

NEW  
PROPOSALS  
FOR  
WORLD  
MONETARY  
REFORM

by

BERNARD SCHMITT

CASTELLA

## BERNARD SCHMITT

was born in 1929 in Colmar, France. He studied Economics at the Universities of Strasbourg and Nancy, and he obtained his Ph. D. from the University of Paris in 1958. He also spent two terms on research at Trinity College, Cambridge, under the guidance of Sir Dennis Robertson and Piero Sraffa. He is now a member of the Centre National de la Recherche Scientifique, Paris. He is also professor of Theoretical Economics at the Universities of Fribourg (Switzerland) and Dijon.

BERNARD SCHMITT

NEW PROPOSALS FOR  
WORLD  
MONETARY REFORM

EDITIONS CASTELLA  
ALBEUVE • SWITZERLAND

COPYRIGHT 1973, BY CASTELLA

All rights reserved. This booklet, or parts thereof, may not be reproduced in any form without permission of the publishers.

*«It is clear that a solution of the international payments problem by the introduction of a common currency, or by some sort of advanced clearing system, is the only real and final answer.»*

The opinion of an enlightened banker,  
ERIK AMBJÖRN<sup>1</sup>

THE establishment of an international monetary system rests on three requirements. 1. The assurance that world commerce and finance will never be hampered or overstimulated through an inadequate pace of overall monetary expansion. 2. The possibilities for all countries to accumulate net foreign reserves without weighing down official reserves in other countries. 3. The various national currencies must be expressed in terms of a general standard.

## THE VEHICLE CURRENCY REQUIREMENTS OF WORLD TRADE AND FINANCE

THE new or expanded International Monetary Fund (XIMF) is to perform two distinct sets of functions. It issues an entirely new currency, to be called the international dollar (\$<sub>i</sub>). On the other hand, it acts as a financial intermediary for official loan-capital, receiving deposits from member countries which it employs in purchasing securities from firms or governments. "This duality of function is the clue to many difficulties in the modern Theory of Money and Credit and the source of some serious confusions of thought."<sup>2</sup>

The XIMF performs the two functions of an ordinary commercial bank. Besides creating book-entry money, the modern banker is also acting as a middleman between savers and investors.

Recently, analysis has thrown new light on this distinction. The two functions of a domestic banking system are not only distinct but totally dichotomous. Although in actual practice banks may combine their two functions and even sometimes substitute one for the other, analysis firmly establishes the logical impossibility of creating money by financial intermediation, or conversely to transfer funds from lenders to borrowers by means of money-creating credits.<sup>3</sup>

It is essential, therefore, that the XIMF be divided into two autonomous departments, the Issue Department (ID) and the Financial Department (FD).

Let us first examine the creation of international dollars by the Issue Department. Some important theorists still hold that a bank can only create money out of previously deposited funds. The explanation runs briefly as follows. Loan-capital deposited by savers is used to provide resources for customers. Now, if banks use these savings only once, they create nothing for they simply pass on financial capital to final investors or consumers. But, mysteriously enough, it is believed that bankers are endowed with the unique privilege of being able to lend the Savings-Deposits to several clients at once. In this manner, the

banking system is said to create the positive difference between loans and deposits. This theory is seriously misleading. In fact banks cannot multiply resources and they cannot lend even a pennyworth of savings beyond the deposits received from the public.

The division of the XIMF into two autonomous departments clearly shows the true and sober significance of money creation. How could the FD lend resources which it had not received from depositors? But there is nothing to prevent the ID from issuing large sums of money "by paper and ink". Loans granted by the ID are necessarily taken out of non-existent deposits, that is "ex nihilo", since no (financial) resources are deposited with the Issue Department of the XIMF.

#### T-Account 1

##### CREATION OF INTERNATIONAL DOLLARS

##### Issue Department of the XIMF

Claims	\$10	Liabilities	\$10
--------	------	-------------	------

Suppose member countries draw \$1 10 billion on the Department of Issue. Where does this money come from? The plain answer is that it does not come from anywhere; it just did not exist before it was lent. Newly issued money is not a multiple of previously deposited reserves. Deposits can only be lent once. Money issued by the XIMF is nothing but a written entry on the balance-sheet of the Issue Department.

The ID of the expanded Fund possesses no resources which it could lend or invest. Nevertheless, it can freely make book-entries of any amount of international dollars on the debit side of its balance-sheet. This is the very definition of international dollars, i. e. claims against the Issue Department. On the credit side, the ID simply enters the reciprocal claim, i. e. the right to recoup its own freely incurred liabili-

ties. The whole money-creating transaction is thus reduced to the symmetrical issuing of two equal sums of liabilities, since member countries must accept to refund in due course all international dollars drawn on the XIMF. In other words, the current function of the ID is to lend its own liabilities which, of course, remain entirely fictitious, for they are inevitably destroyed the moment they flow back.

Issued by a stroke of the pen, *liquidity* can have no purchasing power over riches. In striking contrast, *reserves* denote hoarded amounts of power for purchasing commodities, services, and assets. Both departments of the XIMF are incapable of issuing even a single unit of reserve currency. The ID creates liquidity but no reserves, and the FD only conveys – it cannot issue – reserves deposited by surplus countries. The power to buy real commodities produced in the world belongs to the various *national* currencies. The international dollar simply *borrow*s its purchasing power from all national currencies to which it is related by conventional exchange parities. Importers pay for all their purchases by drawing on their bank accounts in domestic currency. At the same time, commercial banks credit the National Bureau (NB) of the Issue Department. The NB of the importing country at once credits the corresponding value in  $\$_i$  to the NB of the exporting country. Without delay, exporters are finally paid in their own national currency.

The reader will have noticed that no  $\$_i$  are appropriated by private parties who can nevertheless pay in  $\$_i$  for all their international purchases. Importers thus respect the crucial distinction between liquidity and reserves, for they only spend national purchasing power. But the dichotomy between international liquidity and international reserves implies that, like their residents, member countries should be subjected to a budget restraint. Each Bureau of the ID must keep an exact short-term balance between its purchases and sales of the relevant domestic currency.

Although all inflowing  $\$_i$  are promptly retrieved and destroyed, it is clear that international liquidity will always satisfy demands of all solvent importers of goods, services, and assets. Conversely, being self-liquidating, liquidity could never overflow. It would seem, therefore, that no permanent  $\$_i$  reserves could be held by member countries.



## OFFICIAL RESERVES

**S**URPLUS countries earn more international dollars in their total sales than they spend in the same period on total purchases of goods, commodities, and assets. The gain is first defined as a claim on the ID. But net gains are automatically transferred to the other department. We thus arrive at a clear conception of international reserves. Surplus countries have a claim to recoup the \$<sub>1</sub> deposited with the Financial Department of the XIMF. Even if all reserves are accumulated in the form of "Sight-Deposits", a pool of \$<sub>1</sub> permanently remains at the disposal of the department. This pool is used to buy private or official securities.

### T-Account 2

#### DEPOSITS OF INTERNATIONAL DOLLARS

##### Financial Department of the XIMF

Before Fund Investments	Permanent reserves	\$ <sub>1</sub> 2	Liabilities to surplus countries	\$ <sub>1</sub> 2
After Fund Investments	Investments	\$ <sub>1</sub> 2	Liabilities to surplus countries	\$ <sub>1</sub> 2

Let us further examine the nature of reserves in contradistinction to liquidity.

*Liquidity.* Liquidity is a quantum of money with no purchasing power of its own. Such money is also called nominal or vehicular. The vehicle currency has no economic value, for its function is not to finance any net purchases but to "monetize" the economy. It allows complete multilateralization of trade. Liquidity could be represented by the identity of two opposite vectors,

$\longleftrightarrow$   
Liquidity: \$10 billion.

The ID can only issue a revolving fund of liquidity which does not permit total demand (D) to exceed total supply (S) of real riches. Inflowing nominal money leads to inequality

$$D > S.$$

It is obvious, however, that the outflow implies the opposite inequality,  
 $S > D.$

Once the circuit is completed, injections of any amounts of vehicle currency conduce to the necessary equality of total demand with total supply,  
 $D \equiv S.$

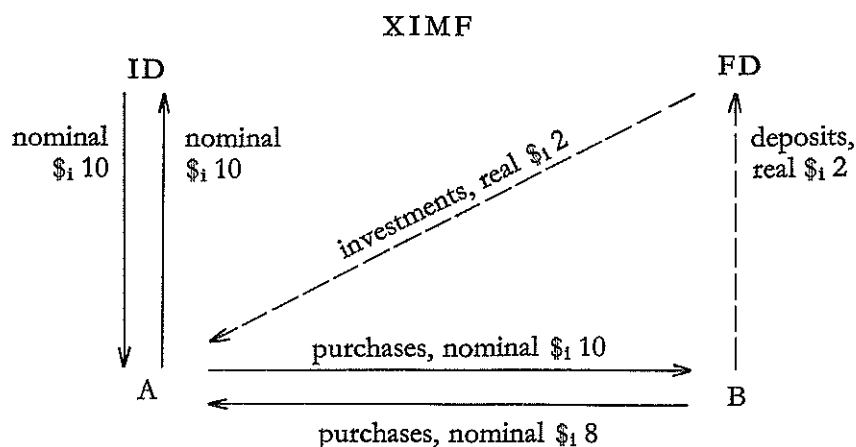
*Reserves.* The Financial Department of the XIMF deals in *real* \$<sub>i</sub>, for all \$<sub>i</sub> passing through the books of the Financial Intermediary are sums of positive purchasing power transferred from lenders to borrowers.

Surplus countries enjoy net gains in world trade which they leave idle. The Financial Department provides a credit mechanism in place of hoarding, to repeat "in the international field the same miracle, already performed in the domestic field, of turning a stone into bread".<sup>4</sup>

Real \$<sub>i</sub> are deposited on the credit side of the FD, while nominal \$<sub>i</sub> enter the debit side of the ID. Thus it appears that the nominal and real international dollars follow opposite rules.

Nominal \$<sub>i</sub> : Loans make Deposits  
Real \$<sub>i</sub> : Deposits make Loans

Before concluding this brief analysis of international reserves, it is important to note that all real \$<sub>i</sub> become extinct within the short period. Final borrowers draw all permanent reserves, while non-permanent reserves are simply withdrawn by initial depositors. As a result, countries keep their foreign reserves in the form of claims to the future possession of real \$<sub>i</sub>. Not a single \$<sub>i</sub>, nominal or real, can survive from period to period. A diagram may help to clarify this point.



Country A is confronted with B, the rest of the world. In the current period, A's residents spend a total amount of 10 billion nominal  $\$i$  to purchase economic values of all kinds, including assets, from B. During the same period, B spends only 8 billion nominal  $\$i$ . It follows that in the current period Countries B add  $\$i2$  billion to their reserves. These hoards are deposited with the FD, which invests them in securities offered on A's financial markets. When Country A finally refunds the ID, no  $\$i$  remains in the circuit at all. Actually, countries hold their reserves in the form of quasi-money. We already know that international money, properly defined, denotes claims against the Issue Department. A claim against the Financial Department is just another kind of security.

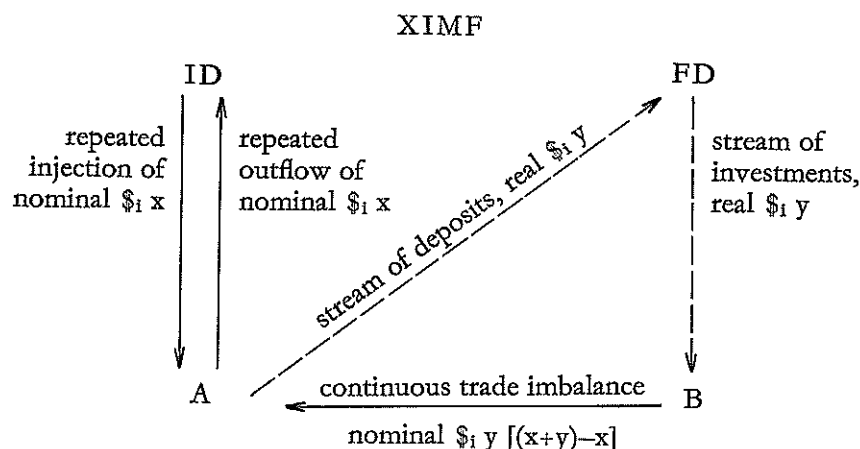
The above diagram also solves the dilemma known as the redundancy problem. There is no logical or necessary relationship between reserves accumulated by surplus countries and possible deficits incurred by others. No external deficit is forced upon Country A, provided the Fund invests in securities which are not denominated in the new international currency.

Two very simple numerical examples show that the redundancy problem can be solved at two distinct analytical levels. (1) All countries can simultaneously add to their external reserves. (2) Rich countries can freely amass considerable reserves (mercantilism) without inflicting any deficits on developing countries.

Case 1. *Simultaneous increments in all official reserves.*

Suppose the above diagram represents the current  $\$_i$  flows between A and B during a month. Permutate A and B for the second month. Plainly, in the same two months A and B add 2 billion international dollars to their reserves.

Case 2. *Rich versus developing countries.*



We now assume that rich countries are net exporters of financial capital. In case (1) A and B merely convert a domestic into an international financial capital. Case (2) implies that Country A newly earns its reserves through net sales of goods abroad. Although the international financial capital acquired by A is derived from international trade on goods and services, B's balance of payments is not adversely affected. In other words, A's surplus is not B's deficit.

In case (1), exchange parities between national currencies and the  $\$_i$  are fixed at such a level as to allow no lasting or structural imbalance between exports and imports of services and goods, *excluding* assets. But in case (2), rich countries must somewhat lower the parity of their money so as to allow for a persistent surplus in their trade balance. Again, there is no redundancy, for the other countries do not follow suit: they leave the parities of their own currencies unchanged.

## THE QUESTION OF THE STANDARD

THEORY has made considerable headway since RICARDO's *Principles*. During the 19th century, the value of all commodities was defined in terms of a "standard", an intrinsic value which had, in some sense, to remain constant through time. Values were thought to exchange for equal values. WALRAS has convincingly shown that if  $x$  units of  $a$  exchange for 1 unit of  $b$ , this only means that  $xa$  is equivalent to  $b$ . The statement that value of  $xa$  is equal to value of  $b$  is metaphysical. Economic values are mere relationships between marketable goods. To look for exchange values *in*  $a$  or  $b$  is like measuring segment  $KL$  by comparing the distance *in*  $K$  with the distance *in*  $L$ .

The few economists who still advocate that national currencies should be placed on a gold standard actually attempt to determine the distance between two space-points by equalizing the distances which they find in each. The  $\$1$  carries the only positive meaning of a universal standard, for it possesses no intrinsic worth, and its only value springs from the series of exchange rates between domestic currencies and the  $\$1$ .

While modern theory is absolutely clear on the definition of a standard, some monetary experts still feel that international adhesion could only be secured if the new currency was somehow linked to the yellow metal. There is no reason why the Gold Illusion should be dispelled. There is no possible harm in linking the  $\$1$  to gold. Obviously, the theorist is aware that gold is then defined in terms of the  $\$1$ , but the less theoretically inclined expert will be apt to appease his concern by simply reversing the proposition: to him it will appear that the  $\$1$  is defined in gold.

## CRITICAL APPRAISAL OF ALTERNATIVE SOLUTIONS

### FLEXIBLE EXCHANGE RATES

The international dollar (\$<sub>i</sub>) is fully compatible with a system of freely fluctuating exchange rates. But the real point at issue is whether flexible rates can be an operative *substitute* for an international currency. Actually, the case for flexible rates is weakened by two arguments.

*Net exports of financial capital.* Rich countries must be allowed to indulge in net exports of nominal capital, by accumulating official reserves, but also in the form of private investments. It is essential, therefore, to distinguish the two balances of payments. Each country must be careful to maintain continuous equilibrium in its *nominal* or monetary balance of payments. Under the new régime, nominal balances simply denote equal inflows and outflows of \$<sub>i</sub>. But there is no logic in the imposition of a permanent equilibrium in the *real* or financial balances of payments. It is clearly in the interest of both rich and developing countries that the former should be enabled to lend official and private financial capital to the latter. This goal will be achieved only if the so-called strong currencies exchange for the \$<sub>i</sub> at a slightly lowered rate, assuring net exports of goods and services. Flexible rates cast an exceedingly rigorous restraint on world transactions. If it is essential to preserve short-term equality between each country's exports and imports, it would be unnecessarily harsh to restrict this equivalence to the balance of trade.

*Coherent exchange rates.* Posit a three-country-world, A, B, and C, with national currencies a, b, and c, exporting commodities a', b', and c' respectively. Suppose that each country lets its money float to find its daily exchange value. Clearly, the exchange rates between a, b, and c are uniquely determined by the relative prices of commodities a', b', and c'. Let us count the independent equations determining

these relative prices. If we choose a particular currency (money  $a$ , for instance) to measure all transactions, only two autonomous demand and supply adjustment factors are available. Arbitrage on the commodity markets provides a third independent equation. The three equations determine the three relative prices. To extrapolate the relative exchange rates, we simply have to state the internal prices of the three commodities. Now we arrive at an insoluble problem. General equilibrium implies an additional equation. We already have

- the coherence of measurement (money  $a$ ),
- the coherence of relative prices (arbitrage on the international commodity markets),

but a third coherence is still required:

- the coherence of relative exchange rates (additional equation).
- Arbitrage in the exchange markets finally overdetermines the system. The problem is soluble on the *sine qua non* condition that the exchange rate between any two currencies be defined by the relationship of the absolute exchange rates of each national currency and the international monetary unit ( $\$i$ ).

#### THE DOLLAR STANDARD

It is hardly surprising that theorists diverge on the merits of the present Dollar Exchange Standard. The  $\$i$  now provides a criterion by which to judge the fundamental logical defects of the American dollar as an international medium of exchange.

The ID acquires no real resources of any kind against newly issued  $\$i$ . The only counterpart (or collateral) to injections is the outflow of the same nominal dollars. Even interest charges on ID loans can be put at zero. If we now look at the Dollar Standard, it is obvious that the \$ 80 billion or so injected by the accumulated American deficits have been given against equivalent real resources (goods, services, and assets). This seigniorage charge is unjustified, anachronic, and utterly illogical. Conveyed by United States deficits, each dollar is merely a duplicate

of the real dollar which, by definition, cannot leave the American banking system. "Hot" nominal dollars invade the world, introducing inflation everywhere.

Furthermore, the Dollar Exchange Standard has no built-in mechanism to regulate the amount of available liquidity, which can therefore be scarce or too abundant, according to the circumstances. Ebb and flow of the \$<sub>1</sub> continuously adjusts the supply of liquidity to the needs of world trade and finance.

#### A MULTIPLE CURRENCY STANDARD

According to their definition, *reserve* units denominated in national currencies should be taken out of domestic money *incomes*, by fiscal appropriation. However, they are in fact created ex nihilo by central banks, either directly or through the IMF and other organs. The formal defect of such units appears in the light of the new monetary analysis. Basically, the Multiple Currency Standard shares the deficiencies already found in the Dollar Standard: – no ebb and flow mechanism, – conflation of two logically distinct qualities, for all reserve units should be earned, owned, and *transferred* by credit. Only liquidity can be *issued* by credit.

#### SPECIAL DRAWING RIGHTS

It is not yet known (Spring 1973) what will become of the reform plan put forward by U. S. Treasury Secretary George SHULTZ. Discussions will have to continue over a period of several years before the committee of 20 nations can hope to reach an agreement. But there is little doubt that the world is gradually moving towards the general adoption of Special Drawing Rights. I am convinced that this is the right direction if we are to avoid a system of restrictions on trade and capital movements <sup>5</sup>, competitive devaluations, and the revival of isolationist policies.



Progress will be faster once experts realize the newly uncovered dichotomy of nominal and real money. All schemes advocating SDRs as the world's *reserve* currency must inevitably raise considerable misgivings and reluctance, for no economist can light-heartedly accept the strange idea of creating large amounts of reserve units (or *savings*) – that is of drawing rights on some countries' real resources – by arbitrarily distributed strokes of the pen. The issue would be much clarified if the new plan was fully effective in distinguishing the needs for two *separate* international currencies, the nominal \$<sub>i</sub> and the real \$<sub>r</sub>. So long as the *same* monetary units are meant to carry simultaneously the two functions of (1) a reserve currency, and (2) a vehicle (or transaction) currency, discussions cannot help turning round in endless circles. After the pioneering works of KEYNES, TRIFFIN, and MACHLUP, a further and more modest analytical progress is called for, exemplified in the following cursory confrontation.

SOME UNDESIRABLE CONSEQUENCES  
OF THE CONFUSION BETWEEN  
NOMINAL MONEY AND REAL MONEY

1. Should the XIMF be a creator or merely an intermediary of international money? No clear answer can spring from traditional theory which holds that money is created by financial intermediation.

2. Additional monetary units are created in the form of deposits. As a result, only assets of unquestionable quality should be put behind XIMF deposits.

SOME ADVANTAGES OF THE  
DISTINCTION BETWEEN NOMINAL  
MONEY AND REAL MONEY

1. The ID of the XIMF is purely a creator of international money. Net \$<sub>i</sub> gains are deposited with the Financial Department, which acts in the capacity of a pure intermediary.

2. No assets of any kind are purchased by the ID. Permanent reserves deposited in the FD can unrestrainedly be converted into assets denominated in weak currencies.

- |  |  |
|--|--|
| 3. A definite rule must be found by which to delimit the over-all lending capacity of the Fund.  | 3. The FD lends the exact amount of \$ <sub>1</sub> savings which it receives from surplus countries.  |
| 4. How is the precise level of reserve adequacy to be determined?  | 4. The ID creates all \$ <sub>1</sub> demanded by solvent importers of goods, services, and assets.  |
| 5. Any quantum of newly created liquidity is apt to exert an inflationary pressure.  | 5. The nominal \$ <sub>1</sub> fund is revolving and self-liquidating.   |
| 6. When reserve units are created by credit, they offer recipient countries an unearned command over riches produced by other countries.   | 6. International dollars flowing from the ID offer no power to purchase any riches.  |
| 7. Newly-created reserve units allow deficit countries to pay for their excess-purchases.  | 7. No reserve units can be issued by either department of the XIMF. Deficit countries borrow real \$ <sub>1</sub> deposited by surplus countries.  |
| 8. Only central banks can borrow SDRs in their present form.   | 8. All traders and investors can buy nominal \$ <sub>1</sub> to pay for their imports.   |
| 9. No mechanism can be built into the system which would provide a scientific guideline for exchange rate policy. The ordinary theory of Purchasing Power Parity is obsolete and unworkable. | 9. Exchange rates are basically fixed at the level which equates the demand for and the supply of nominal \$ <sub>1</sub> in terms of each national currency. Rich countries must slightly depreciate their currency in terms of the \$ <sub>1</sub> in order to export financial capital to developing countries. |

10. Endowed with the exorbitant function of reserve creation, a super-bank would necessarily restrict the sovereignty of member countries. In particular, surplus countries could not be left free to go on accumulating foreign reserves.

10. The international dollar derives its purchasing power from national currencies. On the other hand, surplus countries should be left free to accumulate reserves, since redundancy is a false problem.

Under the new plan, full convertibility will be restored. The very concept of convertibility is meaningless in the present world. The fundamental meaning of convertibility stands out in the new proposals. Any holder of a nominal income should be enabled to spend it anywhere in the world. This complete "transferability" is achieved by the Issue Department of the Expanded International Monetary Fund. <sup>6</sup>

## NOTES

<sup>1</sup> «International Payments and the I. M. F.», *Skandinaviska Banker Quarterly Review*, Vol. 42 (July 1961), p. 72 – cited by Fritz Machlup, *Plans for Reform of the International Monetary System*, Special Papers in International Economics, Princeton University (1964), N° 3, n. pp. 40–1.

<sup>2</sup> John Maynard KEYNES, *A Treatise on Money*, Macmillan (1950), II, 214.

<sup>3</sup> See my *Macroeconomic Theory, A Fundamental Revision*, Castella, Switzerland (1972).

<sup>4</sup> «Proposals for an International Clearing Union», in *World Monetary Reform*, ed. by Herbert G. Grubel, Stanford University Press (1963), p. 66.

<sup>5</sup> Domestic income holders should be free to buy foreign assets. Monetary authorities could still control capital movements with respect to international loans denominated in the new currency (\$<sub>1</sub>).

<sup>6</sup> The \$ 80 billion or so accumulated in private and official holdings outside of the United States should be consolidated into an equivalent amount of negotiable \$<sub>1</sub> securities issued by the Financial Department of the XIMF. American Banks would repay their foreign deposit liabilities in instalments over a period of, say, twenty years. Payment of each creditor would be made in his own domestic currency through the \$<sub>1</sub> mechanism described in the text. Remaining £ balances should be sunded in the same fashion.

*By the Same Author*

LA FORMATION  
DU POUVOIR D'ACHAT  
(Sirey, Paris, 1960)

MONNAIE,  
SALAIRES ET PROFITS  
(Presses Universitaires  
de France, Paris, 1966)

L'ANALYSE MACROÉCONO-  
MIQUE DES REVENUS  
(Dalloz, Paris, 1971)

MACROECONOMIC THEORY -  
A FUNDAMENTAL REVISION  
(Castella, Albeuve,  
Switzerland, 1972)

NEW PRINCIPLES  
OF INTERNATIONAL MONEY  
(in preparation, Castella,  
Albeuve, Switzerland, 1973)