

Lectures in Development Economics  
No. 2

Lecture on  
International Monetary Issues

FRITZ MACHLUP

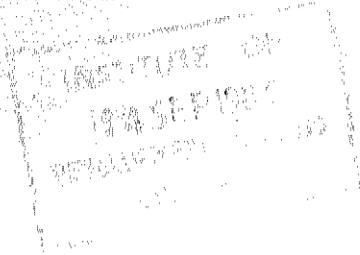
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**Biographical Sketch**

FRITZ MACHLUP (1902–1983) was an economist with strong transdisciplinary interests. Among his many books published since 1925 are *The Economics of Sellers' Competition* (1952); *The Production and Distribution of Knowledge in the United States* (1962); *Remaking the International Monetary System* (1968); *Methodology of Economics and Other Social Sciences* (1978); and the first two volumes for a projected ten-volume series on *Knowledge: Its Creation, Distribution and Economic Significance*; Volume I on *Knowledge and Knowledge Production* (1980), and Volume II on *The Branches of Learning* (1982).

He taught at Harvard, Buffalo, Johns Hopkins, Princeton and, for the last twelve years, New York University. He was elected Member of the American Philosophical Society, and Fellow of the American Academy of Arts and Sciences, and the AAAS. He received Six honorary degrees, two of them from universities in Europe.

Born in Austria in 1902, he came to the United States in 1933. He served as President of the American Association of University Professors, the American Economic Association, and the International Economic Association. Prof. Machlup died on 30th January 1983 of heart attack.

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## FOREWORD

This lecture on International Monetary Issues was delivered by Professor Fritz Machlup in Islamabad on 22nd November, 1981 under the auspices of the Pakistan Institute of Development Economics. The publication of this lecture was delayed because, being a perfectionist, Professor Fritz Machlup wanted to rewrite it extensively, but found it difficult to do so owing to his very heavy academic preoccupations. Now that he is gone, we are publishing this lecture posthumously. I requested Professor Robert Triffin to edit it suitably for publication and we are extremely grateful to him for promptly responding to my request.

Prof. Fritz Machlup was an acknowledged world authority on International Monetary Economics and engaged extensively in the debate on international monetary reform. It is just a coincidence that Professor Fritz Machlup's first scholarly work was on gold standard, and his last public address also focussed on international monetary problems at a major conference held on January 22, 1983. (I have dwelt at some length, in my 'introductory remarks' to the present lecture, on his many contributions to this area of economics.)

I received his last letter, dated January 26, 1983, in which he complained of angina pectoris which he developed as a result of his successful super-human effort to finish in one year Volume III of his *magnum opus* on *Knowledge: Its Creation, Distribution and*

*Economic Significance* as well as another volume on the *Study of Information: Interdisciplinary Messages*. At an advanced age of 80, even as young a heart as Professor Fritz Machlup's refused to take any more. He died of heart failure on January 30, 1983. For a man who never stopped working "in thunder, lightning or in rain" it was a befitting end to die, literally, 'in the harness', with all his intellectual faculties intact. He would have hated to dry up 'like a raisin in the sun' before being picked up by the Angel of Death.

In Professor Fritz Machlup's death the economics profession has lost one of its most illustrious and stylish exponents, who bore the cross of scholarship with great courage and grace. Along the thorny road of knowledge he travelled far and wide, sometimes all by himself, with complete familiarity, authority and rationality. As Chaucer once remarked, "He knew the tavernes wel in every toun". And no one "knew the tavernes" better than Professor Machlup did when it came to resolving with semantic clarity and taxonomic exegesis the knotty problems of economics, philosophy and logic. In breadth of erudition and lucidity of vision he can be compared with the Encyclopaedists of France. The passing away of this great scholar will be deeply mourned all over the world by his colleagues and students, to whom he was a philosopher, a guide and a friend. However, he lived and worked long enough to light a trail that will be followed by many a courageous soul to advance the frontiers of knowledge.

Syed Nawab Haider Naqvi

### INTRODUCTION TO THE SERIES

The purpose of this new Series is to create useful knowledge about development economics and to disseminate it widely. It is not possible to prescribe exactly the topics that will be discussed in this Series. Indeed, it would not even be desirable to do so because this subject is still developing. The mystery of the development process is not yet fully understood. The days of chivalry, when economic development was seen as simply a function of physical capital formation, are gone. The importance of such factors as human capital, education and religion as determinants of both the rate and the composition of economic growth is now gradually recognized. And then there are the efforts to understand more clearly the relationship between economic growth and income distribution. In this connection, the vital role of structural reform is also being realized. The practical (social and political) requirement of alleviating the incidence of absolute poverty has brought to the fore the key role of agricultural development. Furthermore, there is now a greater awareness of the importance of endogenizing the demographic variables in order to understand fully the problem of underdevelopment as well as the many ways of solving it.

In direct proportion to the comprehension of these issues, the intellectual fashions have changed among economists. And there are no signs — a healthy sign, of course — that economists will

remain far behind ladies in their love for fashion. As such, we have left it to the contributors to this Series to decide on the topics of their lectures. And, yet, it is to be expected that economists, as if guided by an 'invisible hand', will select areas of enquiry that are most relevant not only theoretically but also for practical policy making.

The contributors to this Series are all members of the Advisory Board of the Pakistan Institute of Development Economics (PIDE) and of the Editorial Board of the *Pakistan Development Review*. The visits of these outstanding economists have been made possible by a generous grant by the Ford Foundation, which will be administered by the Institute of International Education (IIE), New York. It is to be hoped that the success of this Series, which we can predict with certainty, will lead to greater financial support from the Ford Foundation and other donor agencies. Even more important is the 'fact' that these contributions will serve the cause of knowledge formation in an area where its marginal productivity is most likely to be optimized.

The present lecture by Professor Fritz Machlup is the second in this series.\* Prof. Machlup, a member of the Advisory Board of the PIDE, was most eminently suited to give this lecture on "International Monetary Issues" – a subject on which he has never ceased to talk and write. The lecture is followed by a lively discussion which, in many ways, clarifies the various points raised by Prof. Machlup. It is to be hoped that this publication will be widely read and used by economists throughout the world.

*Editor*

\*This lecture, delivered on 22nd November, 1981 in Islamabad was *not* sponsored by the Ford Foundation but by the State Bank of Pakistan where Prof. Machlup gave a lecture in the Zahid Husain Memorial Lectures series.

## Chapter 1

### INTRODUCTORY REMARKS

*by*

Professor Syed Nawab Haider Naqvi

Prof. Machlup, Ladies and Gentlemen,

It is a great pleasure for me to introduce Prof. Machlup once again. Yesterday, I talked of his contributions to various areas of knowledge. Today, I would restrict myself to his contributions in the general area of international monetary economics. As I remarked yesterday, it is in this area that Prof. Machlup has revealed his preferences most convincingly.

I was just having a rough count and I found that of the thirty-eight books that have flowed out of Prof. Machlup's prolific and precise pen, fifteen deal with problems of monetary economics. I think it will be pointless to catalogue all these books because they are available in all respectable libraries throughout the world. But I thought that it was a good point just to say a few introductory words about the contributions that Prof. Fritz Machlup has made in the highly intricate field of monetary economics. I can say it without fear of contradiction, and this is not to flatter Prof. Machlup, that in this field he alongwith Prof. Robert Triffin stands unrivalled among economists. Indeed, he stands out like a colossus among those working in this area. To me, as I saw him teach – and, of course, then I had to read all that he wrote, otherwise I would have failed his course – his contribution in the field of monetary economics has been at three levels.



First, at the level of expostulating a basic theory of international monetary economics. On this, as a person who has been in this field, I think that his classic paper on the "Theory of Foreign Exchanges", even though written in 1939, is an ever-green contribution to the subject. It is an article whose brilliance and radiance are not going to dim with the passage of time. I read it in 1965 and since then I have read it again and again. I believe that anybody who wants to know the theory of foreign exchange, in particular the elasticities approach, has to go through it. After S.S. Alexander came out with his 'absorption approach' and tried to show, with the zeal that characterises a pioneer, that the elasticities approach was no good at all, Prof. Fritz Machlup wrote his classic paper "Relative Prices and Aggregative Spending in the Analysis of Devaluation" (1955) which, while applauding the pioneering work of S.S. Alexander, showed that the two approaches – the elasticities approach and the absorption approach – were in fact complementary instead of being competitive or the one supplanting the other. "A contribution it is, and an especially meritorious one where it gives scope to the roles of both aggregative spending and relative prices", so adjudged umpire Machlup concluding his harangue to Alexander that in the analysis of devaluation the happy marriage of 'aggregative spending' and 'relative prices' must not be disturbed. So convincing was Machlup's 'sermon' that nobody has ever since challenged his judgement, even though the monetary factors have also been introduced subsequently. However, the introduction of money, instead of leading the 'couple' astray, has been a sweetener for them. The companion article on the "Terms of Trade Effects of Devaluation. . ." (1956), where Prof. Machlup builds on the same theme, is also a classic in terms of both analytical and expository excellence. Prof. Machlup has been writing and advancing the frontiers of knowledge in this area, yet if someone pushed me to the wall, demanding me to reveal my preferences in one minute or else face dire consequences, I would instinctively repeat the magical trio I have just mentioned. To use a Freudian phrase, the wisdom that radiates from these papers has now sunk into the sub-conscience of the students of the subject. Of course, if I were given some more time to think, I could mention a whole list of his books and scholarly papers; for Prof. Machlup has never stopped to grow.

Prof. Machlup's second contribution in this general area has been an elucidation of the basic concepts that are used in monetary economics – more misused than used properly and correctly. For instance, even as innocent-looking a concept as 'balance of payments' has not always been clearly understood by most people. To repair this defect of comprehension, the (economics) doctor now routinely refers his 'patients' to Professor Machlup's excellent paper entitled: "Three Concepts of Balance of Payments" (1950) in which he distinguishes between the market balance of payments, the programme balance of payments and the accounting balance of payments, where the first two concepts are defined *ex ante*, and the third only *ex post*. For instance, to most people, it would be confusing to imagine cases when at the same time the programme balance of payments is in deficit, while the market balance of payments is in surplus. However, the taxonomy introduced by Prof. Machlup makes these confusing associations transparent: it is entirely possible that while a government may have succeeded in convincing foreign donors of its need for large loans to finance its programmes – causing a deficit, *ex ante*, in the programme balance of payments – it may also have been pursuing prudent monetary and fiscal policies to hold the domestic demand firmly in check. This will cause a surplus, again *ex ante*, in the market balance of payments. Similar combinations are feasible between a surplus in market balance of payments and a deficit, *ex post*, in the accounting balance of payments – and so on. The upshot of these clarifications is that the red ink of the deficit in the balance of payments may or may not be an indicator of the ill-health of an economy. It all depends on the anatomy of the red ink!

Prof. Machlup has also been elucidating concepts like equilibrium and disequilibrium which come again and again in the context of his discussions on monetary economics. The notion of international reserves and the "fuzzy concepts of liquidity" have been the subject matter of yet another article which is one of his illuminating pieces. Prof. Machlup in this article has shown, among other things, how the concept of liquidity can be understood in forty-four senses instead of just one! This is so depending on

sources of liquidity, the uses of liquidity and the institutions which are issuing liquidity. People have tried to determine the optimal level of international liquidity but Prof. Machlup has shown that many of them are talking past each other mainly because they do not always understand all the things that they are talking about. Just to give an example of what semantic confusion can do, Prof. Machlup has noted that if you use – rather misuse – the term international liquidity in different senses, it is quite likely that you come to the following paradoxical situation: a system may be suffering from deficient liquidity precisely because it has supplied excess liquidity!

The third most penetrating contribution of Prof. Machlup has been in the area of the theory of international monetary *policy* and practices. He has cast his analytical net far and wide to catch all kinds of fish – and red herrings too! In particular, he has analysed the institutional practices of the IMF and other institutions, showing up their inherent ‘weaknesses’ and anomalies. His witty aphorism sums up rather well the basic problem: “money needs takers not backers” (*Remaking the International Monetary System*, 1968). This profound remark also points the way – the only way – out of the liquidity crisis from which IMF has suffered. He has brilliantly surveyed the various plans for international monetary reforms from this vantage point. His monograph, *Plans for International Monetary Reforms* (1964), is an indispensable guide in this veritable jungle in which all ‘planners’ of all hues and colour roam about tossing their plans at each other. However, in my humble opinion the classic in this field is the one that I prescribed for all our friends to read before coming to Prof. Machlup’s lecture: “The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer” (1965).\* The ideas contained in this paper have directly contributed to the conception of the SDR (Special Drawing Right) innovation – which just stopped short of turning into a revolution because the obscurantist forces intervened in good measure to prevent the ‘epidemic’ from spreading too far. Prof.

\*This article was published in *Quarterly Journal of Economics*. (Vol. 79, 1965).

Machlup will talk about the various ideas contained in this paper, and perhaps will 'update' them. However, to give an example of Prof. Machlup's ability to reduce complex ideas to their essentials, I refer you to the following startling statement in his 'cloakroom' paper: "As long as we are concerned with international, and not interplanetary, payments there is no need to worry about the resources of an international bank whose liabilities are accepted as reserve assets of national reserve bank." Even though Prof. Machlup dislikes (misuse of) mathematics, I call this the fundamental Theorem of International Reserves. Though simple, it may look almost weird to many: how could this be a correct statement since all the debates in the IMF have maintained that a particular investment may drain the Fund of its resources! I think that this Fundamental Theorem needs to be widely understood if fatal errors are to be avoided.

We all know that in science there are two things which really have been responsible for scientific progress. The first is the process of simplification. That is, you simplify a complicated thing to its essentials. I think that in this Prof. Machlup has succeeded like success. This was the remark that I made yesterday, and again to-day, that apart from all the other contributions which he has made, Prof. Machlup's greatest contribution has been in clearing up the jungle of semantic confusion. Prof. Machlup commands unrivalled mastery of semantic dissection and also analytical incisiveness with which he goes about his task. The second principle of scientific progress has been 'generalization'. I think both these characteristics, simplification and generalization, shine through all his work, particularly in the area of monetary economics, and I think this quality of his has inspired succeeding generations of his students and of all his readers. With these few words I would like to close, before I may be suspected of starting to give a lecture on Prof. Machlup. I would now request Prof. Machlup to deliver his talk.

## Chapter 2

### INTERNATIONAL MONETARY ISSUES

(Lecture by Professor Fritz Machlup)

My dear friend, Naqvi, now you have made it almost certain that the audience would be disappointed because no one can live up to that praise. Moreover, when you tell me how lasting and how great my contributions were, some of which were made in the 1920s and in the 1930s I come to wonder, have I ever grown! If I was so smart in the 1920s and 1930s, I have no rate of growth to show, and growth is the modern paradigm of measuring anything. Well, I do not know that I have grown. I have not grown in size. That I know. I have lost at least three inches during the last few years but I shall keep up and try to do my best.

When you recommended to the audience, this morning, to read my old article on "The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer," it occurred to me exactly when the ideas for that article first came to me. It was at a meeting of the U.S. Treasury Department where I was one of the consultants. The Treasury had always a large number of consultants and since they knew that they would give contradictory advice, they had them all in one room arguing with each other and with the Secretary of the Treasury, the Under-Secretary and Assistant Secretary. They were all sitting and listening to the arguments of the Professors to try to make up their own minds and, of course, rejecting everything that they heard. Now at that meeting some people, some of my colleagues, probably were very much

concerned about the following question: Does the IMF have adequate resources to make available to its members for this or for that, or does it not have enough resources? And at this point it occurred to me – and I explained to them – the need for reserves of a single bank, of a national bank, and of a world bank. And the words occurred to me:

(1) As long as people make payment only from one account to another account *in the same bank*, the bank does not need any reserves because this is merely a transfer from the account of Mr. A to the account of Mr. B. The bank does not have to make any payment to any other bank.

(2) However, if there are inter-bank payments, a need of reserves definitely arises. If Mr. A has his account in bank X and Mr. B has his account in bank Y, then bank X has to make a payment to bank Y. Hence there was a need for reserves for inter-bank payments.

(3) Finally, there are payments between nations. As long as payments are within the same country, there is no need of any payment from the country to another; but when there is a need for international payments, then it becomes necessary that the one nation from which payments are made to another nation have some kind of reserve assets acceptable to the other nation. So there was a need of reserves for a nation. But is there a need for reserves in the entire world, if there is only one world? As long as no one in this world makes any payment to anybody on another planet, there is no need for a whole world to have any reserves.

Now this idea of inter-planetary payments – a joke, of course – appealed to my colleagues and one of them happened to be the editor of the *Quarterly Journal of Economics*. At the tea-break he came to me and said: “You must write that up for us; we want to publish that”. And that was the origin of that article. Of course, I expanded it considerably on my presentation before the Secretary of the Treasury.

I shall discuss today a good deal about reserves and I would like to use a very simple example for the relation between reserves and adjustment. I have used, I believe, successfully with other groups an example I think worth repeating, though I usually do not like to repeat. Assume that I suffer from some accident and have to undergo medical treatment. If I have some money in my pocket or have cash reserves or money in my bank, I can pay for the cost of that emergency and still eat the same amount of food and get the same amount of clothing and shelter and heat, etc., since I can simply draw on my reserves to pay the persons who sell me the goods and services. That will give me the satisfaction that I need. If I have absolutely no reserves, neither in my pocket, nor in my bank account, then I cannot pay unless I get a loan from someone. I must try to borrow. If I am successful, the financing of my need will make it possible for me still to eat and still to keep warm. Assume, however, that there is no one who lends me a penny. Then, what can be done? I have got to adjust; I have got to go hungry or at least eat less. Unless I eat less and turn down my heat, I have to adjust immediately because otherwise I can not get what I need. So we have established here that if someone feels there should be immediate adjustment, the best recipe is to have no reserve and give no credit. Then every adjustment would take place immediately, without delay. But that hurts, and hence we do have systems where people have cash and also where people can possibly borrow. These two devices – reducing one's cash reserves and getting aid or getting loans from someone else – make it possible to defer adjustment or to slow it down and make it less painful.

Now exactly that simile, that analogy, will work if we just now direct it to a national economy. Assume that a nation has an emergency that requires additional imports or a higher price of the imports – say, oil – and it has to pay more. If that nation has absolutely no reserves and cannot get any loans or aid from the outside, that nation must adjust immediately. But this adjustment need not be planned, need not be directed by anybody simply because there is an international market for the currency of that nation. The process of that nation or the citizens of that nation trying to

exchange their currency for the currency of other nations from which they import would lead to a depreciation of their own currency – that means the appreciation of other currencies – and this exchange-rate adjustment becomes immediate because the goods of that country will have to be sold at fairly low prices in real terms and the goods that they import will have to be paid for at much higher prices in terms of their own currency. This adjustment is immediate.

I said before that just and immediate adjustment is painful, more painful than perhaps slower adjustment. I would say personally that very long deferred adjustments usually are very harmful but I shall not go into this now. The point is that a completely flexible exchange rate system, where there is not the slightest attempt at financing a deficit, forces countries to adjust immediately and that is something which they sometimes do not like. It happens that some economists – good economists! – are heartless, and have all only a head, but not heart. If they also have a heart, they get usually terribly confused. They do not know whether they should follow their head or their heart. Now they are also politicians and, therefore, they are *political* economists, and in this case they have to use both their head and their heart. I have said that under perfectly flexible exchange rates, each country must adjust to any change that occurs. And changes occur every day: there are price changes, changes in weather, emergencies of this sort or that sort. There are changes occurring every day, and in daily adjustments there is no such thing as an average over the year. So you do have a sudden increase in the exchange rates or a sudden fall in the exchange rates. Exchange rates fluctuate. However, even if there are no governments that try to reduce these adjustments by intervening in the market, there may be some private people, such as financiers and speculators, who may provide the finance that can smoothen the fluctuations in exchange rates. These people can supply the finance needed to defer or to slow down the adjustment. So exchange-rate speculation, if it is done by wise people who believe wrongly that they can look into the future, can provide the finance needed to slow down the process of adjustment. Governments do



not trust private speculators. Why? Well, they could not remain in the government if they were not thinking at least that they are smarter than the private speculators and if they were not able to advertise such superiority of mental capacity and of capacity to prophesy. So here are governments saying that these private speculators do not know things well enough; we know them better. And then monetary authorities – the reserve bank, the central bank – will do some intervening. If they think that the exchange rate falls too quickly or should not have fallen at all, then they will make available foreign currency to the market, against the national currency, and vice versa, if the exchange rate or the currency appreciates. The governor, or his people, will say this appreciation is now justified, that this intervention is necessary to avoid market “overshooting” and avoid an unnecessary, unjustified depreciation or appreciation of the national currency. In these interventions they may either pile up enormous reserves, or deplete their reserves so that one day they may have almost nothing left and adjustment will become unavoidable.

This is where the International Monetary Fund may come in, and say it will help the country and allow it to continue such interventions, to enable the authorities to beat the market, to fight the market forces and insist that the exchange rate of foreign currencies be lower than it would be if it were all left to the market. I believe that these introductory remarks have shown what a reserve and what a loan by the IMF or what drawing rights with the IMF are really intended to achieve. They are intended to achieve a delay in adjustment.

Let me now come to an idea that is very closely connected with this. We spoke here of the reserves of an individual country and the reserves that each may use or borrow to slow down adjustment and we spoke of the aid that the IMF can give her. Now comes the question: is there such a thing as a total worldwide need for reserves? From my initial remarks about the absence of interplanetary movement, one may think: oh! there is no need for reserves. Yet, there is a very well-entrenched idea of each monetary

authority that in order to keep a domestic economy at the right keel and at the right pace, it should be able to increase money supply by a certain percentage every year. Some people, like the monetarists, would like to have that percentage fixed over the average of some years at 5%, 10%, 15% or even 20%. We would not go into that quarrel, but one thing is certain: the central bank that increases money supply, or allows money supply to increase, will want also to have an increase in its reserves, and if that increase does not take place, it may take measures that are harmful to the economy: import restrictions, systems of export licensing, credit rationing, i.e. giving credit according to the judgement of a wise man or a group of wisemen, although this will in fact harm the economy, etc. And in order to prevent the authorities from doing such things because they see their reserves as too low, it is desirable that the reserves of all the countries have a chance to increase over time. Now if the reserves of all the countries should have a chance to increase over time, something must be done to create these reserves.

The IMF was not designed to create reserves. The original idea was merely that it would collect national currencies from the various members and be willing to lend these national monies to the various countries. The IMF did not use the correct terms, "lending" or "borrowing", preferring to speak of "selling" or "buying" foreign currencies. But you know that if I sell you dollars for a piece of paper that you print, this is as much as lending. The authorities often try to avoid problems by choosing an unintelligible term "pay". So IMF was not designed to create money but merely to collect currencies and shift them around. In this article, which Prof. Naqvi has assigned to you as compulsory reading, I point out that the IMF became a warehouse for the storage of national currencies, with the possibility of acting as a kind of credit agent: it spoke of receiving this much and of lending this much, and of being repaid, and so on and so forth. *They could not create new reserves.* Yet, the IMF had evolved in such a way as to do similar things as adding to the reserves. This is a technical point which I shall not bring in now because it would take me too long and leave

no time for something else. By and large, it was a warehouse, a storage place and not a creator of reserves. Reserves in the early 1950s did, however, increase. They increased simply by the fact that Americans made many long-term investments in terms of dollars and that these dollars were not all used by the receiving countries to purchase goods. Some of these reserves, some of these dollars, were simply hoarded as reserves by foreign central banks or monetary authorities. So the U.S. sent dollars abroad, not physically, but by mere book-keeping entries: credits to the foreign countries account, and debits in the U.S. account. The point was that the possibility of spending dollars was not utilised by all countries that hoarded dollars. They bought dollars with their own currencies and kept these dollars, thereby increasing their reserves. It was clear to a few economists that this could not go on because if it went on and on, the U.S. would incur year after year an increase in her short-term liabilities. Dollars were given out. They were all short-term dollars and the other countries kept them and could use them any time. So that was an unstable system and that was the Bretton Wood system. It was funny that some thought of it as a very safe system. Now, as you mentioned, Prof. Triffin was the first one who saw that this could not last and a group of others agreed that the system was bound to break down if this purchase of dollars by other central banks did not end. But if dollar purchases ended, the increase of reserves could become insufficient. The monetary policy and the economic policy of the whole world depend on a continuing, although moderate, increase in world reserves. So the question arose: What to do? Most people thought, and still think, that the IMF's role has to change: the Fund has to become an agency which can create reserves. This was the beginning of the idea of Special Drawing Rights. Thus, the IMF created with ink and paper, and nothing else, these special drawing rights and they were allocated to all the countries in the world according to their quotas in the IMF. Among the countries which received such drawing rights, some did not need more reserves; they had enough reserves. Other countries are, however, very happy to receive such reserves because that allows them to make purchases in other countries that otherwise could not be made and this meant that the creation of special drawing right was, in fact, inseparably connected with

transfer of resources because if some countries make use of these drawing rights and purchase goods and services from other countries, they achieve a transfer of real resources from the other countries to the recipients. Many economists did not like that one bit. They said that the IMF had no business doing this. The IMF may finance some deals in the very short term but should not be allowed to contribute to the transfer of resources from one group of countries to another group of countries. On the other hand, the developing countries said: "Well, you are rich enough. You have a lot of reserves. Indeed every buy from you is to your advantage as it increases your exports and your factories operate at higher capacity. It is a good idea, but special drawing rights should be given only to the countries that need them for buying things. It should be used for the transfer of resources."

This became a real controversy, a controversy that is not finished even today. It is still that quarrel whether special drawing rights have the purpose of transferring resources from one group of countries to another or whether they should merely allow all countries to have a little bit more in their reserves, enabling them to keep a well-disciplined and yet not constraining monetary policy.

Many people called this the problem of the "link". They said they wanted to link this device of creating reserves with the need for real resources by the developing nations, and they insisted with all the political and diplomatic powers that such a link be established. Other countries resisted with all their economic and political power. They did not want this link to be established.

Now comes the problem of the recent months. Special drawing rights were distributed in 1970, 1971, and 1972: about 9.3 billions in all. Then they were no longer distributed for several years. Then there was again a second round and they distributed for another three years four billion dollars a year, totalling 12 billion in 1979–1981. The last distribution was in January 1981. When the last IMF annual meeting was prepared, various groups made their statements. There was a statement of the Group of 77. It is called 77 because it had originally 77 members. Now it has over a hundred members.

This Group of 77 argued that SDR allocation should be resumed at a pace of at least 12 billion dollars per year. There were other international reports, such as the report of Brandt Commission and so on, in favour of distribution of SDRs. The Group of Ten, the ten most industrialized, financially strong countries, however, said: "No, we cannot do that; there is already an excess of reserves in the world. Indeed this large excess of world reserves has contributed to the fact that we have world-wide inflation, since these reserve increases increased national money supplies. So, let us try not to increase reserves any further. These talks about the link get on our nerves. By not distributing SDRs at all, there will be no link, because you cannot link resource transfers and reserve creation if there is no distribution at all."

Be that as it may, the Group of Ten prevailed. The annual meeting agreed, by majority vote, that there should be no distribution of drawing rights. It was, of course, said later to the interim committee and to the executive board of the IMF that they should study the problem. By saying, "Let us study the problem", one gains time. Everybody says, "It is not yet our last word; it is now being studied."

I want to connect this whole discussion with the problem of gold. In the distant past, when there was a gold standard, some countries produced no gold and some countries produced gold. If the former wanted some gold in their reserves, they had to acquire it. They could acquire it from the gold-producing countries only by exporting something to them. So, they had to transfer some real resources, i.e. goods, products of their own labour, in exchange for the gold which they put into their cellars. It was not a very productive use for that gold to sit in the cellars. It was withheld from industrial uses. It was withheld from ornamental uses. No one could possibly look at it. So, these countries which were not gold producers worked, produced, exported and got gold to put in the cellar. Now, one can say that if these countries were so foolish as to surrender the products of their own productive resources to other countries merely for that gold to be put into the ground, they should be equally inclined to surrender their products for some

better purposes; and what better purposes could there be than to give resources to countries that need them badly for their development? So, one could say that anyone who is in favour of increasing international reserves by purchases of gold should be even much more in favour of increasing international reserves by giving funds to the developing countries which can use these funds to acquire these resources. This is irrefutable. Of course, somebody may say that he is both against the gold standard and against development help. That is a consistent position. It is foolish to surrender our resources to the USSR on the one hand and to South Africa on the other. These are the two major producers of gold. I also do not want to give up our resources for development aid. If, for example, the development aid link or the distribution of SDRs were 12 billion dollars a year, well, that would mean that the industrialized countries would surrender 12 billion dollars worth of drawing rights to the developing world. So, those people are consistent when they say that they do not want either of it. On the other hand, others will argue as follows: "You have in your country, in the U.S., in France, many people who are in favour of the gold standard. Now, then, instead of buying gold you should use your resources better for re-building or developing the less-developed world." This is not an economic argument any more. It is an argument of "If you think that way, then as a consequence you should do that; if you think that way, then etc., etc." This is not a problem that can be solved by economic reasoning. It is only a problem of logical relationships.

I spoke of the gold standard and of the propaganda that is made for its restoration. First of all, let me say the restoration of the gold standard is a practical impossibility. The world as it is can never work with the gold standard. If some foolish people tried to put a gold standard together, it would break down in very short time. I leave it to you to say whether it would be six months, or 18 months. It just could not be managed. So, these people who are in favour of the restoration of the gold standard are just simply poor economists who believe, as an article of faith, that gold is a most sacred thing and that it should be used as money. Nevertheless, there are fools, even in the houses of parliament and Congress.

And so, there are a few people of that sort in the Senate of the U.S. and in the Congress of the U.S. Not many, but a few. These few people can always propose a bill, and, so, about over a year ago, some of these Senators and Congressmen agreed that there should be a Commission to study the role of gold in the monetary system. It was still under the Carter regime. President Reagan has inherited that Act, that law. So he had to appoint a Commission. That commission contains some Republicans, some Democrats, some experts, some non-experts, some wise men, some fools – in other words, a well-composed, proportionally composed Commission. They have also a Secretary, a very good economist, a woman, Anna Schwartz, and, of course, she supplied the Committee with the right data and with the right information.

From the present state of the conducting of the hearings and of the discussions it is pretty clear that this Gold Commission will come out with a report saying it is completely impractical and that it should be done away with. A small minority of one or two people will undoubtedly say: “That is all wrong. Gold is the best way to avoid inflation, lower interest rates, increase growth, and reduce unemployment; gold will do everything that is desired.” A new law will be introduced with a proposal for a new Commission, and for the next two years this new Commission will study again the gold standard question. Now, there are journalists to report about this. Since journalists have to find something to report on, they will use these reports on the working of the Gold Commission in their nation and that will go into the papers all over the world, in the sub-continent, in Asia and so on, and newspaper readers will find that there is constantly something in their papers about gold. They will believe that the gold standard is just around the corner. Take it from me: it is not around the corner, and not even ten blocks away. I had a nice ending in mind for this; now I forgot what it was; perhaps I will end right here and invite questions. Your questions will surely give me an idea of how to end this presentation with a better ending than I had in my mind. Can I now invite questions?

### Chapter 3

#### DISCUSSION ON INTERNATIONAL MONETARY ISSUES

*Dr. A. R. Kemal:* The U.S. and the U.K. have been supplying their currencies for a long time to increase world reserves in the international market. This way they have collected a large seigniorage by just printing the money and throwing it on the market. Now, when the developing countries want 12 billion dollars or so a year from them, I do not understand why the developed world should object to the transfer. There can be an argument about why 12 billion dollars and not less or not more than that figure be transferred. Now this is a sort of seigniorage which would have accumulated with the IMF for transfer to the developing countries. The trouble is that the U.S. or the U.K. or for that matter other developed countries would object to this transfer.

*Professor Machlup:* This question has been discussed frequently and I have the right to say that the U.S. and Britain, first of all, have not forced anybody to buy dollars. They have used dollars to purchase foreign bonds, foreign shares, buildings, factories and so on. The other central banks of the world were not forced to buy these dollars. But they wanted to buy these dollars and sometimes for political reasons continued to buy these dollars against their own interests. Moreover, the U.S. has paid interest on these dollars. So they have not collected seigniorage in that sense. The world "seigniorage" was created many, many hundreds of years ago when



a Prince or King coined his mock gold coins and did not use all the gold for the gold coins, pocketing instead some for himself. He, in other words, got something for nothing. With the U.S. printing these dollars, and the others buying these dollars, the U.S. has paid interest on every one of these dollars and so has Britain. Sometimes the interest rate paid to dollar holders was very high. Especially now, the interest that the Treasury Department pays for a dollar in the reserves held by other countries is approximately 12 percent to 14 percent.

So this is not seigniorage in the old sense of the word and it is a very unfortunate metaphor that people have been using for it. One should not use the word seigniorage when interest is paid on these holdings. The U.S. has not profited from that, contrary to the view held by that great economist, Charles de Gaulle. The President of France has always said that the U.S. enjoyed and was abusing an "exorbitant privilege". What happened in fact is that other countries have agreed not to let their currencies appreciate as they would have if they had simply refused to buy the market overhang of dollars. I would not call this seigniorage, since seigniorage is the amount pocketed by the issuer of the money when no interest on it is paid. Now, when the issuer of the money is the IMF, it is not collecting seigniorage on it. The real point is that of the transfer of resources from countries that are being paid with the foreign exchange acquired with SDRs, and the transfer of resources to the developing countries. I would speak of resource transfers, but not of seigniorage at this stage. Here you see the semanticism. I like to have clean words used so that they cannot be politically misleading. So let us agree that the issuance of drawing rights would be leading to a transfer of resources, not from the IMF but from the countries that are being paid with SDRs.

*Dr. Akhtar Hasan Khan:* Professor Machlup, you have talked about the 'link' between liquidity, international liquidity and development assistance. There were two main arguments against the latter. One, as you have correctly said, is the political problem that the developed countries would not like to hand over their part

of the liquidity for development purposes. The other was the technical argument when you said that there would be an excess liquidity and there would be more inflation. Regarding the second argument there is a lot of controversy. Some people say that the magnitude of extra liquidity that would be passed on when development assistance is increased should be so small in relation to world trade and general liquidity from other sources that the argument does not carry much weight. Do you think that the technical objection to this link was great or was it only a political objection that prevented or aborted the idea.

*Professor Machlup:* Thank you for your question. I believe that the argument of the inflationary impact should not be taken too lightly. It is a serious argument. Let me put it into these words. Let us talk about the U.S. The U.S. has an inflation rate that it very urgently tries to reduce. If it does not succeed in reducing the inflation rate, I see the future of the U.S. in a very dark light. In order to reduce inflation, you have to reduce the budget deficit which is the biggest contributor to the rate of inflation. Now you may say that this budget deficit runs at a yearly pace of 40 billion, 60 billion, or 80 billion dollars. It matters enormously. They are trying now to reduce it by only 10 billion dollars and even this small reduction has great difficulty being accepted or approved by the Congress. There is a great deal of debate and a great deal of controversy and conflict about how the budget deficit should be reduced by \$ 10 billion. Should we perhaps quickly lower social security payments to old people, to sick people in the U.S. and so on? If the U.S. were following the requests of the Group of 24 to see to it that official aid be equal to three quarters of a percent of the GNP, it would add 20 billion dollars to the deficit. So you see that this proposed aid is by no means a small item. Now you will say 12 billion dollars for the entire world is not as much as 10 billion dollars for the U.S. But in this fight against the price inflation in the U.S., I would say that every 1000 dollars count. If I said "every dollar", that would perhaps be an exaggeration, but every thousand dollars count and in the various government departments, in development finance, in aid for student loans who study in the universities, we try to cut ten thousand dollars here and twenty

thousand dollars there, and so on, in order to reduce the demand for American goods. Any demand that would now come from the outside would be in conflict with these needs and I would say that the inflationary impact of any source coming from domestic demand, business demand, investment demand, or foreign demand would be equally effective in destroying the attempts of the American Government to reduce the rate of inflation.

*Professor M. A. Hussein Mullick:* Prof. Machlup, I must say I have very much enjoyed your lecture. Now I take you to the Bundesbank in Frankfurt because I have the feeling that they tried to refuse to increase in the beginning their discount rates on the plea that this will affect investment and a whole discussion started in the Federal Republic of Germany with the Christian Democrats on one hand advocating the conventional method of using the discount rate while the Social Democrats had opposed this policy. I wonder how far this controversy in Germany throws additional light on this subject. The views of the Social Democrats were that if they follow the conventional monetary economics the results will be that they will be simply exporting more unemployment or, if not, they will be financing or leading to more unemployment because the investment will become more expensive. This I thought is my first question. My second question relates to your discussion on "adjustment". You said if the adjustment is too much prolonged, problems arise. You see, in the case of Pakistan we are all the time begging for rescheduling of foreign debts. Some economists have been advising the government that we have to do this with enormous consequences for the future generations which may not be in a position to pay. On the one hand, the World Bank is letting the Third World get indebted to it to the tune of 3 or 4 hundred billion dollars. On the other hand, they are still not shy of giving more funds to the Third World and in fact they are misusing the IMF for purposes of their own business. I think this is something incredible as to why monetary economists are keeping quiet when all these things are happening. There is an attack on the conventional theory and on the institutional build-up all over the world which in fact is postponing the problems rather than solving the problems.

*Professor Machlup:* These are two difficult questions but both can be commented upon. I do not know whether my answer is correct. The Bundesbank, the German Federal Reserve Bank, has been following a monetarist policy earlier than most other countries. To the great benefit of Germany, they have been able to hold the rate of price inflation down. Also, the rate of unemployment was not very bad. They gave jobs to a large number of foreign workers. The policy of the German Federal Bank was relatively consistent. President Emminger insisted that the reserve money would not be increased at a very high rate. He fixed the amount. He does not want to have an increase of more than 8 percent. So everything was fine for a long time. Then the Government of the U.S., joined by few others, committed a terrible error of putting pressure on the government of Germany to relax their monetary discipline. The Bundesbank tried to resist, but Chancellor Schmidt gave in and this was the revival of the German inflation. I blame chiefly President Carter for imposing an inflationary policy on the German Bundesbank. German inflation had the same effect that it has everywhere, namely, it led to further inflationary expectations, increased wage rates, a lack of competitiveness of German industry, and eventually unemployment. The Germans are now in that position. Their budget deficit is very bad. I do not know whether it is as bad as the one in Britain or in the U.S. Now, Schmidt says that he must do something to reduce the budget deficit because if Germany does not reduce the budget deficit, it will have to borrow money, and borrowing of money raises the rate of interest. The Bundesbank was absolutely correct in not reducing the rate of interest because if they had reduced the rate of interest, the mark would have fallen even much further than it has in the last two years. So the high rate of interest in Germany was an absolute act of monetary prudence. Do not forget that the French at the same time also have a higher rate of interest, and enormous funds flow out from Germany to France, further weakening the German Mark. Now the Germans are in the same position in which practically all the rest are. They have an inflation rate that is higher than what it ought to be. They also hope to bring it down to 5 percent or less by next year but the rate of unemployment is increasing, and they expect it will increase further for at least another year, or at least another half a year. So

I myself applaud very much the resistance of the Bundesbank and am sorry that they did not have enough clout, enough power, to resist the pressure of the German government. That an opposition party always gives that advice, is another question. If the opposition parties were not in the opposition but in the government, probably their rate of interest would be higher than it is but this is a problem that an opposition party does not have any responsibility, and they can easily advise things that they themselves would never do.

Now your second question is about the lendings of the World Bank. I hate to criticise these people because the World Bank people are sincerely doing what they are doing. They think they do the best that can be done. They have a huge bureaucracy. They send people to all countries of the world and these people want to come home with fine projects to finance. This is a great project and if the project is very appetising, then, of course, the Board will approve it, but some of these projects are not so good. Let me give you an example, an illustration, for choosing a good project. Princeton University, with which I have been connected for a good many years, received from very generous donors money for the construction of new buildings. Another building for Bio-Chemistry, and another building for this, and for that, and so on. Now, when the buildings were all there, the heating cost of each building was so great that the University was in a deficit. These were good projects because research in these fields is highly productive, but they will ruin the university. The same thing is true with the World Bank. They may, in their generosity and in their willingness to help, make funds available for projects which in the end are not helpful to the recipients. Now comes the question of World Bank helping to press the IMF for giving loans that really ought not to be given by it. Again, if you want badly to do something, and you cannot do it, you find someone else who can help out. Here, then, is the pressure of two people in the neighbouring buildings, which have the same Board of Governors as you know. Again, I am not charging the World Bank with mismanagement. I am not charging them with bad intentions at all. They are good, learned, generous fellows. They try to do their best but, I am afraid, wisdom cannot be monopolized.

*Dr. Javaid Azfar:* I would also like to ask few questions but I think time is probably running out fast. My first question would be an extension of adjustment mechanism which Professor Machlup has talked about. It stems from a presumption on Professor Machlup's part and also from Professor Mullicks' part that the world trading system should be such that every country should be in current account balance. There should be no surplus countries and no deficit countries over a period of time and that adjustment should take place within two or three years. This assumes, of course, that there will be no surplus country; and now we all know that it is one group of countries which, for very genuine reasons, exports non-renewable resources of energy. They are bound to be in surplus and if they are going to be in surplus some other group of countries is bound to be in deficit. It is not very difficult to see as to which group of countries is going to be in deficit because of an increase in oil prices. We in the developing countries feel that the burden of adjustment has been forced on us and it is not fair because the developed countries can pass on the burden to us. You have said that the U.S. pays rates of interest for its dollars but we feel that again the U.S. can finance deficit just by printing currency. It is the developing countries that have always been asked to bear the burden of adjustment. The case for the link between any bank reserve creation and the development assistance is strengthened because one group of countries is bound to be in surplus for very long period of time and certainly other groups of countries will be in deficit and if the genuine needs of these developing countries are to be met and their development plans are not to be thrown overboard, they are going to be in long-term deficit. The relevant question is: What is the best means of alleviating this problem – through aid or through SDR creation? That, in my view, is the problem. I do not know what the question would be. But there should be an appropriate solution for it. The second question which I would like to ask is . . . . .

*Professor Machlup:* May I ask you, because of my short memory, that I be allowed to answer your first question and you then come to your second question. I do not want to show how poor memory I have. Now the point here is: What do we mean by a surplus

country? Prof. Naqvi introduced me partly by referring to my various different concepts of the balance of payments. Now we must first of all ask if there is a part of the world producing oil, selling it on very high cartel prices. They can surely have a surplus on current account. That means that the exports of goods and services will have a higher value than what they can purchase. That does not necessarily mean that they have an overall surplus because they might use the receipts for investment in other countries, and if they use none of what they receive just to build up all their reserves, if they use all their receipts for buying up lands, buildings and factories in other countries or creating new enterprises in other countries, from motels to steel industries, then there would be no overall surplus. So the question of this imbalance in international payments or the chronic surplus of the oil-exporting countries is a phony one. It is the fact that their savings, their excess receipts, are not used for investment abroad. Now I have often discussed but I do not want to discuss here what kinds of institutions could be used here. The world has resisted the investment of some of these funds. Switzerland began by saying, "No foreigner can buy land, real estate." Other countries decided that foreigners desirous of buying land etc. must obtain necessary permission. There was a resistance to the investment of foreigners. Then there is a fear of blocking and confiscation. Some people would say, "Once an oil-producing country confiscated the assets of another country, there will be a revenge." So, if a big country invests in an industrial country, maybe someone will have the terrible idea of confiscating the investment or the assets. So there was a feeling that neither a country that should receive the investment nor the country that were to make the investment had the right incentive to do so because of all these restrictions which had appeared. Therefore, I thought international action would be necessary to take these excess funds, accumulated by the oil-exporting countries, putting them into an investment fund or investment trust that would make sound and productive investment all over the world in industrial and non-industrial, developed and non-developed countries, and that would solve that sort of problem. The question that you connected with it was, of course, that adjustment would have a high price for it. It is quite clear that if suddenly price of grain or price

of rice or price of anything needed would rise, the poor will suffer more than the rich. It is absolutely clear; it is not a matter of conscious discrimination but the rich may not feel it very badly. He may do a little bit of cutting down here and a little bit there, and everything will be all right. The poor has not this flexibility. He will really suffer. Now the question then arises that in view of the fact that the developing countries are hit much harder than the rich countries by rapid increase in the prices of oil, one should do certain things to lighten the dramatic emergency and this was, of course, why the Fund created an extended credit facility/right. I grant you that not enough has been done to alleviate the burden on developing countries, but what can one do? One cannot force all these countries to step in and do something.

*(The second question was not asked by Dr. Azfar because of the shortage of time.)*

*Dr. Mahmood Hassan Khan:* Your talk this morning as well as the earlier talk has dealt with many complex issues. Some of the assumptions are quite tendentious. There is a school – and I am sure you go along sympathetically with it – which believes that inflation somehow is only a monetary phenomenon. We know that it may have been true at one stage in the past, but since the market conditions, especially in the West, have changed rather drastically – the West does not have the same competitive market structure today that it had in the past – you can not put all the blame of inflation on just the government: the government has done this and the monetary authorities are doing this. In other words, inflation is not necessarily a monetary phenomenon. Some would say that we must look into the market structure today which is contributing perhaps equally, if not more, to inflation. I want to link this with the other question.

*Professor Machlup:* I want one question at a time. I do not want a “link”

*Dr. Khan:* But then there is no question.



*Professor Machlup:* Why did you not then ask a question? I interpret the statement that you made as a question: Why do I stress the monetary factor in the case of price inflation? I do so because the increase in the quantity of money is a necessary condition for a sustained rise in prices and if there is a necessary condition it need not be the only condition. There are, of course, many conditions that contribute to the price inflation but this one is a necessary condition and can, therefore, be singled out. If there had not been that increase in the quantity of money, there might have been enormous unemployment and all sorts of things but no sustained price inflation

*Professor Naqvi:* I am sorry, I have to cut Prof. Khan's question as the time is short. Any more questions?

*Dr. Munawar Iqbal:* Yesterday, Prof. Naqvi made a comment that you are known amongst your students as Dean of Faculty of Exposition. After listening to the two lectures and the way you have explained the traditional theory, I am sure that all the audience will agree that the students were not wrong in their judgement. During the course of your lecture, I was wishing that we had more time so that we could get ourselves enlightened on some of the more recent developments in this area. If we could draw on your time, there are three issues which interest me but I will not ask you to comment on all of these. I will let you use your judgement to pick the most important out of these.

The first issue relates to the valuation of SDRs. We know that if the SDRs have to serve as international currency and if the holders have to hold them, then its capital value has to be maintained. How to do that? There are various schemes which have been proposed like the currency basket proposal or asymmetric currency basket proposal or linking it to gold, and so on. Which one of these do you think is the best, because this is still a living controversy.

The second issue relates to the question of conditional vs. unconditional liquidity. Many people say that the SDRs are not unconditional liquidities; they still do not relieve the pressure of

adjustment which is on the shoulders of under-developed countries. My question then is whether we should go for a source of international liquidity which is unconditional.

The third question relates to the issue of seigniorage which you have touched upon in response to the question of Dr. Kemal. The famous controversy of dollar imperialism versus the policy of benign neglect is relevant in this regard. I certainly agree with you that if the U.S. is paying market rates of interest on dollar holdings, then there is no seigniorage involved. However, you would agree with me that in addition to that there is a good number of dollars which are being held by private and public institutions and banks to facilitate transactions in the international field and on that part certainly there is a question of seigniorage involved because there is no interest being paid and that is a return flow of resources to developed countries.

*Professor Machlup:* Your three questions are so good that I am inclined to answer all three.

Your first question was about the valuation of the SDRs. The SDRs do not have to be valued in any way. It was the ignorance of the Board of Governors of the IMF that originally forced the valuation of the SDRs in terms of gold. I said this repeatedly at Rio de Janeiro and earlier. It was due to the traditional ignorance of governments. When the gold link was cut, there came the lawyers who said you have to define the special drawing rights into something and they created a basket of 16 currencies. Why? Do you define your rupee as any thing else than a rupee? Your rupee is a unit. A unit is a unit, is a unit. There is no need for defining it or valuing it. There is of course a good possibility of saying: "I will always convert this into this at a fixed rate." This is a mistake, too, but you can do it. There is no need of any kind of basic valuation. They have now changed the rule from 16 currencies to five currencies to make it simpler, although the computer did not protest. For the computer it makes no difference whether you have 16 or 5 currencies but it was the brains of the people in the Board of Governors that wanted something simpler. They have an easier time

in calculations if they think of five currencies. But if they did not define it at all, it would be just as good. The dollar is not defined in anything. One dollar is one dollar. So you could say one SDR is one SDR. You have money in your pocket that you want to spend quickly; you do not want a permission to spend it on this or that. That would reduce the value of that money.

On the other hand, if you want a loan, you can go to your lender who will have the right to say, "Now, come here; how is your balance sheet? What are you going to use it for? What are your profits? What is your turnover? That does not look good to me. I think you ought to do this and you ought to do that." That is very good for the borrower. Very often the borrower can be very grateful to the lender if he gives him good advice about how to get his house in order. So, I believe in conditionality of lending and I must say – although I am not sufficiently informed – that some of the conditions imposed by the Fund were very helpful to the borrower.

And the third question: Yes, if you remember, we have had a time in the United States – I do not know the situation in Pakistan – when banks paid no interest on demand deposits. Cheque deposits were not subject to interest charges. You could call this seigniorage on the part of the banks because they had funds available for which they paid no interest. This was economically unsound and the good economists have for generations said: "Stupid! Let the banks compete for deposits, and let them pay a competitive rate of interest. If it were not the stupidity of governments, we would have had that for generations". Now we have it. The banks found a way out and there are some accounts on which they do pay interest far less than they ought to; but, again, because of these regulations they can get away in paying only 5 percent or 5½ percent although the rate of interest is very much higher in the market. I believe that if there are any people who hold dollars without getting interest, they are what in American slang is called "suckers". They are people who just do not know enough about how to get the right deal. They should take their money from their banks and put their money somewhere else, where they can get interest.

## Chapter 4

### CONCLUDING OBSERVATIONS

*by*

Professor Syed Nawab Haider Naqvi

I think that even though I can see a lot of intelligent faces here wanting to ask questions, I must indulge in the unethical practice of imposing quantitative restrictions and stop this discussion right here. I will also commit yet another sin, if I am allowed to do so, of giving vent to my own views on a couple of points raised during this morning's highly stimulating session. A more 'proper' chairman would have remained strictly 'neutral' and said nothing. However, being a student of Prof. Machlup, I would not be myself if I were a harmless neutral creature either as a chairman or in any other capacity!

My first point is concerning the adverse position taken by the Group of Ten against the 'link'. As I see it, the Group of Ten fears that the developing countries have an "unbounded stomach" for imports, to borrow a Shakespearean phrase. As such they will actually use the liquidity created by the IMF (i.e. the SDR allocation) instead of holding it for buttressing their precarious reserve positions. The Group of Ten smelt mischief in this because the actual spending of the liquidity, created primarily for 'holding', will lead to a large-scale transfer of real resources from the developed to developing countries. I find these arguments not very sound.

Firstly, the use of reserves for imports will not only *transfer* real sources, but also *create* new resources by stimulating the effective demand for exports from the developed countries. A rise in international trade benefits both parties to the exchange. Secondly, the availability of such additional reserves will save the developing countries from getting lost in the jungle of quantitative restrictions. And if I remember Professor Machlup's argument (not given this morning) correctly, the "need" for international reserves can be assessed meaningfully only in terms of the "consequences" of the shortages of reserves for the actual policies pursued by them. Combining these arguments one can conclude that the developing countries really 'need' international reserves and that the use of these reserves will not necessarily be harmful. Thirdly, since the accent of the argument against the 'link' is on excessive creation of SDRs, I may simply remind the Group once again of Prof. Machlup's argument that such fears amount to a distrust of the wisdom of the IMF – really the XIMF – and that this distrust can be vastly exaggerated. Incidentally, this also takes care of the other argument against the 'link': namely that the SDR will of necessity lead to an excessive creation of international reserves. I am afraid that sometimes the rich countries think and act like Narcissus – having irretrievably fallen in love with themselves, they think that only they know best what the real interest of the world is and how best that interest can be promoted.

My second comment is merely to remind the audience of the 'weight' of Prof. Machlup's ingenious argument that the very same resources that the developed countries have so far wasted in having the gold dug up for them in South Africa or the Soviet Union could more usefully, and fruitfully, be 'transferred' to the developing countries – and, mind you, this transfer will come about not haphazardly but according to the rules and procedures agreed upon among the members of the XIMF. I think that this argument, which is essentially for the link, is more logical, powerful and rational than the many rhetorical outbursts in which the representatives of both the developing and the developed countries indulge in international fora – proving, incidentally, that soft-headedness is not the monopoly of either the rich or the poor.

However, the developing countries will do well to listen to the very apt example that Prof. Machlup cited of the Princeton University refusing donations because their acceptance would have imposed an intolerable electricity bill on the University. Now, not because I am an alumnus of Princeton University or that I was a student of Prof. Machlup, I firmly believe that this is exactly the example that developing countries asking for ever more transfer of resources from developed countries must emulate. By failing to accept a reasonable rate of economic growth, these countries, including Pakistan, have saddled posterity with huge foreign debt. Now this cannot go on for ever. A painful internal adjustment cannot be avoided. The problem is that this adjustment should not be so painful as to become politically or even economically, intolerable. Unfortunately even after developing countries have done the acceptable amount of 'adjusting', a large transfer of real resources from the rich to the poor countries will still be necessary to avoid mass poverty and social deprivation. And the rich countries should respond positively to such calls for help because it can not be denied that a good part of the blame for the present predicament of the developing countries is due to the (compulsory) advice given by them. It will be immoral now for them to take positions which would be justified only if they had no hand in shaping the policies of these countries – which essentially made them dependent on foreign imports and resources.

At any rate, be that as it may, we must have learnt our lessons by now of avoiding untenable growth strategies. As they say, one who commits a mistake once is only human; whoever does it twice is a fool. In the Fifties and Sixties we went out of our way, by committing a large number of mistakes, to show convincingly that we were great human beings. Now that every one is convinced of that, I very much hope that we do not commit as many mistakes to prove how great fools we are! This comment applies with equal force to the rich countries, who should appreciate now the great complexities of the development process and stop issuing compulsory 'advice' to the poor countries – an advice that has been shown wrong by the facts of life in the last twenty years. The time has come now that developing countries, including Pakistan,

stopped accusing others for their troubles – even though, as I just said, some of these accusations are justified. We have no option but to prepare ourselves for the difficult, but inevitable, task of effecting the necessary internal ‘adjustment’. This is the essence of Prof. Machlup’s advice, who has spoken the truth, however harsh it may have appeared. May I remind this distinguished audience of one of the profound thoughts of Homer: “We know how to speak falsehood which resembles real thing; but we know, if we will, how to speak true things.” And Prof. Machlup has shown us this morning how to tell the truth – something that he has taught his students throughout his long and distinguished career as a teacher.

I think, Prof. Machlup, that we all have let our ‘hearts’ rest for too long and have exercised our minds too much. I would now do the reverse: I will let the mind rest if only because it has been overworked and will let the heart throb. I take this opportunity to express my gratitude to two or three agencies. First of all, I would like to thank, although they are not here, the State Bank of Pakistan, who, on my request, invited you. I am sure that they would never regret their decision even for a second. However, we are the ones who have got the ‘windfall’ because we did not have to pay anything for your travel to Pakistan. Indeed we have got more out of you than they have because you have been with us continuously for the last two days. I would also like to express my gratitude to the audience who came in large numbers and so well prepared. I think that the distinguished guests here will agree with me that in the bargain they got more than they might have ‘sacrificed’ by way of giving up their other engagements this morning. Indeed, I will make bold to say that the opportunity cost of your attending these lectures has been zero, yielding only ‘net’ benefits.

In the end, I would express my deepest gratitude to you, Prof. Fritz Machlup, for taking the time out to come to Pakistan, and to Islamabad in particular. I would, as I said earlier, just let the emotions have the upper hand now. I would quote at this

moment a beautiful verse that was composed by one great poet in praise of another great English poet, Shelley:

“Ah! did you once see Shelley plain  
And did he stop and speak to you.”

I think we have been deeply honoured because not only did you stop here, though unfortunately not long enough, but you also spoke to us and spoke to us and spoke to us. I think that in the process, we are wiser now than we were before you came. We have been so lucky to have heard the oracle himself on international monetary economics, without any intermediation. We are in luck because who can better expostulate his ideas, even those which may appear enigmatic to some, than Prof. Machlup himself. For me personally it has been a sentimental journey into the past, because I cherish the wonderful time I had with you. I remember that I was advised against taking you as my thesis supervisor by other fellow students who said, “Look! Prof. Machlup will make you work so hard that you will go mad”, and then I said to myself – I do not know whether it was rational or irrational to do so – that I would take my chances and work with you. I think that I have never stopped thinking that I was the luckiest man to have taken that chance. But while the past was beautiful, the present is beautiful, too. I will never forget these two days of ‘reunion’ with one of the greatest minds of our times – a truly wise man. I think that in saying these words I am expressing the sentiments also of the scholars of the PIDE who, I can say without fear of contradiction, are the best of the lot you will find anywhere in Pakistan – so intelligent and so committed. They deeply appreciate your coming here and your addressing them and enlightening them. With these words, I thank you once again.

*Professor Fritz Machlup:* I must say that I really feel that I never spoke to a more sympathetic, better-informed, intelligent and nice audience. I thank you very much.



## BIOGRAPHICAL SKETCH OF FRITZ MACHLUP

- Date and Place of Birth: December 15, 1902 Wiener Neustadt, Austria
- Nationality: U.S.A. (Naturalized in 1940)
- Academic Degrees and Honours: Dr. Rer. Pol., University of Vienna, 1923  
LL.D. (Hon.), Lawrence College, 1956  
Dr. Sc. Pol. hon.c., University of Kiel, 1965  
LL.D. (Hon.), Lehigh University, 1967  
L.H.D. (Hon.), Case Institute of Technology, 1967  
LL.D. (Hon.), LaSalle College, 1968  
Honorary Senator, University of Vienna, 1971  
Dr. oecon. hon.c., University of St. Gallen, 1972  
Dr. Rer. Pol. 50 Year Renewal, University of Vienna, 1973  
Bernhard Harms Prize, University of Kiel, 1974
- Academic Positions : Visiting Lecturer, Harvard University, 1934-35, 1938-39  
Goodyear Professor of Economics, University of Buffalo, 1935-47  
Visiting Professor, Cornell University, 1937-38  
Visiting Professor, American University, 1943-46  
Hutzler Professor of Political Economy, The Johns Hopkins University, 1947-60

Visiting Professor, Kyoto University and  
 Doshisha University, Japan, 1955  
 Walker Professor of Economics and  
 International Finance, Princeton Uni-  
 versity, 1960-71  
 Visiting Professor, City University of  
 New York, 1963-64  
 Visiting Professor, New York Univer-  
 sity, 1969-71  
 Visiting Professor, Osaka University,  
 Japan, 1970  
 Visiting Professor, University of Mel-  
 bourne, Australia, 1970  
 Professor of Economics, New York  
 University, 1971-  
 Visiting Professor, University of Vienna,  
 1972-73  
 Also Visiting Professor for Summer  
 Sessions :  
 Harvard University, 1936  
 Northwestern University, 1938  
 University of California, Berkeley,  
 1939  
 Stanford University, 1940 and 1947  
 University of Michigan, 1941  
 Columbia University, 1948  
 University of California, Los Angeles,  
 1949

Fellowships: Rockefeller Foundation, 1933-35  
 Ford Foundation, 1957-58

Government Positions : Consultant, U.S. Department of Labor,  
 1942-43

Chief, Division of Research and Statistics,  
Office of Alien Property Custodian,  
1943–47

Consultant, U.S. Department of Treasury,  
1965–77

Membership in

Honorary Societies:

Phi Beta Kappa – Honorary Member,  
elected 1937

American Academy of Arts and Sciences,  
elected 1961

American Philosophical Society, elected  
1963

National Academy of Education, elected  
1965

American Association for the Advancement  
of Science elected Fellow, 1966

Accademia Nazionale dei Lincei, Rome,  
Foreign Member, elected 1974

Membership in

Professional Societies:

Austrian Economic Society Secretary-  
Treasurer, 1927–33

Royal Economic Society

American Economic Association

Member, Editorial Board, 1938–41

Acting Managing Editor, 1944–45

Vice President, 1956

Member, Executive Committee, 1956,  
1965–68

President-Elect, 1965

President, 1966

Distinguished Fellow, 1968–

Southern Economic Association  
Member, Executive Committee,  
1958–62

President, 1959–60

Mont Pèlerin Society

Treasurer, 1954–59

Member of Council, 1954–64

American Association of University Pro-  
fessors

Chairman, Economic Committee, 1957–  
60

Member of Council, 1957–70

1st Vice President, 1960–62

Member, Executive Committee, 1960–  
68

President, 1962–64

International Economic Association

Member of Council, 1966–71

President, 1971–74

Honorary President, 1974–

## BOOKS BY FRITZ MACHLUP

## A. English

*The Stock Market, Credit and Capital Formation* (London: Hodge, and New York: Macmillan, 1940), xii and 416 pages.

*International Trade and the National Income Multiplier* (Philadelphia: Blakiston, 1943), xvi and 237 pages; (3rd printing, New York: Augustus M. Kelley, 1961).

*Financing American Prosperity*, Paul T. Homan and Fritz Machlup, eds., (New York: Twentieth Century Fund, 1945), xi and 508 pages; (4th printing, 1949).

*A Cartel Policy for the United Nations*, Corwin D. Edwards ed., (New York: Columbia University Press, 1945), vi and 124 pages, esp. pp. 1–24.

*The Basing-Point System* (Philadelphia: Blakiston, 1949), vii and 275 pages.

*The Political Economy of Monopoly* (Baltimore: Johns Hopkins Press, 1952), xvi and 544 pages; (4th printing, 1967).

*The Economics of Sellers' Competition* (Baltimore: Johns Hopkins Press, 1952), xx and 582 pages; (5th printing, 1969).

*An Economic Review of the Patent System*. Study of the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary, U.S. Senate (Washington: Government Printing Office, 1958), vi and 89 pages.

*The Production and Distribution of Knowledge in the United States* (Princeton: Princeton University Press, 1962), xix and 416 pages; (4th printing, 1971. paperback edition, 1972).

*Plans for Reform of the International Monetary System.* Special Papers in International Economics, No. 3 (Princeton: International Finance Section, 1962), 70 pages; (Revised edition, 1964), 93 pages.

*Essays on Economic Semantics* (Englewood Cliffs, N. J.: Prentice-Hall, 1963), xxxii and 304 pages; (Paperback edition, New York: Norton, 1967; 3rd printing, New York University Press, 1975).

*International Payments, Debts and Gold* (New York: Scribner's, 1964), vii and 472 pages. Paperback edition *International Monetary Economics* (London: Allen & Unwin, 1966); Second, enlarged, edition (New York: New York University Press, 1975), x and 514 pages.

*International Monetary Arrangements: The Problem of Choice,* Report on the Deliberations of an International Group of 32 Economists, Fritz Machlup and Burton G. Malkiel, eds., (Princeton: International Finance Section, 1964), 121 pages.

*Involuntary Foreign Lending* (Stockholm: Almqvist & Wiksell, 1965), 129 pages.

*Maintaining and Restoring Balance in International Payments* with William Fellner, Robert Triffin, and eleven others (Princeton: Princeton University Press, 1966), xii and 259 pages; (2nd printing, 1968).

*Remaking the International Monetary System: The Rio Agreement and Beyond* (Baltimore: Johns Hopkins Press, with the Committee for Economic Development, 1968), x and 161 pages; (2nd printing, 1970).

*Economic Means and Social Ends: Essays in Political Economics* with Adolf Lowe *et al.* Robert L. Heilbroner ed., (Englewood Cliffs N. J.: Prentice-Hall, 1969), ix and 240 pages, esp. pp. 99–129.

*Roads to Freedom: Essays in Honor of Friedrich A. von Hayek* with Erich Streissler *et al.*, Erich Streissler, Gottfried Haberler, Friedrich A. Lutz, Fritz Machlup eds., (London: Routledge & Kegan Paul, 1969), xix and 315 pages, esp. pp. 117–146.

*Approaches to Greater Flexibility of Exchange Rates: The Bürgenstock Papers* with C. Fred Bergsten, George N. Halm, Robert V. Roosa, *et al.*, George N. Halm ed., (Princeton: Princeton University Press, 1970), xi and 436 pages, esp. pp. 31–47, 297–306, 309, 320–321.

*Education and Economic Growth* (Lincoln, Nebraska: University of Nebraska Press, 1970), ix and 106 pages; (2nd printing, New York University Press, 1975).

*The Book Value of Monetary Gold* (Princeton, N. J.: International Finance Section, 1971), 24 pages.

*The Alignment of Foreign-Exchange Rates* (New York: Praeger, 1971), xi and 95 pages.

*Reshaping the International Economic Order: A Tripartite Report by Twelve Economists* with C. Fred Bergsten *et al.* (Washington, D. C.: Brookings Institution, January 1972), 23 pages, esp. pp. 6–11.

*International Monetary Problems* with Armin Cutowski and A. Lutz (Washington: American Enterprise Institute for Public Policy Research, 1972), 136 pages, esp. pp. 3–36, 55–57.

*International Mobility and Movement of Capital*, Fritz Machlup, Walter Salant, and Lorie Tarshis eds., (New York : National Bureau of Economic Research-Columbia University Press, 1972), xi and 708 pages, esp. pp. 1–24.

*Optimum Social Welfare and Productivity* with Jan Tinbergen, Abram Bergson and Oskar Morgenstern (New York: New York University Press, 1972), 175 pages, esp. pp. 153–165.

*International Monetary Systems* (Morristown, N. J.: General Learning Press, 1975), 60 pages.

*Essays on Hayek* with William F. Buckley, Jr. and five others, Fritz Machlup ed. (New York University Press, and Hillsdale College Press, 1976), xxiv and 182 pages, esp. pp. xi–xix and 13–59.

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*Economic Integration: Worldwide, Regional, Sectoral*, Proceedings of the Fourth Congress of the International Economic Association, Fritz Machlup, ed. (London: Macmillan, 1976), xxiv and 375 pages, esp. pp. v–xviii, 1–13 and 61–85.

*A History of Thought on Economic Integration* (London: Macmillan, 1977), xi and 323 pages.



*Methodology of Economics and Other Social Sciences* (New York: Academic Press, 1978), xiv and 567 pages.

*Information Through the Printed Word: The Dissemination of Scholarly, Scientific, and Intellectual Knowledge, Vol. 1: Book Publishing* with Kenneth Leeson *et al.* (New York: Praeger Publishers, 1978), xviii and 302 pages.

*Information Through the Printed Word: The Dissemination of Scholarly, Scientific, and Intellectual Knowledge, Vol. 2: Journals* with Kenneth Leeson *et al.* (New York: Praeger Publishers, 1978), xxiii and 339 pages.

*Information Through the Printed Word: The Dissemination of Scholarly, Scientific, and Intellectual Knowledge, Vol. 3: Libraries* with Kenneth Leeson *et al.* (New York: Praeger Publishers, 1978), xv and 204 pages.

*Information Through the Printed Word: The Dissemination of Scholarly, Scientific, and Intellectual Knowledge, Vol. 4: Journals, and Bibliographic Services* with Kenneth Leeson *et al.* (New York: Praeger Publishers, 1980), xxvii and 339 pages.

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*The World Monetary Order. Zahid Hussain Memorial Lecture Series* –No. 5 (Karachi, Pakistan: State Bank of Pakistan, 1981), 26 pp.

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## B. German

*Die Goldkernwährung* [The Gold Exchange Standard] (Halberstadt: Meyer, 1925), xv and 203 pages.

*Die neuen Währungen in Europa* [The New Currency Systems of Europe], Finanz- und volkswirtschaftliche Zeitfragen, No. 92 (Stuttgart: Enke, 1927), 83 pages.

*Vorschläge für eine wirtschaftliche und sichere Währung von David Ricardo* [Proposals for an Economical and Secure Currency by David Ricardo] German translation (with Wilhelm Fromowitz) and Introduction by F. M. (Halberstadt: Meyer, 1927), 29 pages.

*Börsenkredit, Industriekredit und Kapitalbildung* [Stock-Market Credit, Industrial Credit, and Capital Formation] (Vienna: Springer, 1931), xi and 220 pages.

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*Der Wettstreit zwischen Mikro- und Makrotheorien in der Nationalökonomie* [A Contest between Micro- and Macrotheories in Economics] Walter Eucken Institut, Vorträge und Aufsätze, No. 4 (Tübingen: Mohr-Siebeck, 1960), 55 pages.

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*Die wirtschaftlichen Grundlagen des Patentrechts* [The Economic Foundations of the Patent Laws] (Weinheim: Verlag Chemie, 1962), 141 pages.

*Wettbewerb im Verkauf: Modellanalyse des Anbieterverhaltens* [Competition in Selling: Model Analysis of Sellers' Behavior] (Göttingen: Vandenhoeck & Ruprecht, 1966), xviii and 568 pages.

*Hochschulbildung für jedermann: Eine Auseinandersetzung mit einem Gleichheitsideal* [University Education for Everyone: Critique of an Egalitarian Ideal] (Zürich: Schulthess Polygraphischer Verlag, 1973), 43 pages.

*Der Aussenwert des Dollars: Zum Problem der Unterbewertung und Überbewertung einer Währung auf den Devisenmärkten* [The Foreign Value of the Dollar: The Problem of Undervaluation and Overvaluation of a Currency in Foreign-Exchange Markets]. Translated by Hans-Wolfram Gerhard. (Kieler Vorträge, Neue Folge No. 78, Tübingen: Mohr-Siebeck, 1974), 54 pages.

*Würdigung der Werke von Friedrich A. von Hayek* [Appraisal of the Works of Friedrich von Hayek] (Walter Eucken Institut, Vorträge und Aufsätze, No. 62, Tübingen: J.C.B. Mohr-Paul Siebeck, 1977), 75 pages.

### C. French

*Guide à travers les panacées économiques* [Guidebook through Economic Panaceas]. Translated by R. Hadekel. (Paris: Librairie des Médicis, 1939) 331 pages.

*Essais de Sémantique Economique* [Essays in Economic Semantics]. Translated by A. Berthaud. (Paris: Calmann-Lévy, 1971), iv and 342 pages.

## D. Italian

*La concorrenza ed il monopolio* [Competition and Monopoly].  
Translated by Michelangelo Giordi. (Turin: Unione Tipografico-Editrice Torinese, 1956), xv and 660 pages.

*La verifica delle leggi economiche* [Verification of Economic Laws] with Terence W. Hutchinson and Emile Grunberg  
(Milan: Editrice L'Industria, 1959), 79 pages.

## E. Japanese

*Urite Kyoso-no Keizai Gaku* [The Economics of Sellers' Competition]. Translated by Masahiro Hattori, supervised by Keitaro Fukuda (Tokyo: Chikura-Shobo, 1965), 72 and 612 pages.

*Chishiki Sangyo* [Knowledge Industry]. Translated by Tatsuo Takahashi and Hiroshi Kida (Tokyo: Sangyo Nohritsu Tanki Daigaku, 1969), 35 and 477 and 16 pages.

*Kabushikisijyo Sinyo Oyobi Sihon-Keisei* [Stock Market, Credit, and Capital Formation] Translated by Eiju Nagata (Tokyo: Chikura Shobo, 1970), 17 and 296 and 41 and 13 pages.

*Chishiki Sangyo no Kōsō*. [The Structure of the Knowledge Industry]. Collected by the Institute for General Telecommunication Research (Tokyo: Diamondo, 1971), 24 and 188 pages.

*Gendai Keizaigaku no Tembo* [Views on Selected Topics in Modern Economics]. Edited and translated by Yasukichi Yasuba (Tokyo: Nihon Keizai Shimbun Sha, 1971), 199 pages.

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Translated by Toru Mabuchi (Tokyo: Diamond, 1973), 17  
and 327 pages.

*Tokkyoseido no Keizaigaku* [The Economics of the Patents  
System]. Translated by Teruo Doi, with a new foreword by  
F. M. (Tokyo: Nihon Keizai Shimbun, 1975), 214 pages.

*Kyōiku no Keizaigaku* [The Economics of Education]. Translated  
by Motoo Kaji; with a new preface by F. M. (Tokyo: Shunju-  
Sha, 1976), 10 and 148 and 5 pages.

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by Hiroshi Kida. (Tokyo: Gyosei, 1979), 11 and 180 pages.

#### F. Russian

*Plany perestrojki mezhdunarodnoj valutnoj sistemy* [Plans for the  
Reform of the International Monetary System] Translated by  
D. V. Smyslov, supervised and introduced by N. N. Lyubimov  
(Moscow: Progress, 1966), 159 pages.

*Proizvodstvo i rasprostranenie zaniy v SShA* [Production and  
Distribution of Knowledge in the United States] Translated  
by I. I. Diumulen, U. I. Kozlov, and M. Z. Shterngarts, with a  
preface by G. V. Poluminoi, edited by E. I. Rozental  
(Moscow: Progress, 1966), 462 pages.

#### G. Spanish

*Ensayos de Semántica Económica*, [Essays in Economic Seman-  
tics] Translated by Pablo J. Gallez. Colección Metodológica,

No. 1 (Bahía Blanca, Argentina: Universidad Nacional del Sur, 1962), 128 pages.

*Planes de Reforma del Sistema Monetario Internacional* [Plans for the Reform of the International Monetary System] (Mexico: Centro de Estudios Latinoamericanos, 1965), 257 pages.

*Análisis sobre el mercado de eurodólares* [Analysis of the Euro-dollar Market] (Mexico: Centro de Estudios Latinoamericanos, 1971), viii and 100 pages.

*Semántica Económica* [Economic Semantics]. Translated by Pablo J. Gallez and Francisco González Aramburo] (Mexico: Siglo Veintiuno Editores, 1974), viii and 306 pages.

*Ciclo de Conferencias Dictato en la Bolsa de Comercio de Buenos Aires* [Series of Lectures Delivered at the Stock Exchange of Buenos Aires] (Buenos Aires: Bolsa de Comercio de Buenos Aires, 1980), 48 pages.

#### H. Swedish

*Kris i Valutasystemet: Ar Pappersguldets Losningen?* [Crisis in the Monetary System: Is Paper-Gold a Solution?] With introductions by Erik Dahmen and Goran Ohlin (Stockholm: Studieförbundet Näringsliv och Samhälle, 1970), 204 pages.

#### I. Dutch

*Inleiding tot de onderwijs-economie* [Introduction to the Economics of Education] Translated by R. de Boez (Rotterdam: Universitaire Pers, 1971), ix and 59 pages.

**J. Serbo-Croatian**

*Medunarodna Trogvinā i Multiplikator Nacionalneg Dohotka*  
[International Trade and the National Income Multiplier]  
Translated by Branko Vemic (Sarajevo: Svjetlost, Izdavacko  
Preduzece, 1973), 191 pages.

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