A MONETARY AND ECONOMIC DIALOGUE WITH LORD KEYNES

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INTRODUCTION

1. The Personality of Keynes and the Keynesian Heritage.

John Maynard Keynes, or Lord Keynes as he is now called, was without doubt a great man of the 20th century. Put to the test, he satisfies all three basic requirements of a great original thinker in any field of science.

First, he broke the prevailing conventional wisdom of the past, i.e., the classical economics and method of reasoning, and brought for debate a new economic vision where government intervention becomes a part of and a major rule in the economic system. This was a new economic philosophy in contrast to the classical view where government intervention in a free society was conceived to be an exception to the rule or not needed at all, according to the formula of «laissez-faire» or whands-off policy».

Second, he was able to develop new tools of analysis like the multiplier theorem, the consumption function or the paradox of thrift-all devised to prove that his new economic philosophy based on the concept of active and permanent government intervention was necessary and workable.

Third, he was able to induce a large number of his peers in the economic profession to finally accept and follow his method of approach and the overall conceptualization, even though this was a sort of inverted type of analysis when compared with classical economics, as will be shown later. The fact of the matter remains that his influence upon the thinking of his time was tremendous and unprecedented. Indeed, no other economist since Adam Smith enjoyed the opportunity to see that during his lifetime his ideas have conquered the world. This was a performance which raised Keynes to the status of the most influential economist of this century.

Such a unique performance could not have come except from a man of extraordinary intellectual background. No one has described his personality in more

eloquent terms than his old friend, colleague and former student, Professor E. A.G. Robinson of Cambridge University, England, who wrote in 1946 shortly after Keynes' death: «He (Keynes) was an optimist in the sense that he believed that very many of the world's evils were remediable, if only the obstacles of human stupidity could be removed; he hated stupidity...with the passionate, emotional hatred of one who believed that it was depriving the human race of so much that was most valuable. He was an idealist in the sense that it mattered to him deeply and immediately what was the fate of mankind; he was not prepared to tolerate wrong in the present in the belief that it might ultimately be mitigated.» ¹

So much for the personality of Keynes. Now a few words about the Keynesian heritage in terms of application and results of his new economic philosophy over the last four decades. After some reluctance in the 1920's, his own country and the rest of the free world finally gave heed to his theories and followed his new ideas and propositions, supposedly to make a better world.

What followed after the Great Depression until the 1970's was the application of such policies based in principle on the same new economic philosophy of active government intervention as formulated by Keynes. What are the end results by 1976? Before the 1930's modern capitalism seemed to be plagued with problems coming from the private sector of the economy. Four decades later, having applied Keynesian policies, we have ended with the welfare state which gives evidence of even more difficult problems in the area of the public sector, respectively government business and finances. Obviously, over this span of time there was no cleareut long-run improvement since we moved from one set of disequilibrium (in the private sector) to another set of even more complicated disequilibrium (in the public sector). Indeed, if we now (in 1976) consider what is happening in Great Britain, France, Italy and the United States as well as the rest of the free world, we can clearly distinguish a widening gap between what the Keynesian doctrine had promised and what was achieved in practice. The Keynesian heritage in terms of both theory and policy is now open for debate.

What went wrong with Keynesian economics in recent decades, or, for that matter, from the beginning? Is there any other method which can help us to resolve more effectively and efficiently the many problems which are menacing the foundations of Western society? What is wrong with the alternative of Marxian economics as applied in the Socialist countries, which also harbor a plethora of unresolved problems? Is the thinking of our time upside down, or are we using the wrong approach-both in the West and the East-and therefore cannot resolve the pending problems? These are some of the leading questions to be answered during the rest of this century.

For the sake of the argument regarding the validity of Keynesian economics, it is encouraging to see that another great living economist, the Nobel laureate Sir John Hicks, in a recently published book acknowledges in a friendly way that there is a crisis in Keynesian economics, which he describes thusly: «There can

yet be no doubt that the boom (of the 1950's and early 1960's) was associated in the minds of many with the Keynesian policies; so when at some date in the late sixties (varying from country to country), the boom itself began to falter, the authority of the policies that were supposed to have let it inevitably begin to be called in question. Instead of producing *real* economic progress, or growth, as they had for so long appeared to do, they were just producing inflation. Something, it seemed clear, had gone wrong.

What was it? That is a major question, one of the largest questions with which the world is at present confronted. I do not suppose that I am able to answer it.» ² And on the next page he reached this conclusion: «So the issue which seemed closed is reopened. We have to start, in a way, all over again.»

The purpose of the monetary and economic dialogue with Keynes in this contribution fits very well with the characterization of Sir John Hicks in the last sentence: «We have to start all over again.» Certainly Keynesian economics alone cannot save the Western world from another potential debacle reminiscent of the 1930's, and this time perhaps even more complicated. I might say that the incentive to conduct such a dialogue was sparked when this author was reading another most enlightening article by Hicks in which, back in 1937, he diagnosed Keynesian economics as the «Economics of Depression or Slump Economics.» ³ One could easily draw the conclusion from this article that what Keynes constructed was in reality not a general but rather a partial theory of disequilibrium of the capitalist system during a depression. But this part of Sir John Hicks' message was not caught at the time, and the Western world now must bear the consequences.

Since Keynes is no longer alive to answer or correct possible misinterpretations, it is necessary to make crystal clear the objective standards used in the coming dialogue so that personal bias may be reduced to a minimum. In addition, whenever some value judgments are needed or unavoidable, they should be of the order of impersonal, objective or positive values supported by principles or social consideration. For the rest, history will have the last word.

2. A New Composite Method of Approach: Equilibrium vs. Disequilibrium.

Classical economists were deficient in two major areas, one theoretical and the other practical. Their great performance was the study of stable equilibrium in theory where they found natural laws. This direction culminated with the formulation of the Walrasian theorem of general equilibrium. However, they were deficient in not having studied with the same diligence and attention problems of disequilibrium which were closer to the existing economic and financial conditions of their time. In other words, they were not aware of the existence of a gap between the harsh and unstable realities staring them in the face and the conceptual construction of an economics of stable equilibrium with natural laws valid only under the assumption of most ideal conditions, non-existent at the time.

Classical economists further failed to investigate systematically the practical

side of the issue, namely, the empirical conditions and the institutional set-up necessary for the realization and maintenance of an economic order based on a system of free markets with equilibrium prices and optimum use of available resources (natural and human). In other words, the classical economics of stable equilibrium was never tested scientifically since the real economic and financial conditions of that time or thereafter never corresponded to the requirements of such a system as expressed in the Walrasian law of general equilibrium.

Contemporary economists beginning with John Maynard Keynes ⁴, Frank H. Knight ⁵, Piero Sraffa ⁶ in the early 1920's and increasing their number in the 1930's and thereafter shifted their attention almost exclusively to the study of disequilibrium problems, leaving out the concept of stable equilibrium. In other words present day economists are committing the same methodological error as their classical predecessors, only this time in reverse. The result is that over the last decades we have developed a large amount of knowledge and iterature which belongs mainly to the study of Economics of Disequilibrium. Nevertheless, to ble able to solve the basic problems in theory and practice, we need both the classica, economics of stable equilibrium and the contemporary economics of disequilibrium with the understanding that one cannot be a substitute for the other; nor is it possible to combine them in one «grand synthesis» as envisioned by others ⁷.

In order to correct the methodological deficiency inherited from the past, it is proposed to apply here a composite method of approach: Equilibrium versus disequilibrium. According to this new method of approach, for every concept or theorem it is possible, and scientifically necessary, to formulate an equilibrium and a disequilibrium version, with the understanding that both can be true and valid, theoretically in their own methodological habitat or model. Thus we shall have an equilibrium and disequilibrium theory of prices, wages, employment, rent, interest, profit, taxes and foreign exchange.

A MONETARY AND ECONOMIC DIALOGUE WITH KEYNES.

1. Problems of Methodology and Keynes.

Even though there are many studies about Keynes, among the most recent that by Don Patinkin, 8, nevertheless, in my view not enough attention has been paid to problems of methodology, especially to the influence on Economics by the parallel revolution in Logic led by Ludwig Wittgenstein. Evidently we need to know more about the Keynesian concept of stability, his method of approach and the type of policies he has forged and recommended to the free capitalist world which finally accepted them.

Let us take first the concept of stability. By following the new composite method of equilibrium versus disequilibrium, we can distinguish two different concepts of stability. One is the equilibrium concept which may be called «stabi-

lity-from-within» and the other the disequilibrium version, or «stability-from-without».

Stability-from-within is mechanical or automatic in nature and it is based on the inner co-ordination of economic and financial life. This kind of stability is derived from a system of stable general equilibrium in the Walrasian sense. This means an economic order where a 100 per cent strong natural parameter of the numeraire together with the force of competition (purged of any monopoly elements) and other suitable institutions provide a suitable environment for inner co-ordination. In this system of open but stable markets, economic activity is free but restricted to its natural (equilibrium) limits and guided by a number of self-regulating mechanism (price, wages, interest, rent, etc.). These self-regulating mechanisms in turn assure a normal functioning of the system as a whole with the end result of an optimum allocation of resources and the highest possible social and individual welfare function.

The economic calculation for making correct decisions in dividing the current income between immediate spending and savings for future needs, i.e. investment, for both the private and the public sector, is helped by the most dependable and objective standard of value, numeraire, which cannot be manipulated by government or private interests. Indeed, the numeraire is the only magnitude in the system which remains constant (equal to a certain quantity of a selected commodity) and yet flexible enough in its supply to guarantee a normal rate of economic growth consistent with the goal of full employment and price stability. It is the double circular flow of investment, employment and real income, as part of the law of general equilibrium extended and reformulated which secures the accomplishment of this performance 9.

The task of government in a system of stability-from-within or stable equilibrium is rather easy, limited and determinate. First it has to introduce such a system by undertaking all the necessary reforms and then it must watch that the system works properly and whenever it is disturbed, to restore it to function normally. We can say that in this case government intervention is an exception and not the rule, once the new system has been installed. Classical economics in its most refined state best suits this concept.

Stability-from-without is a more intricate concept and it cannot be understood in all its complexities unless we take a look at the Orientation Tables containing all possible economic systems 10. It refers to the unlimited number of possible disequilibrium systems (beyond the territory of stability-from-within), a vast ocean of minor and major disequilibria, with the limiting model of total disequilibrium. Any of these myriad possible mixed systems is unstable in itself for the fundamental reason that it lacks the natural parameter of the numeraire (partially or totally), and the equilibrium force of competition appears more and more diluted until it vanishes completely in a system of pure and perfect state monopoly or 100 per cent government-planned and controlled economy and society. The crux of

the matter in any mixed unstable system is that in order to preserve the status quo, government intervention becomes a necessity or the rule in economic and financial life.

By the nature of the system, the task of government here is to struggle continuously with disequilibrium forces. It has to be ready to lean against the wind of disturbances and distortions which are automatically created by inconsistencies in the system, the greatest one being the conflict between government and its people, who want to be free of such interference. The amount of intervention, of course, will depend upon whether the given system is faced with a minor, a major or a total disequilibrium.

Stability-from-without is always more or less arbitrary since it involves and requires state monopoly power, even in a country with social democracy. The reason is clear but not obvious. A disequilibrium kind of stability remains artificial, shaky and never completely fulfilled because the science of economics cannot yet provide-and it is doubtful that it ever will-the formula and the means to calculate and maintain an equilibrium supply of paper money and monetized bank credit including foreign exchange, all consistent with price stability, full employment, maximum of social equity in the distribution of national income and a balanced budget and balance of payments in equilibrium. Whenever the natural parameter of the numeraire is partially or totally missing, i.e., replaced by papermoney and monetized bank credit, this problem becomes insoluble. In other words, the proper economic calculation to achieve an optimum allocation of natural and human resources under conditions of disequilibrium is simply not possible or is distorted beyond recognition.

As we shall soon see, there is ample evidence to prove that Keynes took the second, more difficult road of disequilibrium type of stability, even though from time to time he used the first concept, too. But choosing the road of «stability-from-without» inevitably brought him in direct, open conflict with classical economics.

As far as the method of approach is concerned that same technique of equilibrium versus disequilibrium brings to light the distinction between two different types of analysis. One is based on the consideration of the natural sequence of events (from primary causes to end effects) and can therefore be called the «thinking-forward» type of analysis. The other discards the law of causality and begins the reasoning with end effects, moving backwards toward the original causes but never reaching them. I call this the «thinking-in-reverse», or the inverted type of analysis. Ludwig Wittgenstein with his Nominalist Logic certainly has influenced Keynes and those who prefer the second type of analysis; he noted that, «We cannot infer the events of the future from those of the present. Belief in the causal nexus is superstition» ¹¹. Wittgenstein is right as far as disequilibrium conditions are concerned, but he is definitely wrong when the same question refers to a set of general equilibrium conditions.

I believe there is sufficient evidence to prove that Keynes used the second type of analysis extensively, although, depending upon the issue, he also applied the first. To understand the difference between the two approaches, let us take a look at Say's Law in action, under conditions of general equilibrium and disequilibrium. Under conditions of general equilibrium:

Under conditions of disequilibrium:

The same as above until output (110) and Income (110) have been reached. If, however, during the same period an expansion of monetized bank credit takes place, then the last three variables (pC,G and I) may increase nominally, f.i. to 140. This means that to the previous real income of 110 a differential of 30 nominal income must now be added. And that is the economic and financial picture during a boom characterized by an excess demand, which is a sign of disequilibrium.

If, however, during the same period a contraction of monetized bank credit occurs, the opposite will happen: the same three variables in the aggregate will decrease nominally, f.i. to 90. This means that the previous real income of 110 now appears curtailed in money form to 90. This is the picture of economic activity during a depression or recession, characterized by a leakage of demand, which is again a sign of disequilibrium.

According to the first, classical method of approach, the natural sequence of events is: first capital (savings) and then investment, followed by first output and income including employment, and then spending. By applying the second method of thinking-in-reverse the sequence appears inverted: first spending and then output, income and employment followed by first investment and then capital (savings).

It is clear that Say's Law is applicable only under conditions of general equilibrium, but it does not hold under conditions of disequilibrium. It is also true that for the case of general equilibrium it makes no difference which of the two methods is used because the end result will be the same even though from the point of view

of classical, realistic logic the first method is the proper one. In the case of disequilibrium, however, it is vitally important to know which method is used because when it comes to the question of what kind of policies have to be applied, then the policies derived by using the first method of analysis are entirely different from the second method even though the problem on hand is one and the same.

As a sample of policies of the two categories:

- —Given the problem of unemployment we can decide to create more employment by deficit spending (second method) or to search for the causes which create unemployment and then try to eradicate those causes (first method).
- —Given the problem of inflation we can decide to use anti-inflationary policies, leaving other things unchanged (second method), or to investigate the causes of inflation and then try to extirpate those causes (first method).

The same technique of equilibrium versus disequilibrium therefore can help to distinguish between two different categories of policies. One category is oriented toward the law of causality or the first method of analysis and may be called policies of «cause-and-effect». The second category discards the law of causality and is oriented toward the end effects, usually given facts, and therefore can be called policies of «effects-counter-effects».

To sum up, the equilibrium concept of stability belongs organically to the classical method of thinking forward based on the law of causality and using the cause-and-effect type of policies. The disequilibrium concept of stability, on the other hand, seems to be associated with the opposite method of thinking-in-reverse-ignoring the law of causality and applying the effect-counter-effect type of policies. The distinction between Economics of Stable Equilibrium and the Economics of Disequilibrium appears fully justified. All of these relationships of a methodological nature are useful and in a way indispensable to understand both Classical Economics and Keynesian Economics.

2. The Keynesian Concept of Economic Stability.

A. From Keynes: «A Tract on Monetary Reform (1923)» 12.

«We leave saving to the private investor, and we encourage him to place his savings mainly in titles to money. We leave the responsibility for setting production in motion to the business man, who is mainly influenced by the profits which he expects to accrue to himself in terms of money. Those who are not in favour of drastic changes in the existing organization of society believe that these arrangements, being in accord with human nature, have great advantages. But they cannot work properly if the money, which they assume as a stable measuring-rod, is undependable. Unemployment, the precarious life of the workers, the disappointment of expectation, the sudden loss of savings, the excessive windfalls to individuals, the speculator, the profiteer-all proceed, in large measure, from the instability of the standard of value».

«It is often supposed that the costs of production are threefold, corresponding to the rewards of labour, enterprise, and accumulation. But there is a fourth cost, namely risk; and the reward of risk-bearing is one of the heaviest, and perhaps the most avoidable, burden on production. This element of risk is greately aggravated by the instability of the standard of value. Currency reforms, which led to the adoption by this country and the world at large of sound monetary principles, would diminish the wastes of risk, which consume at present too much of our estate

«Nowhere do conservative notions consider themselves more in place than in currency; yet nowhere is the need of innovation mor urgent. One is often warned that a scientific treatment of currency questions is impossible because the banking world is intellectually incapable of understanding its own problems. If this is true, the order of society, which they stand for, will decay. But I do not believe it. What we have lacked is a clear analysis of the real facts, rather than ability to understand an analysis already given». Preface - p. xiv.

B. Commentary: How should we evaluate the above passage?

I think Keynes was a master in observing important phenomena, and he expressed these observations in most powerful language. The above text shows him in the rare position of a classical thinker. The problem is so clear: How to get a dependable, stable standard of value or currency. The reasons are also evident: «unemployment, the precarious life of the worker, the disappointment of expect_ ation» and other social evils including a higher risk in business, all resulting-in his own words-»in large measure, from the instability of the standard of value».

The natural sequence of events in this case can therefore be reconstructed: an undependable standard of value (paper money and monetized bank credit) creates unstable financial and economic conditions resulting in unstable prices and other social evils. The practical conclusion along this line of thinking is also explicit: construct a stable standard of value and after that you may have stable economic conditions. But this is the classical approach starting from primary causes and moving with the analysis to the end effects. The real problem therefore is how to realize a dependable standard of value. And the concept of a stable standard of value was long formulated (1874) by Leon Walras in the form of the numeraire, indispensable for the law of general equilibrium.

Keynes, of course, was familiar with the concept of the numeraire and the Walrasian law of general equilibrium, but as early as 1923 he was no longer interested in the classical method of approach. By reading the Preface and parts of Chapters 1 and 2 regarding the consequences of changes in the value of money to society and public finance, one would be inclined to think that Keynes' attention was focused mainly on the instability of the standard of value or currency, but this is not quite true. In the final analysis, the instability of the price level, output and employment and not the instability of the standard of value is the real

issue which dominates Keynes' thinking, and this corresponds to the inverted order of analysis.

Another important observation from the Preface deserves to be analyzed more carefully. Keynes wrote: «One is often warned that a scientific treatment of currency questions is impossible because the banking world is intellectually incapable of understanding its own problems. If this is true, the order of society, which they stand for, will decay. But I do not believe it».

Actually bankers are good speculators in the habits and confidence of the people, but should we accept the verdict that «the banking world is intellectually incapable of understanding its own problems?» As a former banker, I believe this rather harsh value judgment should not be taken literally because modern bankers (in Keynes' time as well as ours) have not been and are not ignorant of what they do, but they may prefer not to discuss this subject publicly. If they were to disclose and describe in detail what they do daily, it would become clear that in reality they are pure speculators in public confidence and that they realize an extra profit by misusing public confidence in the form of lending and charging a rate of interest for funds they do not have but which they manufacture themselves when they make loans using the mechanism of monetization of debt or credit.

Keynes knew all these things about modern banking, and one would expect that in the book he would have presented a blueprint of a reformed banking system so that bankers would finally understand their own problems with respect to the rest of the economy. But there is no trace of such a banking reform in his book, and this creates a great riddle about Keynes' position on this issue. In monetary matters he was a radical liberal thinker, since he recommended paper money or an anti-numeraire instead of commodity money or numeraire. On the subject of modern banking, however, he does not seem to be disturbed by any evil, thus appearing to be an innocent conservative banker.

On the instability of money.

A. Keynes: «A Tract on Monetary Reform» (1923)

«The fluctuations in the value of money since 1914 have been on a scale so great as to constitute, with all that they involve, one of the most significant events in the economic history of the modern world. The fluctuations of the standard, whether gold, silver, or paper, has not only been of unprecedented violence, but has been visited on a society of which the economic organisation is more dependent than that of any earlier epoch on the assumption that the standard of value would be moderately stable». pp. 1-2.

«From 1914 to 1920 all these countries experienced an expansion in the supply of money to spend relatively to the supply of things to purchase, that is to say *inflation*. Since 1920 those countries which have regained control of their financial situation, not content with bringing the inflation to an end, have contracted their supply of money and have experienced the fruits of *deflation*»... p.2.

«Each process, inflation and deflation alike, has inflicted great injuries. Each has an effect in altering the *distribution* of wealth between different classes, inflation in this respect being the worse of the two. Each has also an effect in overestimating or retarding the *production* of wealth, though here deflation is the more injurious.».. p. 3.

«The instability of money has been compounded, in most countries except the United States, of two elements: the failure of the national currencies to remain stable in terms of what was supposed to be the standard of value, namely gold; and the failure of gold itself to remain stable in terms of purchasing power.» p. 116.

B. Commentary:

In the first paragraph, where he is talking about violent fluctuations of the monetary standard between 1914 and 1923, he put together gold, silver and paper, as if no distinction was to be made between «gold and silver» which served as the numeraire, and paper money which was the anti-numeraire. This was the period of the paper money system during and after World War I. Keynes did not see that the fluctuations of gold and silver prices did not represent instability in their natural value (expressed in terms of numeraire) but rather instability in the artificial value of paper money in which they were expressed. The same thing happened with the price of gold after the convertibility of the American dollar was suspended in August 1971. The price of gold skyrocketed from \$42.2 to over \$180.00 per ounce. This does not mean that the natural value of gold has been over-appreciated but rather that the artificial value of the inconvertible paper dollar in which it was expressed, has become the object of pure speculation and has depreciated in that proportion.

In the next paragraph Keynes describes in classic, most perfect language, what inflation and deflation mean for a national economy, but he does not mention that these two social evils were due to the instability of paper money and monetized bank credit. In the last paragraph he repeated the same mistake of not considering the distinction between the nature and behavior of gold as numeraire or stable currency and the unstable and undependable nature and behavior of paper money and monetized bank credit as anti-numeraire. He treated the two as if gold, and not paper money, including monetized bank credit, was the impostor.

On the stability of prices versus stability of exchange.

A. Keynes: «A Tract On Monetary Reform»

«Since...the rate of exchange of a country's currency with the currency of the rest of the world (assuming for the sake of simplicity that there is only one external currency) depends on the relation between the internal price level and the external price level, it follows that the exchange rate cannot be stable unless both

internal *and* external price levels remain stable. If, therefore, the external price level lies outside our control, we must submit either to our own internal price level or to our exchange being pulled about by external influences. If the external price level is unstable, we cannot keep *both* our own price level *and* our exchange stable. And we are compelled to choose pp. 125-126.

«In the pre-war days, when almost the whole world was on a gold standard, we have all plumped for stability of exchange as against stability of prices, and we were ready to submit to the social consequences of a change of price level for causes quite outside of our control, connected, for example, with the discovery of new gold mines in foreign countries or a change in banking policy abroad. But we submitted, partly because we did not dare trust ourselves to a less automatic (though more reasoned) policy, and partly because the price fluctuations experienced were in fact moderate»... p. 126.

«Our conclusions up to this point are, therefore, that, when stability of the internal price level and stability of the external exchanges are incompatible, the former is generally preferable; and that on occasions when the dilemma is acute, the preservation of the former at the expense of the latter is, fortunately perhaps, the line of least resistence». p. 132.

On alternative solutions:

«We have no ready-made standard. Experience has shown that in emergencies ministers of finance cannot be strapped down. And-most important of all-in the modern world of paper currency and bank credit there is no escape from a 'managed' currency, whether we wish it or not; convertibility into gold will not alter the fact that the value of gold itself depends on the policy of the central banks». p. 136.

B. Commentary

Keynes made a great discovery, namely of a conflict between the goal of stability of prices and the goal of stability of exchange rates during the era of the modern gold standard before 1914. This was indeed masterful observation at a time when the rest of the profession thought that the system in question as a whole, before World War I, was stable. As Keynes reported, it is historically true that at that time governments had «plumped for stability of exchange as against stability of prices» and had «submitted to the social consequences of a change of price level for causes quite outside» of the country. If there were nothing to be added to the above observation, Keynes would be right in drawing the conclusion that whenever faced with a conflict between the two goals, it is the one on price stability and not on the stability of exchange which is to be preferred in the national interest.

Fortunately, there is more to be said about this issue, and an alternative

exists when the conflict in question is avoided. But in order to see the alternative, we must apply the new composite approach of equilibrium versus disequilibrium. Keynes missed the other most important implication-that the existence of such a conflict was a signal or a characteristic of disequilibrium conditions in the economy. If so, then under conditions of stable equilibrium the two goals are consistent with each other, are realized at the same time without government intervention. The real problem therefore was not to take the correctly observed conflict as an immutable phenomenon-as Keynes did-but rather to search further and discover the real nature of the disequilibrium under the aegis of a presupposed stable gold standard. But such further investigation required a classical outlook and mentality, and Keynes by that time already had rejected classical heritage and was on his way to developing his own method of approach.

Given the conflict between the two goals as insoluble by other means-as assumed by Keynes-or as he put it, that «we have no ready-made standard,» then he was roadblocked and proclaimed emphatically: «in the modern world of paper currency and bank credit there is no escape from a 'managed' currency, whether we wish it or not».

It is clear that Keynes by 1923, and it is fair to say for the rest of his life, saw no other economic light but the road of a disequilibrium type of stability or stability-from-without which has to be constructed so to say backwards by using the trial-and-error method, i.e. using effect-counter-effect type of policies. If it can be proved, as I have tried to do in more detail elsewhere, ¹³ that the conflict in question can be avoided by taking the alternate road of stable equilibrium or stability-from-within, then this exposes a basic weakness of first magnitude in Keynes' system of thought. It is not in his extraordinary ability of observation, it is not in his unequal power of reasoning, but rather in the most difficult and least reliable road that he himself selected: a new concept of stability-from-without, a new approach and a new type of policies, all consistent with initial disequilibrium conditions with which he was mostly concerned.

Another technical point must be clarified. It is from the first paragraph of the above quotation. Keynes stated that the «exchange rate cannot be stable unless both internal and external price levels remain stable». This is not quite correct. The exchange rate, in the words of Keynes, «depends on the relation between the internal price level and the external price level». But this is true *only* for the case of an inconvertible paper-money system both at home and abroad. It is one side of the theorem of the purchasing power parity by G. Cassel.

In a system of general equilibrium with a freely convertible numeraire-currency in a given country vis-a-vis a system of disequilibrium with inconvertible paper money in another country, the theorem of the purchasing power parity does not hold. This means that the exchange rate in the first country is not determined by the price level in other countries but rather by the natural parameter of the numeraire-currency allowing only simple and finite fluctuations around the narrow gold-import and export points. If the other country, for instance, has an inflation,

the foreign exchange rate of the first country expressed in relation to the monetary units of the other country will reflect the external inflation but without touching its own stability. It means that the external value of the second inconvertible currency appears depreciated whereas the external value of the first currency remains stable as long as it is expressed in terms of numeraire.

Thus the true condition of stable general equilibrium requires that both the internal and the external value of the currency in question be equal or very close to each other, independent of the price level in other countries. In other words, the natural parameter of numeraire in the form of gold or other suitable commodities in a system of general equilibrium is *immune* to disturbances from abroad. This is a very important conclusion which Keynes missed.

There is no need to belabor the third possible case, i.e. when we have a system of stable equilibrium with numeraire both at home and abroad. Under such circumstances, of course, the internal price level will be equal to the external price level but only under the qualification that the numeraire-currency will have the same basis at home and abroad. Only with this specific qualification is the theorem of the purchasing power parity true again. But it is possible that the numeraire-currency may have various bases in different countries and therefore a variety of price levels and yet stability of exchange rates at different levels.

We reach the conclusion then that in a system of stable equilibrium with freely convertible numeraire-currency, the exchange rates are determined *not* by the price levels in other countries but rather by the natural parameter of the numeraire and its corollary.

3. The Keynesian Concept of Monetary Policy.

A. Keynes: «A Tract on Monetary Reform» (1923).

«A sound constructive scheme must provide-if it is to satisfy the arguments and the analysis of this book:

- 1. A method of regulating the supply of currency and credit with a view of maintaining, so far as possible, the stability of the internal price level; and
- 2. A method of regulating the supply of foreign exchange so as to avoid purely temporary fluctuations, caused by seasonal or other influences and not due to a lasting disturbance in the relation between the internal and the external price level». p. 141.

«It follows that the capacity of the joint stock banks to create credit is mainly governed by the policies and actions of the Bank of England and of the Treasury...

How far can these two authorities control their own actions and how far must they remain passive agents? In my opinion the control, if they choose to exercise it, is mainly in their own hands. As regards the Treasury, the extent to which they draw money from the public to discharge floating debt clearly depends on the rate of interest and the type of loan which they are prepared to offer. A point might be reached when they could not fund further on any reasonable terms; but within

fairly wide limits the policy of the Treasury can be whatever the Chancellor of the Exchequer and the House of Commons may decide. The Bank of England also is, within sufficiently wide limits, mistress of the situation if she acts in conjuction with the Treasury. She can increase or decrease at will her investments and her gold by buying or selling the one or the other». p. 144

«My scheme would require that they (the Treasury and the Bank of England) should adopt the stability of sterling prices as their *primary* objective-though this would not prevent their aiming at exchange stability also as a secondary objective by co-operating with the Federal Reserve Board in a common policy.»...

«If the Bank of England, the Treasury, and the Big Five were to adopt this policy, to what criteria should they look respectively in regulating bank rate, government borrowing, and trade advances? The first question is whether the criterion should be a precise, arithmetical formula or whether it should be sought in a general judgment of the situation based on all the available data». p. 147.

«There remains the question of the regulation of the note issue...p. 151,

«The governors of the system would be bank-rate and Treasury bill policy, the objects of government would be stability of trade, prices, and employment, and the volume of paper money would be a consequence of the first (just-I repeatas it is at present) and an instrument of the second, the precise arithmetical level of which could not and need not be predicted. Nor would the amount of gold, which would be prudent to hold as a reserve against international emergencies and temporary indebtednes, bear any logical or calculable relation to the volume of paper money; for the two have no close or necessary connection with one another. pp. 153-154.

«Therefore I make the proposal-which may seem, but should not be, schocking-of separating entirely the gold reserve from the note issue. Once this principle is adopted, the regulations are matters of detail. The gold reserves of the country should be concentrated in the hands of the Bank of England, to be used for the purpose of avoiding short-period fluctuations in the exchange. The currency notes may, just as well as not-since the Treasury is to draw the profit from thembe issued by the Treasury, without the latter being subjected to any formal regulations (which are likely to be either inoperative or injurious) as to their volume. Except in form, this regime would not differ materially from the existing state of affairs.

The reader will observe that I retain for gold an important role in our system. As an ultimate safequard and as a reserve for sudden requirements, no superior medium is yet available». p. 154.

B. Commentary

What is then the essence of the Keynesian concept of monetary policy? The goals are clear and acceptable: (1) stability of the internal price level, i.e. stability

of trade, prices and employment and (2) stability of the exchange rate as to avoid temporary fluctuations.

What about the means used to achieve these goals? According to Keynes' advise, the Bank of England and the Treasury Department should have absolutely a free hand in manipulating the supply of paper money and the price of gold at their discretion in order to reach the given goals. But can they accomplish such an enormous task when the private banking system, which in fact supplies 80 per cent or more of the total supply of money in circulation, remains free and independent? What criterion should be used in the execution of the job entrusted to the Bank of England and the British Treasury? Should it be, in Keynes' words, «a precise, arithmetical formula or... should (it) be sought in a general judgment of the situation based on the available data?»

Keynes never provided «a precise, arithmetical formula», i.e. how to compute and maintain an equilibrium supply of paper money and monetized bank credit that would satisfy the two objectives mentioned above. He gave no solution other than to trust and rely on the «general judgment of the situation» by the respective officials of the Central Bank and the Treasury Department. In other words, Keynes leaves us empty-handed just at the crucial moment when the question is raised of how to apply successfully his new economic philosophy. It is almost incredible that in the name of science and after so much bad experience with paper currency in modern times, we should finally consider and apply (as in fact we later did) such advice from Keynes that «The currency notes may... be issued by the Treasury, without the latter being subjected to any formal regulations (which are likely to be either inoperative or injurious).»

Can we as scientists in a free democratic society of the 20th century accept in good faith the verdict which would deliver into the hands of a few officials (some not even elected) and economic experts (selected mostly for political affiliation) the livelihood and prosperity of millions and millions of industrious, innocent people when these few do not have a precise formula and the adequate practical means of resolving successfully the enormously difficult and complicated problems of stability of prices, output, employment, income and foreign exchange of a whole country? This is the unanswered question which we have inherited from Keynes.

Of course later, in «A Treatise on Money» (1930 and the «General Theory» (1936), he tried to polish this rather crude concept of monetary policy of 1923 by adding the instrument of fiscal policy, in fact stressing the latter more than the first. His disciples and followers have developed the additional tool of incomes policy or the control of wages and prices at the same time. But the fundamental question of how to calculate and maintain an equilibrium supply of paper money and monetized bank credit consistent with full employment and price stability has remained thus far unanswered and very probably cannot be answered.

Prrsent-day England is the best example where we can see «sur le vif» that the application of the Keynesian concept of monetary policy combined with fiscal and incomes policy, and in fact the whole fabric of measures and techniques derived

from the ideal of stability-from-without or disequilibrium type of stability, cannot be successful in a free democratic country. But it will take some time and unfortunately unnecessary tribulations and suffering of millions of people before we shall be able to see the new economic light on the other economic road toward stability-from-within, i.e. the equilibrium type of stability.

4. The Keynesian Concept of Money.

A. Keynes: A Treatise on Money. The Pure Theory of Money (1930) ¹⁴ Chapter 1-The Classification of Money.

«Money of account, namely that in which debts and prices and general purchasing power are *expressed*, is the primary concept of a theory of money. p. 3.

«The State...comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contract. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time-when, that is to say, it claims the right to re-edit the dictionary... It is when this stage in the evolution of money has been reached that Knapp's chartalism-the doctrine that money is peculiarly a creation of the State-is fully realized». p. 4

«Bank money is simply an acknowledgment of a private debt, expressed in the money of account, which is used by passing from one hand to another, alternatively with money proper, to settle a transaction. We thus have side by side State money or money proper and bank money or acknowledgments of debt». p. 5.

«Commodity money is composed of actual units of a particular freely obtainable, non-monopolized commodity which happens to have been chosen for the familiar purposes of money, but the supply of which is governed-like that of any other commodity-by scarcity and cost of production». p. 6.

«Fiat money is representative (or token) money (i.e. something the intrinsic value of the material substance of which is divorced from its monetary face value)-now generally made of paper except in the case of small denominations-which is created and issued by the State, but is not convertible by law into anything other than itself, and has no fixed value in terms of an objective standard.

«Managed money is similar to fiat money, except that the State undertakes to manage the conditions of its issue in such a way that, by convertibility or otherwise, it shall have a determinate value in terms of an objective standard... Commodity money and managed money are alike in that they are related to an objective standard of value. Managed money and fiat money are alike in that they are representative of paper money, having relatively little or no intrinsic value apart from the law or practice of the State». p. 7.

B. Commentary

After the adoption of the disequilibrium concept of stability, the other important weakness in Keynes' system of thought is his definition of money. By applying the composite method of equilibrium versus disequilibrium, the monetary reality as conceived from the history of money from ancient times on can be represented by two bipolar types:

- 1. Commodity-money, in any form, which satisfies the function of numeraire (i.e., a stable and dependable standard of value) in the Walrasian theorem of general equilibrium as extended and reformulated, and
- 2. Non-commodity or nominal money in any form (paper money, monetized debt or bank credit, counterfeited money, booty money) which is inconsistent with the function of numeraire. The first can be called *numeraire* type of currency and the second the *anti-numeraire*. The numeraire-currency in a system of free markets behaves in such a way that pure inflation or deflation (due to monetary causes) could not develop beyond simple and finite price fluctuations. The anti-numeraire currency, on the other hand, behaves so that pure inflations or deflations (in open or hidden form) are automatically nurtured and expanded in form of cumulative gaps or fluctuations ¹⁵.

If we look at several definitions used by Keynes in the text given above, then it is not difficult to see the significance of the two bipolar types of money, but he avoids by all means admitting or recognizing a clear-cut distinction between the two. «Money of account»-in his sense-evidently is something abstract and therefore an anti-numeraire type of money. Keynes selected this disequilibrium element as «the primary concept of a theory of money» and necessarily he will end up with an unstable monetary system which requires it to be managed.

The role of the State or the Chartalist doctrine of money maintaining that money is a creation of the State, as the German economist Friedrich Knapp before him tried to prove ¹⁶, is debatable because commodity-money or numeraire originally was a creation of the market and existed long before any rudimentary signs of the institution of the State ¹⁷.

In the latter part of the text, Keynes precisely describes the difference between commodity money and fiat money, which is the same as between numeraire and anti-numeraire. But in the next paragraph, he combines both into one concept, «managed money». The procedure he used is logically very debatable. Commodity money evidently is an asset type of currency whereas fiat money and bank money are a liability type of currency. If money at one time appears to be an asset (a positive value) and at another time a liability (a negative value), this means that the nature of money is dual. Therefore, in a scientific investigation we have to use two concepts of money in order to represent properly the whole of monetary reality. It is therefore a deficiency in logic to use just one concept for two bipolar types of money. That is exactly what Keynes did. Excluding the asset or numeraire-type of currency from his consideration, he was consistent with his disequilibrium con-

cept of stability-from-without, but on the other hand, he deprived himself of the opportunity to discover the fundamental importance of the law of the natural parameter of the numeraire and the system of stable equilibrium, or stability-fromwithin.

4. Keynes Misjudged the Mixed Nature of the Modern Gold Standard.

A. Keynes: A Tract on Monetary Reform (1923)

«In truth, the gold standard is already a barbarous relic. All of us, from the Governor of the Bank of England downwards, are now primarily interested in preserving the stability of business, prices and employment, and are not likely, when the choice is forced on us, deliberately to sacrifice these to the outworn dogma, which had its value once, of L 3.17.10 1/2 per ounce.

Advocates of the ancient standard do not observe how remote it now is from the spirit and the requirements of the age. A regulated nonmetallic standard has slipped in unnoticed. It exists». p. 138.

«Therefore, since I regard the stability of prices, credit, and employment as of paramount importance, and since I feel no confidence that an old-fashioned gold standard will even give us the modicum of stability that it used to give, I reject the policy of restoring the gold standard on pre-war lines». p. 140.

-A Treatise on Money. Vol. 2, The Applied Theory of Money (1930) 18 Auric Sacra Fames.

«The choice of gold as a standard of value is chiefly based on tradition. In the days before the evolution of representative money, it was natural, for reasons which have been many times told, to choose one or more of the metals as the most suitable commodity for holding a store of value or a command of pruchasin gpower.» p. 258.

«Dr. Freud relates that there are peculiar reasons deep in our subconsciousness why gold in particular should satisfy strong instincts and serve as a symbol. The magical properties, with which Egyptian priestcraft anciently imbued the yellow metal, it has never altogether lost. Yet, whilst gold as a store of value has always had devoted patrons, it is, as the sole standard of purchasing power, almost a parvenu.»...

«Of late years the auri sacra fames has sought to envelop itself in a garment of respectability as densely respectable as was ever met with, even in the realm of sex and religion.» ... p. 259.

«One great change, neverthless-probably, in the end, a fatal change-has been effected by our generation. During the war individuals threw their little stocks into the national melting pots. Wars have sometimes served to disperse gold, as when Alexander scattered the temple hoards of Persia or Pizarro those of the Incas. But on this occasion war concentrated gold in the vaults of the central banks; and these banks have not released it.»... pp. 259-260.

«Thus the long age of commodity money has at last passed finally away be-

fore the age of representative money. Gold has ceased to be a coin, a hoard, a tangible claim to wealth.»... p. 260.

B. Commentary

Keynes was probably the greatest adversary in economic literature of the modern gold standard and of gold in general. It is no secret that besides ignorance and indifference to the fate of mankind, he hated with pathos and passion what he called the "dynasty of gold" auri sacra fames. The only plausible and reasonable explanation I can think of is the fact that gold as numeraire was the greatest enemy of Keynes' new economic philosophy based on the concept of stability-fromwithout which requires anti-numeraire or a managed paper money system. I suspect that he was keenly aware of this contradiction and he knew very well that his new economic doctrine could not be applied on a general scale until or unless the "dynasty of gold" was dethroned. Fortunately or unfortunately, depending upon one's position, this task has been accomplished by his friends, disciples and followers.

The last step in a world-wide anti-gold hatred campaign, that Keynes himself would not have believed, was brought to fruition by the decision of the International Monetary Fund in 1975 to sell the already very thin basis of 25 per cent gold-numeraire in the mixed structure of the international monetary system, as established by the Bretton Woods Agreement of 1944. If my theorem of the natural parameter of the numeraire is correct, then this decision was the biggest mistake in the history of the Fund, because the international monetary system now appears to be in a vacuum where anything could happen. I have warned the proper authorities at the right time that an empty system without the support of a strong numeraire carries the seeds of destruction of any liberal international economic order. 19 At a recent International Symposium at the Brookings Institution in Washington, D.C., a group of experts from Western Europe, Japan and North America expressed deep concern that «unemployment and unutilized capacity in most industrial countries are at levels which, it long continued, would have serious implications for domestic, social and political stability in some countries, and for the maintenance of a liberal international economic order.» (Wall Street Journal, November 8, 1976). The recent sales of gold reserves by the I.M.F. and floating exchange rates without the support of the numeraire have created even more uncertainty and risk in international economic and financial relations. This in turn will further disturb and distort any remnants of a «liberal international economic order».

All these unpleasant things in the world of today would be diminished to insignificant proportions if the argument against gold raised by Keynes would have been resolved earlier. But it is never too late to correct mistakes inherited from the past. I believe proof can be provided that Keynes misjudged the mixed nature and ambiguous functioning of the modern gold standard, and therefore his diagnosis is debatable, to say the least.

In the excerpt given from the Tract, Keynes in 1923 rejected «the policy of restoring the gold standard on pre-war lines,» and he thought «the gold standard is already a barbarous relic.» I sympathize with him in regard to the deflationary policy which back in the 1920's was considered to be the only way to restore the pre-war gold standard. This was true in particular with British policy when Churchill was Chancellor of the Exchequer and the Gold Standard Act of 1925 was passed. Obviously, a rigorous deflationary policy under the existing conditions of a strong inflation created during the war was wrong and produced incalculable negative effects upon the British economy, as we well know. It is amazing, however, that no one at that time, not even Keynes, thought of the simple device of using a multiple-currency unit in order to instantaneously drain off the war intlation. Such a general cleansing of the financial house of the economy could have provided an entirely different environment for constructive policies. But this is now history, and all we can do is to draw therefrom the right lesson and not repeat mistakes from the past.

In the exerpts from «A Treatise On Money» we can see that Keynes by 1930 had intensified his anti-gold position. Of course, it is not true-as he maintains-that «the choice of gold as a standard of value is chiefly based on tradition.» The basic reasons why gold was the choice of the people for such a long time are in the functions that it performed: (1) a dependable and objective standard of value; (2) a reliable medium of exchange; (3) an equitable instrument for payments; and (4) a trustful means for saving, or hoarding depending on the existing conditions.

The reference to Freud cannot help to resolve the argument scientifically since Freud was concerned with abnormal psychology, while gold was always desired by normal and not abnormal people.

The decision by Central Banks during and after World War I to withdraw gold from circulation and not put it back under inflationary conditions was a wise one. The mistake was, as already mentioned, that nobody from the Central Banks thought to recommend to the respective governments that immediately after the war, a multiple-unit currency should have been used to drain off the inflation completely so that gold again could circulate and resume its normal function.

Beyond all these consideration, there was, however, an important unresolved problem correctly identified by Keynes. The modern gold standard offered exchange stability but not price stability, and thus the restoration of the old system did not mean a reasonable solution to all pending problems. It is a pity that Keynes overlooked undertaking a more thorough analysis of the mixed nature of the modern gold standard since the results of such an analysis might have changed his mind. Let us look into this matter more carefully.

Keynes mentioned the American Federal Reserve System several times as a prototype of a modern gold standard but he never provided a systematic analysis of its real nature and functioning. For this purpose we need to examine the provisaions of the US Federal Reserve Act of 1913.

I. The Domestic Aspect of the American Gold Standard After 1913.

According to the Federal Reserve Act of 1913, the FRS was obligated by law to keep a 40 per cent gold reserve for all shortterm liabilities, i.e. Notes and Deposits created for the account of the private member banks, since the American central bank, like other central banks, did not work directly with the public, including business, but rather with affiliated banks. Here is a simple arithmetic presentation of the creation of money by the US Federal Reserve System (Fed):

Central Bank (Official) Money

$$\times = \frac{100.100}{40} = $250.00$$
 Notes and Deposits

What was the composition of the \$250.00 new money»

The answer is simple: \$100.00 was gold-backed or numeraire currency and \$150.00 was monetized credit by the central bank, i.e. paper money or anti-numeraire.

What happened further to this \$250.00? This new money went into the private banking system where it was used as reserves for more monetization of credit.

The same Federal Reserve Act of 1913 provided that private member banks of the system should hold a certain percentage of their total short term liabilities (demand deposits) as reserve requirements in official money. The private member banks at that time were divided into three categories with different rates, but for explanatory purposes I shall assume as representative a relatively large average of 20 per cent legal reserves requirement.

Private Bank Money

The 20 per cent reserves requirement means that for every \$20.00 excess reserves in official money, the private banking system could grant credits up to the limit of \$100.00, provided, of course, that the conditions on the market were favorable. This is the process of monetization of private debt or credit and here are the results:

\$20.00 reserves in official money...\$100.00 granted monetized credit

$$\times = \frac{250.100}{20} = \$1,250.00$$

End result: For every \$100.00 gold inflow into the system, at the limit \$1,250.00 was pumped into circulation, assuming favorable economic conditions.

What is the composition of this \$1,250.00?

Answer: \$100.00 gold or numeraire currency \$150.00 Central bank credit money or anti-numeraire \$1,000.00 private bank credit money or anti-numeraire.

As a matter of proportions, therefore, the modern gold standard in its domestic aspect was a hybrid, mixed system composed of about 10 per cent gold-currency or numeraire and the balance of 90 per cent credit-money or anti-numeraire. The proportion between numeraire (stable element) and anti-numeraire (unstable element) was 1:10 at the limit. Consequently, the whole system in its domestic aspect can be represented by an inverted pyramid which later was nick-named «fair weather gold standard».

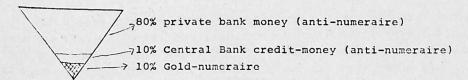


Figure 1

Let us assume a country with such a mixed gold standard had good economic conditions and therefore was showing a moderate surplus in its balance of payments of, say, just 1 gold unit. Then this country would gain 1 gold unit and be exposed to an internal expansion of its supply of credit money by an additional 10 units at the limit and thus punished by an imported inflation. If the same country at another time was losing 1 gold-unit because of a negative difference in the balance of payments, then because of a fixed ratio of gold reserves by law the country was forced to adopt deflationary policies in order to conform to what was called the «rules of the game».

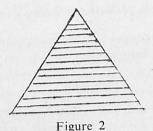
There is apparent evidence here of a chaotic state in the system when the domestic supply of money, and with it the level of prices and the volume of output, income and employment can be distorted by such cumulative fluctuations. This is the explanation of the observation made by Keynes. He had good reasons to be upset und could not understand why his contemporaries in the profession were so blind that they could not see these unpleasant events in the economy. However, the truth of the matter is that the ingenious Keynes observed this chaotic state in the domestic aspect of the modern gold standard more by intuition than as a result of systematic analysis, which he never proffered.

The theorem of the natural parameter of the numeraire explains the same phenomena in even more simple but basic terms. According to this theorem, a monetary system in order to reach and maintain a position of stable equilibrium must have a very strong natural parameter of the numeraire (100 per cent at the limit). The mixed modern gold standard had a very weak natural parameter (only

about 10 per cent) and therefore in its internal aspect was inherently unstable, exactly as shown by the inverted pyramid.

II. The International Aspect of the Modern Gold Standard.

As far as the international transactions are concerned, the picture of the modern gold standard was entirely different. Differences in the balance of payments (positive or negative) could be settled definitively only by the actual transfer of gold or numeraire currency. Therefore, the essence of the modern gold standard in its external aspect was pure, i.e. supported by a 100 per cent parameter of the numeraire. Consequently, the international gold standard before 1914 can be represented by a normal, natural pyramid as follows:



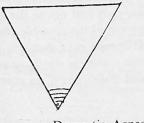
The use of short-term credits and long-term loans did not change this picture as long as they were not monetized.

This is the reason why foreign exchange rates of the member countries of the international gold-club before 1914 were stable, as long as the central banks were abiding by the rules of the game, i.e. allowing gold to circulate freely from one country to another for a final settlement of differences in the balance o. payments. This also explains the fact that there was no need for an international monetary institution to look for problems in international financial relations. The modern gold standard in its international aspect had the strongest possible foundation of 100 per cent numeraire and was guided by self-regulating mechanisms, which could not be manipulated by individual governments or private interests.

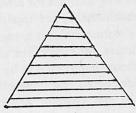
It was most unfortunate for the entire free world, and we must now suffer the consequences, that back in 1944 at the Bretton Woods Conference not the international but the domestic form of the modern American gold standard was adopted as the orientation model for the new international monetary order after World War II. No surprise that 25 years later the Bretton Woods Agreements collapsed. The basic reason for this failure is not that the I.M.F. did not have a good administration or that the economic conditions in recent years changed, but rather because the seeds of failure were planted in the constitution of the Bretton Woods Agreements where the new order was conceived as an inverted pyramid, a replica of the American gold standard at that time.

In view of these results, the real and complete picture of the modern gold standard before 1914 appears ambiguous, doublefaced and can be represented by two pyramids, one inverted and the other normal:

Figure 3



Domestic Aspect



International Aspect

Such a mixed, hybrid monetary system, of course, could not function properly, as in fact it did not. Keynes' observation that this system did not work and that there was a contlict between price stability and exchange stability was a masterpiece of ingenuity, unfortunately based more on intuition than on systematic analysis. It is a pity that he misjudged the system as a whole and hastily drew the wrong conclusion that we should get rid of gold (stable numeraire currency) instead of paper money and monetized bank credit (unstable anti-numeraire) and that we should abandon exchange stability in favor of price stability, when in reality we needed both for the attainment of stable equilibrium with full employment. Keynes' diagnosis was incorrect, I am sorry to stress. The real impostor for instability of the domestic price level and implicitly the volume of output, income and employment was not gold but rather paper money and monetized bank credit. The rea issue therefore was not the dilemma of a choice between price stability and exchange stability but rather how to achieve both at the same time. And the economic and financial history of Great Britain, the United States and other countries of the free world in recent decades shows without a shred of doubt that Keynes' diagnosis was wrong and that a paper money system with the privilege of private banks to monetize and demonetize credit in competition with each other and for the purpose of gaining an extra profit cannot help us to achieve the old economic dream: price stability, full employment, exchange stability and a better world to live in. The time has come to start over again with the analysis of the fundamenta problems, without any preconceived dogmas or misplaced loyalty to ideas from the past. 20

6. Is Keynes' General Theory of Employment, Interest and Money Really a General One?

A. Keynes: «The General Theory of Employment, Interest and Money» (1936) 21

«I call this book the General Theory of Employment, Interest and Money, placing the emphasis on the prefix general. The object of such a title is to contrast

the character of my arguments and conclusions with those of the classical theory of the subject, upon which I was brought up and which dominates the economic thought, both practical and theoretical, of the governing and academic classes of this generation, as it has for a hundred years past. I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience.» p. 3.

B. Commentary:

There is no doubt that Keynes aspired and worked very hard to develop a truly general theory, judging from the very first sentence in the quotation above. Whether this most ambitious project, and in fact dream, in the life of a scientist is possible remains to be proved. In any case, a comparative study of methodology in regard to the works of Keynes, Einstein and Wittgensetin would prove most valuable in showing a common thread in the work of these three giants of the 20th century who, disenchanted with the classical method of approach and reasoning, attempted to develop one single general theory respectively for economics, physics and logic. As a note to the history of ideas, I do not think that any of the three succeeded completely, for the simple reason that the nature of economic life, of the physical universe as well as of the world of ideas, is dual, i.e. composed of stable (equilibrium) and unstable (disequilibrium) elements, forces and ideas.

Let us take a look at the Keynesian model of thinking, which conceptually can be represented by a few basic assumptions:

- 1. Modern capitalism has developed some contradictions expressed in the paradox of thrift; people in a free society want to get rich and therefore save more than they should.
 - 2. Effect No. 1: the phenomenon of over-saving or hoarding;
 - 3. Effect No. 2: a leakage in the aggregate demand;
 - 4. Effect No. 3: under-investment;
 - 5. Effect No. 4: a relatively lower level of output; and
- 6. Effect No. 5: the phenomenon of involuntary unemployment on a large scale.

Considering the assumptions of this model it is not difficult to detect that here we have the image of the capitalist system going through a depression, as happened during the 1930's when Keynes did his work. If this is what he had in the back of his mind, then any theorem which will be developed from this model will be valid only for the second leg of the business cycle. Thus, the Keynesian theory of employment is not and cannot be a general theory but rather a special one restricted to the study of modern capitalism during a depression. As far back as 1937

Sir John Hicks wrote: «The theory of general employment is the Economics of Depression,» 23 but very few understood this message. In any case, it is true to conclude that the Keynesian economics is a part of the Economics of Disequilibrium to which the study of the other leg of the cycle, respectively of booms and inflations, have to be added.

The rest of the Keynesian system of thought can be expressed in a few assumptions and concepts:

- 1. Given the phenomenon of involuntary unemployment in the system;
- 2. Given a conflict between the goal of price stability and foreign exchange stability;
 - 3. Government intervention on a permanent basis becomes a necessity;
 - 4. The concept of the Multiplier devised to show that government deficit-spending was rather limited, and.
 - 5. The increase in the national debt was no danger to the country;
- 6. The concept of the liquidity preference as a basis for the interest theory assumes further that money-market versus capital-market functions are not separated;
- 7. The concept of the marginal efficiency of capital without a clear distinction between capital formation derived from voluntary savings as distinguished from «forced savings» due to the inflationary effect of monetized bank credit.

A careful analysis of all these seven assumptions and concepts show that the Keynesian theory is not a general one and that it belongs to the economics of disequilibrium. Sometimes the equality Investment = Savings is introduced in the Keynesian system, but I think that this is a mistake because such an assumption means stable equilibrium which in turn negates all the other conditions in the Keynesian model and system of thought.

Without sufficient clarification Keynes used the term «the general case», to which his general theory of employment was supposed to refer. What should we understand by this term? Does this refer to all possible combinations or systems other than the special case analyzed by the classics? If so, then the Orientation Tables ²³ show a vast ocean of possible mixed systems or disequilibria which can be divided further into weak or strong, minor and major disequilibria in addition to the limiting case of total disequilibrium. There is no evidence that Keynes was aware of this immense complexity of what «the general case» could possibly mean and that it is impossible by definition to include all the complexity in one single theorem. Again we come to the same conclusion that his theory cannot be a general one.

Keynes also refers to «possible positions of equilibrium,» of which he thought the classical case was a limiting point. This subject also needs clarification. Keynes seems to make no clear distinction between a position of stable or unstable equilibrium derived from the nature of the system and attempts to construct artifical positions of equilibrium within a system which is in disequilibrium. Of course

Keynes may have thought that by using his method of thinking-in-reverse we could manufacture an equilibrium position, so to say, at will and thus the term «possible positions of equilibrium» could be increased to an unlimited number. However, we are faced here with the insurmountable barrier of the Impossibility theorem, which states that it is impossible in a free, democratic society to realize an economic order of price stability, full employment, maximum of social equity in the distribution of income and a balance of payments in equilibrium if we assume a system of paper money and monetized bank credit, as Keynes did.

Keynes was correct in observing that the «characteristics of the special case assumed by the classical theory» did not fit the economic society of his time which was troubled by a major disequilibrium. The problem was what to do under such conditions? Here is where the two principal roads, stability-from-within and stability-from-without, divide and Keynes decided to take the latter one without realizing that the success of his economic philosophy in practice would be road-blocked by the Impossibility theorem. ¹⁴

His remark that classical theory was «misleading and disarstrous if we attempt to apply it to the facts of experience» is ambiguous, to say the least. If classical economics is equated to a do-nothing government or keeping the (economic) status quo, reminiscent of «laissez-faire» and the «hands-off policy», then, of course, Keynes was right in his judgment. But if classical economics is interpreted by the Walrasian theorem of general equilibrium extended and reformulated and the theory of the natural parameter of the numeraire, then the picture is entirely different. This new rejuvenated version of classical economics to be put into practice requires a most energetic and wise government, first to undertake the necessary reforms for creating conditions of stability-from-within, and second to watch and immediately rectify anything that goes wrong in the system. In view of this alternative, Keynes' judgment is not the final word.

The dialogue has a long way to go but for the time being it must be interrupted.

Final Remarks.

These are fragments from a longer intellectual journey through Keynes' work applying the new approach of equilibrium versus disequilibrium. It is a great joy to have a dialogue with an original thinker where one can find surprises at every reading.

I would like to pay a tribute to Keynes who was a challenge for this author in the 1940's. Any serious student of Keynes is put to the test to evaluate what he has learned previously. I would also like to pay a tribute to Leon Walras and my distinguished mentor, Walter Eucken, who were the inspirational forces which helped me to develop the theorem of the Natural Parameter of the Numeraire and the Orientation Tables and thus come to the decisive point not to give up the

classical heritage but rather to restructure it and put it on a more solid and, I hope, lasting foundation. But of course no one can work in science without the hope that others after him will go further to better results.

Keynes' power of reasoning and style are unequaled. His observations of what was going on in real life are masterful. The only basic weakness, if we may call it that, which I found in his work is that he hastily took the dubious road of the belief in man-made stability-from-without derived from a system of disequilibrium, without having on hand adequate refined and tested analytical tools. His original contribution is opening new roads of thinking but based more on intuition than on hard systematic analysis. His *sui generis* method of thinking-in-reverse helped him to develop a number of concepts and theorems in support of his economic philosophy.

Briefly, Keynes could not get along with classical economics. In this respect he brings to mind the Romanian-born Constantin Brancusi, who also at one point in his life could not go along with classical art. When Brancusi met the famous French sculptor Rodin in Paris and showed him a few of his works, Rodin invited him to work with him. After reflecting upon this proposition, Brancusi declined the invitation by telling Rodin: «My art could not grow in the shade of a big oak!» So Keynes' thinking could not grow in the shade of the great classics. Yet, his contributions are so great that he created a new series of immortals: classics in the study of disequilibrium.

FOOTNOTES

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- P.S. This is a shorter version of the original paper which included also as Part One: New and Old Foundations of Monetary and Economic Analysis or
 - I. The Economics of Stable Equilibrium and
 - II. The Economics of Disequilibrium.
 - The complete text of this paper can be received by request from the author.