had done it. So it seems the boot may fit either leg and such observations may be deemed mere peccadilloes among friends. However, the nagging thought is that if this were not so, we might be forced to ask ourselves on whose side is the International Monetary Fund.

Of greater practical interest is what Dr. Zijlstra has referred to as

the tension that often exists between the ministry of finance as the fiscal authority and the central bank as the monetary authority. It is inevitable that friction will occur whenever fiscal policy is going one way and the monetary authorities decide they cannot follow suit. The question that is often asked is whether central banks can or should refuse to cooperate with political direction. More often than not, when the guestion is real and needs an answer, it boils down merely to a contest between two self-willed individuals and is mostly resolved by one of them bowing out of the scene.

In terms of policy, especially in times of crisis, I think it is true to say that the more usual occurrence is for the two to iron out differences long before they can become conflicts. And much, therefore, depends on the personal touch and the particular circumstances. It is noteworthy, but hardly surprising in this context, that Dr. Zijlstra has not experienced any real difficulties of this nature in nearly 15 years as President of the Netherlands Bank. One of the unique qualities that I have learned about Dr. Zijlstra is that he was first Minister of Finance and then Prime Minister before becoming President of the Netherlands Bank. I am sure that this makes a most unusual instance of the mountain moving to Mohammed. The reverse is what most of us are accustomed to.

As the main theme of his lecture, Dr. Zijlstra focused on three topics—exchange rates, international reserves, and monetary policy—but he devoted more of his discussion to monetary policy, which is not surprising since there is a great debate raging today about monetarism, whether it is feasible to make it the centerpiece of economic policy. Doubts are being expressed about its adequacy, questions are being asked about its success or failure, and voices of protest are being raised against the effects it is having on national and international economies.

Regarding the adequacy of monetarism, Dr. Zijlstra expresses the opinion that, "as an instrument for adequately guiding the economy, control of money supply is necessary but not sufficient." The question of whether the current experiment with monetarism, particularly in the United Kingdom and the United States, has been a success or a failure may be perhaps too premature to pronounce at this stage, although it has been going on for the best part of two years. And here also, it is my opinion that Dr. Zijlstra perhaps wants to leave that to the judgment of his other organization, the Bank for International Settlements, which has already indicated that it has a professional interest in the problem. Referring to monetarism, the

BIS stated in its 1979–80 Annual Report (page 47), and I quote: "economists and policy-makers have for once been offered the possibility of observing an experiment akin to those always available in the natural sciences. The outcome will no doubt have wider implications than its effect on the U.K. economy alone." So we suspect there is more to come from that quarter.

Some of the effects of monetarism are already being felt in the domestic economies by way of continuing high rates of interest, persisting high rates of inflation, unstable exchange rates (especially in the case of the pound sterling), business depression, mounting unemployment, and low growth rates of gross national product. But, again, the protagonists maintain that this only means that the policy is working itself through the system and insist that all will come out right in due time. The question though is whether the process of correction might not in the meantime have caused so much damage to the economy that as soon as recovery comes along, further measures will be necessary to contain prices.

It is clear, however, that the experiment is already having serious repercussions internationally, especially on the developing countries, which will have damaging long-term results if continued for much longer. I am sure you will expect me to comment on some of these.

Conditions in developing countries are influenced by two sets of factors: namely, external factors, on the one hand, and national dynamic factors, on the other. The external factors are produced by developments in other countries, in this case the developed world, and which, unlike the national factors, are beyond the control of the developing countries. Movements in the economies of the developed countries are thus of critical concern to the developing countries, and it is from this standpoint that I want to examine some of them.

The movements that monetarism has set in motion in the developed industrial world are high interest rates, cuts in public spending, and fluctuating exchange rates, while at the same time, rates of inflation still remain at high levels. The internal effects of these movements are depressed business climate and activity, rising unemployment, and stagnating or declining rates of economic growth. Consequently, the demand for imports into the developed countries has fallen, and this means that exports from developing countries have also fallen. In addition, because of the fall in demand, commodity prices have tumbled, in some cases quite sharply, and are subject to wide fluctuations. These fluctuations are reinforced by the effects of high interest rates in capital markets which tend to induce

funds to shift back and forth from commodity markets to financial markets to take advantage of high-interest profitability.

The combined effect of reduced volume and lower unit price of exports has been to sharply reduce the export earnings of developing countries and put pressure on their balance of payments. This is pressure on the income side. On the payments side, the effects of high interest rates in capital markets also intensify the pressure on balance of payments. The position is particularly serious for the developing countries that are net importers of oil. It is estimated that the current account deficit of the net oil importing developing countries would increase from \$45 billion in 1979 to about \$78 billion in 1981.

Although a major factor in this is the deterioration during the 1970s in the terms of trade, in recent years the effects of higher interest rates have also been considerable. It is estimated that interest payments and profit remittances will increase from \$34 billion in 1980 to about \$44 billion in 1981. No doubt, the rapidly increasing external debt is reflected in the sharp rise in interest payments, but a major factor is that since interest charges on a large part of the debts are linked to the floating rate, today's higher interest rates on capital markets have affected the cost of servicing not only new borrowing but old outstanding debts as well. An informed view is that every 1 percentage point increase in the rate of interest in capital markets means an additional debt service of \$2 billion per annum for developing countries. The seriousness of the effects of higher interest rates may be guaged by the further estimate that debt service plus profit remittances will amount to about 28 per cent of export earnings in 1981, compared with 25 per cent in 1980.

Furthermore, a large and growing proportion of new borrowing is having to be paid back in interest and amortization, and it is estimated that net proceeds, as a proportion of gross borrowing, amounts to only some 33 per cent in 1981. This means that an increasing proportion of new borrowing is having to be paid back in interest and amortization, leaving a smaller and diminishing share for financing new development. The cumulative effect of this process will be to destroy the creditworthiness and the ability of the non-oil exporting developing countries to raise new capital from external markets. This is today a common situation in several African and other developing countries, and thus, in a number of cases, we have the proverbial situation of poverty in the midst of plenty.

For countries in such a situation to be able to meet debt service payments, there are only two remedies: namely, either they must cut their investment programs and thereby reduce economic growth rate or they must receive substantially increased flow of official funds from both multilateral and bilateral sources.

The net oil exporting developing countries will, of course, be able to fare better; although some of them are facing the prospect of large deficits in their balance of payments this year, their oil wealth will enable them to borrow more easily than the net oil importing developing countries. Moreover, even among the net oil importing developing countries, some individual countries will also fare a little better than others, but on the whole, the overall picture envisaged for developing countries by the various economic reports recently issued by national and international institutions is one of gloom and pessimism.

If I were asked whether monetarism can work as an instrument for economic adjustment in developing countries, my first reaction would be to take refuge in a nonanswer and say that one should not attempt to work monetarism by itself. I might even go on to say that, as part of a programmed package, say, for stabilization, the instruments for the control of money supply will have an important role to play, even if the role is merely symbolic. But my more considered inclination would be to say that we should examine and see how the instruments for the control of money supply work out in practice in a developing country. For this purpose, I shall consider the effects of (1) interest rates, (2) reducing the rate of public spending, and (3) adjusting the exchange rate, i.e., devaluation of the currency.

The situation in which controlling action is required is a fairly familiar one. The country finds itself short of foreign exchange and cannot finance imports at the same level as before; consumer goods are in short supply in the shops and queues are forming; arrears of short-term debts are mounting rapidly; currency in circulation has swollen enormously and is still increasing; inflation is at a high level and prices are rising rapidly; wage demands are high and strong; and a black market has developed and is feeding fast on the situation, debasing the national currency.

All of this most probably will have been started by excessive public spending financed by large budget deficits, and now the spending momentum is fueled by the situation. And, most likely, an application will have been made to the International Monetary Fund

for assistance, but the government cannot agree to the terms of a stand-by arrangement because usually it contains provision for devaluation of the currency.

Given such a situation, how effective will the use of interest rate be? For a start, the rate will have to be raised very high for it to have any deterrence at all because costs can be passed on in such a situation very easily. Yet, in a developing country, the government is usually the largest borrower. So the ministry of finance will most likely also not agree to the setting of a high enough interest rate. Even if a rate high enough can be imposed, it will merely increase the cost of government borrowing, which will be passed on to the taxpayer in increased taxation. Therefore, the deterrence on government of high interest rate alone is not likely to be fully effective. Moreover, by definition, a bond market does not exist. Therefore, the central bank has to support government borrowing. And, in such a case, it may well be that it is better for the central bank to find more direct ways of reducing government reliance on central bank facilities. Within limits, I think, there are ways and means of doing this.

The effect of high interest rates will, on the other hand, be more seriously felt by the private sector, but this may be undesirable because, to the extent that it is effective, the burden falls on wrong candidates, which usually are the export industries. They are, in such situations, the more hard pressed. And yet, they are precisely the ones which are best suited and needed to lead the country out of a situation of chaos.

The commercial sector, especially the retail traders, will simply pass on the interest costs to the consumer in just another round of price increases. Besides, the trading sector usually has so much undeclared liquid money that it can considerably minimize its dependence on the banking system. Thus, for the interest rate to be effective, it might also be necessary to introduce complementary measures, such as demonetization, to bring the currency circulation back under firm control.

If this can be done, that is, if the currency in circulation can be brought under control, then a judicious combination of interest rate and sectoral credit ceilings will be what is required to control the situation, and the combination will yield more effective results than high interest rates by themselves in a developing country.

The theoretical basis for requiring a reduction in the rate of public expenditure is to make room for an expansion of private, productive

enterprise. Deficit financing of public spending, we are told, uses up a disproportionate share of the nation's savings and real resources and there is not enough for productive investment and growth. This is the theory. But, in practice, you will often find in situations of crisis in a developing country that, at the same time as public expenditure is being retrenched, the private sector has also lost confidence or taken fright and not only is it not filling the gap but is actually cutting back and retrenching. This is particularly noticeable on the part of people in the business community who are not nationals of the country. All sorts of methods are used and all forms of pressures are employed to get resources transferred out of the country.

Thus, one can have a situation in which both public expenditure and private investments are being retrenched at the same time to the utter confusion and chagrin of the policymakers.

The third instrument is the adjustment of the exchange rate, which in these circumstances means devaluation. This is the instrument which causes policymakers in developing countries the most hesitation to apply and the greatest difficulty. It is perhaps not too difficult to understand why.

The instruments for controlling money supply and adjusting economic disorder in developing countries are fragile and not so clear cut as in the more advanced countries. And, therefore, they are not so easy to control. Moreover, the situation in developing countries is, as we have already noted, critically dependent upon what is going on in the developed world. That is to say, the external environment, which is beyond the control of the developing countries.

Yet, any change in the rate of exchange and the expected effects on the economy will be based on the assumption that firm control can be exercised over certain given factors and that a corresponding level of discipline can be maintained. If this is not possible, then the forces set in motion by devaluation may well be very different from what was intended by the policymakers, and the situation might actually worsen rather than improve. I suspect it is the fear of powerful external factors, which are subject to change, can very radically affect policy instruments, and are beyond the control of the policymakers that makes governments and policymakers in developing countries slow or reluctant to adopt recommendations for exchange rate adjustment.

On the other hand, there are situations in which the instruments for monetary control cannot or may not work efficiently unless the exchange rate is first adjusted. Unfortunately, this would also be the time when people are expecting a devaluation and are therefore hedging and adopting various strategies and covering themselves to take the most advantage of the coming devaluation or to avoid the worst of it. The element of surprise, which is often so important in devaluation, is thus lost, and the intended effects perhaps largely neutralized.

To give an example, I took office as Governor in August 1965, in the middle of precisely such a situation. The business community seemed to be quite confident that devaluation was around the corner and had to come as the only remedy for the financial crisis we were passing through. But, on the other hand, the Government had repeatedly rejected terms for a stand-by arrangement with the Fund because there was a requirement to devalue the currency. The business community was thoroughly demoralized and, as is often the case, credit sources, including banks, international banks, and export credit guarantee facilities for short-term credit, had all frozen up, pending the outcome of discussions with the Fund. The impression was that this was really to bring pressure on the authorities to devalue the currency. Meanwhile, short-term debts for imports were in serious arrears and the wrong signals were circulating in international markets and every conceivable pressure was being used by creditors to get their money out.

I recall on this occasion one incident, when my secretary announced a visit of the ambassador of a certain friendly country—I will not name the country. He came with his commercial secretary and there had been no previous notice of the visit. I met them at my door and welcomed them by saying, "Mr. Ambassador, it is an unusual pleasure for me to receive your visit today." And he replied, "Mr. Governor, I have come not as ambassador of such and such a country—I have come as a debt collector." Alas, he had instructions to follow up for an exporter in his country for a debt that was absolutely inconsequential but had remained unpaid for several months for one reason or another. I promised him it would be paid and it was.

This is only one example of some of the kinds of pressures that central bankers in developing countries can come under.

My first step in office was to write, after I had been there three weeks, I think, in September 1965, to President Nkrumah to advise him (1) that after studying the situation, I had found it to be far worse than I had imagined when I accepted the job; (2) but that I was

confident that we could resuscitate and correct it, provided the presidential authority would be put behind the Bank and ensure that we were given a proper chance; and (3) that if this were not done, we were facing a total collapse, and I quote, "not foresee the position lasting beyond March of the following year."

I think it shook him. My next step was, with the agreement of the Ministry of Finance, which was now more freely forthcoming, to raise the bank rate to 7½ per cent, which at the time was very high compared even by international standards. We specified credit ceilings (I believe somewhat after the fashion that Dr. Zijlstra has described) for the banks, restricting credit to retail trading, stockholding, construction, and some other areas, but liberalizing credit to mining, agriculture, including cocoa marketing, and timber and fisheries. The Ministry of Finance was expected to take steps to bring government borrowing from the central bank within statutory ceilings and the Fund was to be invited to resume the discussions on stand-by arrangements, at which exchange rate adjustment, that is, devaluation, would be again discussed.

But before this could be carried out, there was a change of government in February 1966 and soon thereafter agreement was reached with the Fund on a stand-by arrangement. Adjustment of the exchange rate was envisaged, but it did not take place immediately. Instead, we had the agreement of the Fund to follow an initial program of tidying up budget priorities and opening up internal credit systems, economic management, and so on, which were all in a state of confusion. And the point here is that in that state of confusion, you did not even know the rate that would be a sufficient devaluation of the currency.

In the process, again with the technical support of the Fund, we made use of some quite novel techniques, which were effective and yielded quick results. This program alone was sufficient to start restoring confidence and strengthening people's resolve to do business again. And the expectation of devaluation entirely disappeared.

As a result, when several months later we announced the devaluation of the national currency, it took all by surprise and the percentage rate of devaluation was smaller than would have been necessary if we had done it at the time of the crisis in 1965.

The drama I have described spanned the years 1965 to 1969, but to some extent the effects were still evident in the system until 1971. Several years later, there was a comment in a review by the then

Government in its 1978-79 budget statement which I thought was the best possible praise and justification for the hard work and dedication that all concerned, especially the Fund staff and the management which stood behind them, put into operation. It stated:

Between 1971 and 1977 the money supply rose from an average of $\not\subset$ 280.6 million to $\not\subset$ 1,761.1 million—an increase of $\not\subset$ 1,480.5 million or over 500 per cent. Crudely expressed on an annual basis, the average rate of increase over this period was more than 80 per cent. This situation may be compared with increases of less than 7.5 per cent per annum in the period of 1969 to 1971, less than 2 per cent per annum in 1965 to 1969 and about 20 per cent per annum in the first Republic 1960 to 1965.

Today, if we look back in hindsight—and I often do that—one fair comment might be made, namely, that the 2 per cent per annum growth of money supply, which was allowed in the period of our exercise, 1965-69, was perhaps too restrictive and that it is not necessarily a measure of success.

But I would totally disagree with any such view as uninformed. The first priority, as I have described, was to stabilize the situation and be on top of the problem. That gives the chance to introduce the measures. By the end of 1967 we were sure that we had achieved this. The next stage, starting from 1968, was to push for more development and growth, especially in agriculture and the export and import replacement sectors. During this process, money supply was to be allowed to increase as necessary to stimulate growth, but precisely at this time the central bank must have talked too much. Certainly, I must have talked too much about the need to boost agriculture and increase development. So I was invited and ceremoniously—or unceremoniously—appointed Minister of Agriculture.

It was Professor Einstein who, in an interview with the Christian Register, was asked about the formula for success in life. He said that if A stands for success in life, then the formula must be A = X + Y + Z, X being work and Y being play. "And what does Z stand for?" asked the interviewer. "That," said the Professor, "stands for keeping your mouth shut!" Alas, I had not learned my equation properly as a Governor!

MR. MARTIN: Thank you, Mr. Adomakoh, for those thoughtful and interesting observations. In view of the short time at our disposal, we shall forgo the question and answer period. On behalf of

30 THE 1981 PER JACOBSSON LECTURE

the Per Jacobsson Foundation I want to thank all of you for being here and for making it a most successful meeting. The Managing Director of the International Monetary Fund is hosting a reception following this meeting to which you are all invited. The meeting is now closed.

Biographies



Jelle Zijlstra was born in 1918 in the Netherlands. He studied at the Netherlands School of Economics in Rotterdam and received his doctor's degree with a thesis on "The Velocity of Money and its Significance for the Value of Money and for Monetary Equilibrium" in 1948. In the same year he accepted the appointment as a professor of theoretical economy at the Free University in Amsterdam.

A member of the Calvinist Party, he was offered the portfolio of Economic Affairs in 1952, which he

held until 1958. From 1959 to 1963 he was Minister of Finance.

In 1963 he returned to teaching at the Free University and became a member of the First Chamber (Senate) of Parliament as a representative of the Calvinist Party. From October 1966 to March 1967 he was Prime Minister. In May 1967 he succeeded Dr. M.W. Holtrop as President of the Netherlands Bank.

Dr. Zijlstra's activities in the international field consist of his membership of the Board of Governors of the European Investment Bank during the period 1962-63; in 1967 he was elected President and Chairman of the Bank for International Settlements at Basle, appointed Governor of the International Monetary Fund in Washington, and became a member of the Committee of Governors of the Central Banks of the Member States of the European Economic Community.

Albert Adomakoh was born in 1924 in Ghana. He studied at Downing College, Cambridge University, and following study at the Inner Temple, London, became Barrister-at-Law. While at the London School of Economics he wrote The History of Currency and Banking in West African Countries.

During the period 1957-69 he was, successively, Secretary of the Bank of Ghana, Managing Director and Chairman, National Investment Bank, Governor of the Bank of Ghana, and Minister of Agriculture.



In the years 1969-72 he served in international organizations as Assistant Director-General, Food and Agriculture Organization, and then as Director of Investments for Africa and the Middle East in the International Finance Corporation.

Since 1972 Mr. Adomakoh has served as a consultant in the fields of development and finance and has held various posts and directorships with a number of industrial and banking corporations.

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- 1965 The Balance Between Monetary Policy and Other Instruments of Economic Policy in a Modern Society—Lectures by C.D. Deshmukh and Robert V. Roosa (Washington); out of print
- 1966 The Role of the Central Banker Today—Lecture by Louis Rasminsky; Commentaries by Donato Menichella, Stefano Siglienti, Marcus Wallenberg, and Franz Aschinger (Rome); out of print
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