

ON SOME UNRESOLVED PROBLEMS OF MONETARY THEORY AND POLICY

(DRAFT)

By *Paolo Savona* §

Paper prepared for a conference on “Assembling a New International Financial Architecture: The Deeper Challenges,” sponsored by the G8 research group and the Guido Carli Association, Rome, July 17, 2001.

1. *Premise.* When John Richard Hicks delivered the *Edward Shann Lecture* at Perth in February, 1967, he presented a brilliant overview of the history of monetary thinking in which he underlined that theory evolved in the closest relationship with the development of monetary and financial institutions, and related events, (that he synthesized with the term “credit structure”) during the epoch when the theories matured¹. The overview ran from the thinking of David Ricardo – whose quantitative theory presupposed a system of metal currency without a central bank – to Keynes, who more than a century later brought economic theory into line with the reality of a system of paper and fiduciary money, and the presence of a central bank and financial speculators.

Not only did Hicks track the development of monetary theory, but he illuminated our minds by doing so in parallel with the development of real theory (as in the well-known case of IS-LM) and thus influenced our way of thinking. He reached a conclusion widely accepted today: that money is effective in combating the overheating of an economy, but much less effective in promoting real growth. And, in the same lecture, he gave Keynes a somewhat tardy recognition in sustaining that growth can instead be spurred by fiscal policies, a thesis that has today lost much of vigor that it enjoyed in the second half of the 20th century.

With all the respect due to this great master, it is only logical to recognize that his thinking was also the offspring of its epoch and thus of the institutional reality of the times. After 1967 many innovations affected the world credit structure (in the sense that Hicks used the term): the development of the market in eurodollars in the sixties; the decision by the United States that the dollar was no longer convertible into gold and the related switch from fixed to variable exchange rates in the seventies; the emergence of two other international reserve currencies – the deutschmark and the yen – in the eighties; the globalization of financial markets, the exponential diffusion of “infomoney” and of derivatives contracts; the Japanese crisis, the new economy and the birth of the euro (or, if one prefers, the looming disappearance of the German mark) in the nineties.

Despite these “Copernican revolutions,” monetary theory (and, as a consequence, the way in which central banks operate) has not changed. This severe lag can have very serious effects, some of which are not yet entirely foreseeable.

My conviction is that we are analyzing new realities with analytical instruments that are obsolete, and that we are managing these realities with antiquated and inadequate techniques.

At the conclusion of his lecture, Hicks warned of an unresolved problem hanging over the international monetary system, pointing out that the stability of credit internationally presupposed

§ *Professor of Economic Policy at the LUISS-Guido Carli University in Rome.*

¹ John Richard Hicks (1967), “Monetary Theory and History: An Attempt at Perspective”, in *Critical Essays in Monetary Theory*, Clarendon Press, Ch. 9, pp. 155-173.

the continuous application at the global level of the measures applied domestically for the solution of monetary control.

“The remedy, my old nineteenth-century experience would tell us, would be an International Central Bank, an international bank which would underpin the credit structure, but in order to underpin it must have some control over it. That was what Keynes, who understood this international aspect very clearly, wanted to get at Bretton Woods, but all he got was a currency board (for it is little more than a currency board, being so tied up with rules and regulations) – the IMF. That, we are finding –and Mill could have told us, one hundred twenty years ago, that it is what we should find – is not enough. But how should the powers, which governments have been unwilling to entrust to their own central banks (once they have realized what is involved) be entrusted to an international bank? That is the dilemma, the old dilemma, to which we have now come back, on the international plane.

Stated like that, the problem looks insoluble. In such black and white terms, it probably is. But to set rules against no rules is to make too sharp an opposition. Can we find rules that are acceptable to national pride, and to national self-interest, and which yet give scope for some minimum of management – just enough to give the international credit structure the security it so sorely needs? It will be a narrow passage, but one must hope that there will be a way through.”²

Thirty-three years have passed since Hicks spoke in Perth. Yet we still face that dilemma, now aggravated by dynamic new financial and global developments. This constation opens up a very broad range of problems, but my analysis is limited to only two aspects:

- . how to reconcile globalization with existing monetary controls;
- . how to adapt monetary theory and practice to monetary and financial developments.

2. *Globalization and Monetary Order.* The problem of how to reconcile globalization with monetary controls can be approached through a practical reference, given the fact that the situation on a theoretical plane follows as a consequence.

When European Monetary Union came into being, its architects realized that it would be impossible to create a single European market if monetary management was unified while individual member nations retained 15 different currencies affected by flexible exchange rates. Since these decision-makers did not feel they could clear this hurdle either by turning to fixed rates or through a common unit of exchange (the *ECU – European Currency Unit*), they adopted the more extreme solution of having 15 currencies disappear with the creation of a single currency, the euro, under a unified system of central banks and the birth of a supranational central bank, the ECB in Frankfurt, that was logically, even if not physically, *off-shore*. Three countries, including Great Britain, suspended their adherence to the Maastricht Treaty while maintaining the right to join the system at a later date.

I don't think anyone would object to the statement that a single market requires the existence of a single currency, or, as a second-best option, the retention of national currencies linked by fixed exchange rates, and, as a fundamental prerequisite, the free movement of capital in all forms and under any sort of maturity. In the light of this consideration, the frequent admonitions from the champions of economic liberalism, the United States above all, or from international

² *Ibidem*, pp. 138-9.

organizations such as the WTO, to respect the rules of the global market ring hollow – and will continue to ring hollow at least until the “narrow passage” identified by Hicks can be left behind.

In fact, the proper functioning of the global market is being impeded by those who oppose any kind of coordination of national monetary policies, given that the establishment of a world central bank is an impractical goal at present. Instead, they support a system of exchange rates which, in the way it currently operates, generates values that are at variance with economic fundamentals.

In the speech he gave when he was awarded the Nobel Prize, Robert Mundell insisted on a global solution along the lines of the one adopted by the European Union, repeating a number of his well-known convictions but, above all, making it clear that his perceptions are no different from those voiced by Hicks ³. Like a faithful apostle, Mundell feels the need to preach the pure orthodoxy: a single currency for everyone, and may that be the end of it!

You are all familiar with the reasons expressed by the United States in 1971 for starting to dismantle the existing system of exchange rates: 1) The Bretton Woods agreement was based on a paradox, attributed to Robert Triffin, whereby the dollar’s convertibility into gold at a fixed price would function only if no one tried to convert their dollars into gold (in other words it wouldn’t function), and, 2) the U.S. government wanted to protect itself from the effects of malgovernment (not simply monetary and fiscal) by interrupting the transmission into its domestic economy of those bad policies.

Underlying the Nixon administration’s decision to break with Bretton Woods was the premise that flexible exchange rates would more smoothly adjust external imbalances. The new system certainly resolved Triffin’s paradox and it did protect the American economy from contamination, but the theoretical expectations of how flexible rates would function did not materialize in practice: the imbalances tended to develop in the opposite direction from the one observers had expected.

Today, only the protective effect for the strongest currencies remains operational. But what does that really amount to? The German mark is disappearing. The Japanese yen has been weakened. Thus, the American dollar remains (and rightly so, but that’s not the problem) the only currency to benefit from flexible exchange rates, becoming the source of the malfunctioning of the credit structure in the global market.

Either countries agree to officially dollarize the global market – a far from outlandish idea since it is already dollarized in fact – or they must find a way to coordinate national monetary policies closely enough to simulate the situation that appears most favorable in terms of logic.

As Hicks warned, in an age less complicated than the one in which we live, “it will be a narrow passage, but one must hope that there will be a way through.”

3. *Adapting monetary theory and practice to monetary and financial developments.* In attempting to formulate a reply to the problem of bringing monetary theory and practice in line with the evolution of the credit structure that has taken place over the past quarter century, it is useful to remember that there are two ways of analyzing how well the credit structure is functioning (always using the term as Hicks used it).

The first is the one elaborated by Milton Friedman and Anna Jacobson-Schwartz which calculates monetary base in terms of the quantity of money being created. The second, re-elaborated by Tobin, examines the various items (assets and liabilities) in the balance sheets of the economy (households and firms) to identify the degree of substitution among them.

³ Cfr. Robert A. Mundell, *A Reconsideration of the Twentieth Century*, Nobel Lecture Dec. 10, 1999.

Concentrating on the first of these analytical methods, that of monetary base, research undertaken by myself, Aurelio Maccario and Chiara Oldani with the support of the Guido Carli Association, showed a clear relationship between the different types of derivatives contracts, including those of stock market indexes, which are analogous to the demand for money for speculative purposes. In other words both are related to interest rates⁴. If the theories elaborated by Keynes and successive economists still have some validity in clarifying how the demand for money for speculative purposes affects the financial mechanism (and the real one as well though this will become clearer when we turn to the Tobin model), it follows that derivatives are a form of money, or quasi-money, and that they should be calculated in the targets set by central banks.

This conclusion is admittedly difficult to apply in practical terms. Instead of trying to find a solution to the problem, central banks have reacted by denying that the problem exists at all! (There are some notable exceptions within the Bank of Italy). On the practical plane we have two items of information. The first is that, to reduce the opportunity cost of holding money (which comes under the category of “luxury goods”), the treasurers of banks and of firms prefer to shift the operation into derivatives which allows them to “call in money” as they need it, keeping their current demand near zero. Added to this type of derivatives operation is the use of vast amounts of quasi-money for speculative purposes, since the operator can put up only a fraction of the total value and the trades themselves are carried out at a very low cost.

The consequence of all these operations has brought about the paradox identified by Keynes (before “modern” derivatives even existed), that is “the paradox of liquidity”: everyone feels liquid but the system itself is not. And the consequences of the paradox are that the central banks, when faced by systemic crises brought on by excessive speculation, become lenders of last resort, responding on demand to the market’s need for monetary base. The example of LTMC in the U.S. is a textbook case.

For this and for other reasons money, whether it is expressed as M2 or M3, has lost its importance in current monetary management (but not in analytical models), at least for those who care to see rather than denying that they’ve seen anything at all. The existence of derivatives and of “infomoney” has blurred the very definition of money. Only a few central banks (among them, alas, is the ECB) continue to believe that pursuing objectives based on the orthodox content of monetary targets can enable them to carry out their responsibility for controlling the quantity of money – a responsibility that has been placed in their care by democratic governments which, unfortunately, also seem unaware how profoundly monetary and financial realities have changed.

4. *The new frontiers of monetary theory and policy.* There is good reason to believe that Greenspan’s success in managing the American economy, and in sum that has been his achievement, is due to his close attention to portfolio equilibrium à la Tobin, whether through a deliberate choice or a pragmatic sensitivity to the moods of the domestic U.S. market.

Bank deposits have become much less attractive in the eyes of savers, as have government and state bonds, because of their low yields and also because of the declining interest on the part of the issuers – a number of factors have been at work here – so that the attention of market operators has been focused on stocks and on real investments. As a result, economic theory and practice has again had to face the eternal question of how the effects of credit (vide Hicks) are transmitted to the real economy. The market has reposed the question in its most simplified form possible, the

⁴ Cfr. Paolo Savona, Aurelio Maccario, and Chiara Oldani, “On Monetary Analysis of Derivatives,” in *The New Architecture of the International Monetary System* (Edited by Paolo Savona), Kluwer Academic Publishers, Boston/Dordrecht/London, 2000, pp. 149-175.

choice that is between possessing capital directly or in its various financial expressions, but behind this simplicity a far more complicated mechanism is at work in transmitting those effects. Compared to the past we now have a vast quantity of derivatives together with a range of options provided by information technology. Both of these factors very significantly affect the rate of substitution between monetary and financial assets. Both make it much harder to decode the working of what has been called “the black box.”

In the light of this reality, monetary policy is now burdened with the portfolio changes among assets which influence growth and/or inflation, either because central bankers believe such an ambition is possible, or because governments demand it of them. In this context derivatives, even before their relevance as quasi-money, are important because they influence the rate of substitution among assets and liabilities, a reality which cannot leave central banks indifferent. Credit structures and central bank policies are determined to an ever-growing extent by the presence of derivatives.

Monetary authorities have already gone down in flames on the exchange markets in dogfights against primitive forms of derivatives. When faced with more sophisticated forms, they fled to their home bases after battles conducted with obsolete instruments produced at the national level. They are therefore wary of fighting new battles on a wider and more dangerous front, and this diffidence has even led them to deny the usefulness of studying what to do and how to do it. The best among them realize that the challenge has to be met, but they are reluctant to commit themselves. It was no coincidence that Greenspan floated a very radical remark during a meeting with American stock market executives: I wonder, he said, if the central banks will not have to be responsible for the way stock markets behave. The notion was so revolutionary that he immediately quipped, I'd much rather be the one who asks this question rather than the one who has to answer it.

Who should try to answer the question, if not we economists?

At the 1999 G-8 Summit, the Heads of State expressed concern over the way the global credit structure was developing. They called on their distinguished experts to analyze the problem and to propose solutions for a New International Financial Architecture. This mandate, however, was given to the very same people who are responsible for the present situation (mainly officials from the ministries of finance and central banks). Not surprisingly, their conclusion was that the New IFA only needs to reinforce its two existing main pillars: the necessity for each nation to put its own house in order, and increased vigilance of intermediaries.

The fact that the world credit structure has fundamentally evolved (with a particular role performed by derivatives), that the market has taken control of the creation of the world's money supply, expropriating the sovereignty of national institutions, and that flexible exchange rates damage the unity and the efficiency of the global market is implicitly considered by the experts of the New IFA as world phenomena which can be governed at home and with a better vigilance of the “sheriffs of credit”. It appears strange that all of these radical developments (which could one day spin out of control) have not changed the theory and practice of monetary control which remain as they were when Hicks gave his lecture. And it seems even more strange that some authorities consider positive these barely-regulated developments.

It is time to give more pillars to the New IFA!

Rome, June 26th 2001