



A MESSAGE FROM LORD KEYNES OF TILTON

doc. Ing. Ján Iša, DrSc.

Institute of Slovak and World Economy, Slovak Academy of Science

John Maynard Keynes, who in June 1942 became Baron Keynes of Tilton, is often connected only with the theory of effective demand, which undoubtedly represents Keynes' main contribution to economic theory. Sometimes however it



is unjustly forgotten that Keynes contributed significantly also to the theory of money, which became one of the pillars of the theoretical system of the most important and most influential economist of the past century.

John Maynard Keynes was born on June 5, 1883 in the university town of Cambridge, where his father John Neville Keynes was a university lecturer in logics and political economy. John Maynard Keynes graduated from secondary school at Eton and then moved to King's College Cambridge, where he studied mathematics and then under the tuition of Alfred Marshall and later also Arthur Pigou he concentrated in the study of economics. A. Marshall clearly had a crucial influence on Keynes, and who on December 3, 1905 wrote to J. N. Keynes "Your son is doing excellent work in Economics. I have told him that I should be greatly delighted if he should decide on the career of a professional economist."

After completing university Keynes sat the entrance exam for the Civil Service and entered the India Office. He had however already expressed a serious interest in scientific work. From the start he devoted his energies to the theory of probability, which became the subject of his dissertation. Keynes' first economic work was "Indian Currency and Finance" in 1913. In 1908 he returned as a teacher to King's College, where he became a life member and a successful treasurer from 1919. A great honour for the young Keynes was his appointment as editor of the foremost English journal "Economic Journal".

Shortly after the outbreak of World War I, Keynes took leave of absence from Cambridge to enter the Treasury. By 1919 he was principal Treasury representative at the Peace Conference at Versailles. It can be said that it was at this time that Keynes' name first penetrated the consciousness of the world economic public. At the peace conference bitter disputes broke out over the level of reparations. Keynes on the basis of his own estimates reached the conclusion that the conditions dictated to Germany by the Treaty of Versailles were too harsh and Germany would not be able to fulfil them. He was justifiably afraid that the payment of the astronomical reparations would lead to economic and political break-up in Germany. In protest against this policy he resigned from his post and returned to Cambridge University. Keynes made his views on the question of reparations clear in 1919 in his famous work

"Economic Consequences of the Peace". From then Keynes was an international figure whose voice was heard on all major economic problems that arose in interwar Britain and, indeed, in the Western world as a whole.

For Keynes it was characteristic that his theoretical work was always connected with business activity and with the function of advisor to various governmental bodies. In 1929, for example, he became a member of the Committee of Inquiry into Finance and Industry, chaired by Lord MacMillan, in 1930 Prime Minister James Ramsay MacDonald appointed him as Chairman of the Economic Advisory Council and in June 1940 he became a member of the Consultative Council to the Ministry of Finance. Keynes played an extraordinarily significant role in the two crucial loans the United States provided to Great Britain. The first was a loan provided on the basis of the Lend-Lease Act approved by the US Congress in March 1941. Thanks to this act and the agreement on mutual aid between the USA and Great Britain signed in February 1942 Great Britain received approximately 60% (i.e. 18 billion USD) of the total value of American aid provided for their allies by the United States during the World War II.

Keynes had to make a huge effort in the negotiations on the post-war loan, without which Britain burdened by a huge foreign debt would have been threatened with great economic difficulties. Despite the fact that the terms of this loans were favourable, Keynes following his return from the negotiations met with sharp criticism. The story was current that he had been asked by a reporter if the rumour was true that he had made Britain the forty-ninth state of the United States of America. "No such luck", Keynes replied.

In February 1946 he again travelled off to the USA, where in Savannah he attended the first meeting of the International Monetary Fund of the World Bank. After returning to England he went to Tilton, where he wanted to relax during the Easter break. His heart, weakened by heart disease, however did not withstand a further heart attack. J. M. Keynes died at his summer residence in Tilton, Sussex on April 21, 1946.

One of the foremost theoreticians of money Don Patinkin wrote of Keynes, "In our profession Keynes is known primarily for his fundamental contributions to monetary economics." The development of Keynes' theory of money can best be followed in his famous "trilogy", comprising three fundamental works:

- A Tract on Monetary Reform (1923),
- A Treatise on Money (1930),
- The General Theory of Employment, Interest and Money (1936)

Though Keynes' three books on monetary theory may be called a trilogy, they differ greatly from one another not only in substance, but also in form and purpose. In the trilogy is reflected the development from the quantity theory of money, which Keynes inherited from his Cambridge teachers, towards an attempt at its dynamisation, elaboration and application up to his revolutionary work *The General Theory of Employment, Interest and Money*, in which the theory of money is incorporated into his macroeconomic theory focused on a new solution to the problems of macroeconomic equilibrium.

The Cambridge Version of the Quantity Theory of Money

The first part of the *Tract on Monetary Reform* dealt with the pressing problems of inflation, deflation and the resulting exchange rate disequilibrium that beset Europe after World War I. The tract throughout is interwoven with Keynes' conviction that the main cause of the fact that the capitalist economy had in the 20th century stopped working efficiently was the significant instability of the purchasing power of money. Keynes' efforts were concentrated on a solution to the basic dilemma between the 'alternative aims' of stability of the internal price level and stability of the exchange rate. Keynes strongly argued the view that he was to reaffirm in the *Treatise on Money*, that of giving precedence to the aim of internal price stability.

In the first part of the *Tract* Keynes examines which negative consequences result from currency instability. Often Keynes' conclusions are cited, "Thus Inflation is unjust and Deflation is inexpedient. Of the two perhaps Deflation is, if we rule out exaggerated inflations such as that of Germany, the worse: because it is worse in an impoverished world, to provoke unemployment than to disappoint the rentier." Keynes here states two arguments in favour of low inflation:

1. low inflation stimulates investment,
2. in contrast to deflation, which transfers wealth from the active population to the inactive, inflation takes place at the expense of the rentier class, which Keynes always wanted to remove.

The theoretical instrument which Keynes at the time wanted to use was the Cambridge version of the quantity theory of money developed by Marshall and Pigou. In the *Tract* the quantity equation was formulated:

$$n = p (k + rk'),$$

where n is the quantity of money in circulation and p is the price level. The other parameters – k = the number of consumption units that the public decides to hold in cash. r = the banks' ratio for checking accounts and k' = the number of consumption units that the public decides to hold in checking accounts. He took the parameters n and r to be institutionally given, i.e. these are determined by a decision of the banking system. The parameters k and k' , whilst they fluctuate over the cycle, are, however, also institutionally given. The only variable in the equation is thus p . From this it results that the banking system should perform manipulation through the parameters n and r counter to the fluctuations of k and k' , whereby the desired price stability could be attained.

Keynes took exacter the form of the quantity theory of money to hold true only in the long term, expressing the famous sentence: "But this in the long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task, if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again."

The *Tract on Monetary Reform* deals with the analysis of the optimal monetary system. Keynes was against a return to the old parity and spoke in favour of a flexible pound-dollar exchange rate. In Keynes' view, there had since the World War I not existed any choice between the gold standard and a managed currency. The automatic standard had lapsed and then there was the issue of whether a currency should be managed in order to ensure fixed dollar parity or a stable internal price level.

The *Tract on Monetary Reform* aroused a great response; it was not however received favourably as public opinion couldn't accept the idea that the gold standard, at the time considered to be one of the main props of economic stability, should be abandoned.

Fundamental equations

Less than one year after publication of the *Tract* Keynes started work on his *Treatise on Money*, which was to be his magnum opus. In this work too he set out from the idea that the main precondition for the smooth functioning of a capitalist economy is price stability. However, he considered investment to be the main cause of fluctuation in the purchasing power of money. In contrast to the *Tract*, in which he based his analysis on the quantity theory of money, in the *Treatise* he started to develop Marshall's concept of the demand for money. His new approach was based on an analysis of household incomes, which – as was later shown – was actually the first step towards a theory of effective demand.

In the *Treatise* Keynes wanted to abandon the traditional approach of starting from a total quantity of money, regardless of for what purpose it was used. He approached his ana-



lysis of the price level from the aspect of the flow of money incomes of society, which he divided into first parts, which are gained through the production of consumer or investment goods; second parts, which are spent on consumer goods, or form savings. On the basis of this he then constructed two fundamental equations – the first for the price level of consumer goods and the second for the price level of the output as a whole. It is necessary to add that Keynes did not regard the Treatise as a rejection of the quantity theory, but as an extension and further specification of it.

Keynes' monetary theory put forward in the Treatise was focused on a change in the price level, which in his view was directly connected with an excess of investment over savings. It is necessary, however, to emphasise that the relationship between I and S in this case served only for an analysis of the change in prices and not for an analysis of output. A key role in this theory was played by the interest rate, where Keynes differentiated between the natural and the market interest rate.

Keynes had great hope for the Treatise. From the start he was convinced that his fundamental equations and the monetary policy based on them were a significant contribution to clarifying the important economic processes, cyclical fluctuations in particular. The criticism and rejection that the main theoretical conclusions of the Treatise encountered led Keynes later to the self-criticism: "My so-called 'fundamental equations' were an instantaneous picture taken on the assumption of a given output. They attempted to show how, assuming the given output, forces could develop which involve a profit-disequilibrium, and thus required a change in the level of output. But the dynamic development, as distinct from the instantaneous picture, was left incomplete and extremely confused."

Keynes' liquidity preference and the theory of demand for money.

In consequence of this criticism Keynes relatively soon after publication of the Treatise started on a new work, which in the end was to become *The General Theory of Employment, Interest and Money*. Here, Keynes from the start made use of the critical comments of R. Hawtrey and fruitful discussion in the legendary "Cambridge Circle", the main participants of which were R. Kahn, J. Meade (Nobel laureate, 1977), A. Robinson, Joan Robinson and P. Sraffa. The first preserved version of the *General Theory of Employment, Interest and Money* is a draft of four chapters, the first of which is entitled the *Monetary Theory of Production*. The definitive title of the work a *General Theory of Employment, Interest and Money* came only in 1934.

The place of the theory of money in Keynes' macroeconomic theory was eloquently put by R. Harrod, according to whom the individual parameters in Keynes' system are defined as follows:

The level of investment is determined by the marginal

efficiency of capital and the interest rate.

The interest rate is determined by liquidity-preference and the quantity of money.

The level of employment is determined by the quantity of investment and the multiplier.

The value of the multiplier is determined by the propensity to consume.

From this it is apparent that the theory of money is one of the basic pillars of Keynes' theory of effective demand or theory of employment. In neoclassical economics the theory of money and the theory of value have developed independently and in isolation. Whereas the quantity theory of money had attempted to explain the general price level, the theory of value should in turn have explained so-called relative prices. This dichotomy, identified as a dichotomy between monetary and real analysis, should have been overcome by Keynes' theory of interest and money, founded on the concept of liquidity preference, and which cast doubt upon the existing variants of the quantity theory of money. Primarily, Keynes did not concur with one of the basic theses of the quantity theory, according to which a change in the quantity of money directly exerts an influence on prices. Keynes revised the traditional quantity theory of money and relativised its validity in the following way: "So long as there is unemployment, employment will change in the same proportion as the quantity of money; and where there is full employment, prices will change in the same proportion as the quantity of money." In other words, the quantity theory of money holds only on various unrealistic conditions.

In Keynes' mechanism the influence of the quantity of money on economic processes is different, as claim adherents to the quantity theory of money. The quantity of money (together with liquidity preference) determines the interest rate. "This is where and how the quantity of money enters into the economic scheme¹". The interest rate in turn influences investment activity, effective demand and in the end employment.

Keynes rejected the neo-classical understanding of the interest rate as an instrument for the automatic balancing of saving and investment. He saw the interest rate as a purely monetary phenomenon, connected with liquidity preference, i.e. as the reward for surrendering the advantages of liquidity and taking on the risk connected with holding securities and other less liquid assets². The term liquidity

¹ True, Keynes concurrently drew attention to the fact that the mechanism of the effect of money on the economy is not as smooth as would appear from these formulations. "If, however, we are tempted to assert that money is the drink which stimulates the system to activity, we must remind ourselves that there may be several slips between the cup and the lip."

² "It should be pretty obvious that the rate of interest cannot be a return to saving or waiting as such. For if a man hoards all his savings in cash, he earns no interest, though he saves just as much as before. On the contrary, the mere definition of the rate of interest tells us in so many words that the rate of interest is the reward for parting with liquidity for a specified period." (Keynes, J. M., 1936). R. F. Harrod notes one

preference expresses the fact that we give preference to holding money over holding securities or real assets. Economic subjects prefer holding money because money exhibits the highest liquidity. It is possible to exchange it for any form of property, or wealth, where holding money is moreover not connected (with the exception of a period of high inflation or hyperinflation) with additional costs. The holding of securities is connected with risk and the creation of a stock of real assets, where as a rule this assumes additional expenses for their storing.

Liquidity preference is, in Keynes' view, a psychological propensity that influences the behaviour of individuals and businesses alike. For example, an individual decides first of all what part of his income he will consume and what part he leaves as a reserve. Then he must decide in what form he will dispose future consumption. Money doesn't function here as an intermediary in transactions, but as a store (holder) of value.

Keynes' Liquidity preference is connected with three motives:

1. the first is the transaction motive, which in turn is divided in to the income motive and the business motive. This motive explains the need for a certain cash income, whether this concerns individuals or businesses. The size of this part of demand for money depends on the level of income and on the length of the time interval between the receipt and expenditure of incomes.

2. the precautionary motive is expressed in the fact that individuals and businesses hold an additional stock of money so as to ensure themselves against various fluctuations and unforeseen circumstances. Liquidity preference is connected with the transaction motive and, with the precautionary motive, determines the demand for cash money, which is sensitive to only a small extent to changes in the interest rate.

3. Keynes' main innovation in the theory of demand for money is connected with the speculative motive. This motive is the important factor influencing changes in the quantity of money, sensitively reacting to changes in the interest rate. The total quantity of money that remains after satisfying the transactions motive and the precautionary motive is then available to satisfy liquidity preference induced by the speculative motive. In this case each economic subject must decide whether to hold savings in the form of cash or transfer them to bonds. The decision of in which proportion savings will be divided between cash and securities depends on how the prospects for the deve-

lopment of the interest rate and the expected capital gains are assessed.

Let the amount of cash held to satisfy the transactions – and precautionary motives be M_1 , and the amount held to satisfy the speculative motive be M_2 . Corresponding to these two compartments of cash, we then have two liquidity functions L_1 and L_2 . L_1 mainly depends on the level of income, whilst L_2 mainly depends on the relation between the current rate of interest and the state of expectation. Thus

$$M = M_1 + M_2 = L_1(Y) + L_2(r),$$

where L_1 is the liquidity function corresponding to an income Y , which determines M_1 , and L_2 is the liquidity function of the rate of interest r , which determines M_2 .

In evaluating Keynes' theory of liquidity preference, which many economists consider to be Keynes' most original contribution to economic theory, it is often pointed out that its primary significance is for the development of the theory of demand for money. There was little explicit consideration on money demand behaviour in pre-1900 writings in the quantity theory tradition. Indeed, there was little emphasis on money demand in the classic contributions of Mill (1848), Wicksell (1906) and Fisher (1911). In the English language literature, the notion of money demand came forth more strongly in the cash balance approach of Cambridge economists A. Marshall and C. Pigou. It was this approach that was taken by J. M. Keynes (even though he had outlined only the main elements of the theory of liquidity preference), which made a radical turn-around in the development of the theory of the demand for money.

From the theory of the liquidity preference is derived also Keynes' concept of monetary policy, which is directed at regulation of the interest rate. Indeed, were the interest rate to decline to a certain very low level, there could, in Keynes' view, arise the curious situation that "almost everyone prefers cash to holding a debt which yields so low a rate of interest" Liquidity preference may become virtually absolute and in this event "the monetary authority would have lost effective control over the rate of interest." and monetary policy would become powerless. In neo-Keynesian economics this situation is termed a liquidity trap. Monetary policy aimed at the long-term maintenance of low-interest rates should according to Keynes' recommendations stimulate investment and thereby also effective demand. Keynes himself however was – on the basis of the experience of the Great Depression – sceptical as regards the effectiveness of monetary policy alone, and therefore recommended also other measures of economic policy, in particular the use of the (government) budget.

The International Clearing Union

Already in autumn 1941 Keynes had began to realise that the balance of trade and of payments of Great Britain,

amusing anecdote which Keynes' father recorded in his diary in 1888 when John Maynard was four and a half years old. John Maynard, on being asked what is interest, said: "If I let you have a halfpenny and you kept it for a very long time, you would have to give me back that halfpenny and another too. That's interest."

³ Keynes himself considered a liquidity trap only theoretically, he did not exclude its occurrence however in the future. Some economists reckon that the ineffectiveness of the monetary policy of the Japanese central bank in past years may be considered as a specific case of a liquidity trap.



which was burdened by huge foreign loans following the end of the war, was getting into difficulties. He was troubled by the question of how to resolve the problems of countries that were to carry out post-war reconversion in conditions of deep deficits, and how to create favourable conditions for overcoming the pre-war economic isolationism and to develop international economic cooperation. The key to the resolution of these questions he saw correctly in radical reform of monetary relations. These thoughts led him to elaboration of the Clearing Union project.

Keynes' Clearing Union project, published in April 1943, contained these principles:

- We need an instrument of international currency having general acceptability between nations, so that blocked balances and bilateral clearings are unnecessary...
- We need an orderly and agreed method of determining the relative exchange values of national currency units, so that unilateral action and competitive exchange depreciations are prevented.
- We need a quantum of international currency, which is neither determined in an unpredictable and irrelevant manner as, for example, by the progress of the gold industry, nor subject to large variations depending on the gold reserve policies of individual countries; but is governed by the actual current requirements of world commerce, and is also capable of deliberate expansion and contraction to offset deflationary and inflationary tendencies in effective world demand,
- We need a system possessed of an internal stabilizing mechanism, by which pressure is exercised on any country whose balance of payments with the rest of world is departing from equilibrium in either direction, so as to prevent movements which must create for its neighbours an equal but opposite want of balance.
- We need an agreed plan for starting off every country after the war with a stock of reserves appropriate to its importance in world commerce, so that without undue anxiety it can set its house in order during the transitional period to full peacetime conditions.
- We need a central institution, of a purely technical and non-political character, to aid and support other international institutions concerned with the planning and regulation of the world's economic life.
- More generally, we need a means of reassurance to a troubled world, by which any country whose own affairs are conducted with due prudence is relieved of anxiety for causes that are not of its own making, concerning its ability to meet its international liabilities ... (Keynes, J. M.: *Proposals for an International Clearing Union*. Speech in the House of Lords, May 18, 1943).

Keynes' project proposed the establishment of an International Clearing Union (essentially in the form of a certain central bank), which would open current accounts for central banks of member as well as non-member states and issue its own currency unit – a *bancor* (originally a *grammor*). International payments were to have been made in

bancors. Countries with a positive balance of trade were to have gained deposits in *bancors*, whereas countries with a negative balance of trade could draw loans in *bancors*. In national economies the national currencies were to have been used, the ratio of which to the *bancor* was to have been firmly fixed and could have been changed only with the consent of the Union's management. Each state was to have been allocated a certain quota in *bancors*, which could have been revised after some time. Member countries should have been directed so as to keep foreign payments roughly at the level of their quotas. According to Keynes' plan loans were to have been provided in the amount of 25 billion USD.

In the USA in 1941 – 1943 the preparation of a post-war international monetary arrangement was being dealt with by an official of the Treasury, H.D. White, who was an ardent admirer of Keynes, and who prepared the project of an International Stabilisation fund. The credits that would be available under the White plan were calculated at only 5 billion USD. In comparison, Keynes' plan was on a much grander scale and could have brought much benefit to debtor nations. Post-war development has in many aspects shown Keynes to have been correct. The Americans, who were in the position of a creditor country, viewed Keynes' Clearing Union with scorn. They claimed that Congress would never agree to the "unlimited liability", which allegedly, Keynes' plan contained, since Keynes' Clearing Union did not require initial deposits of assets, these were to have been created during its working. White's plan on the contrary required deposits from countries for securing loans. Half the deposits were to be in gold and the remainder in their own currency.

Even though Keynes' plan for a Clearing Union was not adopted, its active presentation at the Bretton Woods conference influenced its outcome.

The most important economic works of J. M. Keynes

1. A Tract on Monetary Reform (1923)
2. A Treatise on Money Vol. I, II (1930)
3. The Means to Prosperity (1933)
4. The General Theory of Employment Interest and Money (1936)
5. How to Pay For the War (1940)

Literature

1. Harrod, R. F.: *The Life of John Maynard Keynes*, Macmillan, London 1951.
2. Iša, J.: *The End of the "Keynesian Revolution"?* Pravda 1985 (Koniec "Keynesovskej revolúcie"?)
3. Klein, L. R.: *The Keynesian Revolution*. Macmillan, London 1961.
4. Patinkin, D.: *Keynes Monetary Thought. A Study of its Development*. Durham 1976.
5. Sojka, M.: *John Maynard Keynes and Contemporary Economics*. Grada Publishing, Prague 1999 (John Maynard Keynes a súčasná ekonomie).