

THE KEYNESIAN THEORY OF INFLATION

Dr. FERENC FOLTYN

First assistant

The so-called "quantity theory of money" considers the amount of money as the most significant determinant of the price level. This concept gradually lost its credibility during the thirties, on one hand because some empirical studies had proved the remarkable changes in the circulation speed of the money, on the other hand — even more significantly — Keynes started a certain kind of "revolution" in the Western economics.

At first in this "Treatise on Money"¹ he had worked out the "money value-income" theory, which replaced the traditional quantity theory with the "basic equations of the money". This work was published in 1930. He acknowledged a special relationship between the money income and the flow. Marget² severely criticized this peculiar money value-theory. In his price theoretical work he did his utmost to prove that Keynes did not take stand at all against the quantity theory.

Keynes presented his inflation theory (which is basically demand theory) in his most important work, titled "General theory of employment, interest and money" ("General theory" in further references)³ and in "How to Pay for the War", which appeared in 1936 and 1940, respectively.⁴

In these works Keynes created the "income-expenditure approach" and eliminated the money quantity as determinant factor of the price level.

In the 11. Chapter of the "General Theory" he expressed his opinion that in the economy, which seeks full employment, in case of "liquidity preference" the quantity of money is one of the main determinants of the interest rate. The marginal effectiveness of the interest rate and the capital determine the investment demand, which in turn influences the employment and the total income through the well-known multiplier. Therefore the quantity of money significantly determines the so-called "effective demand". In case of the lack of full employment, the increase of the quantity of money remarkably increases the real income, because the unit labor cost will increase due to the decrease of the unemployment and the bottlenecks. Meanwhile the prices remain stable. Af-

terwards when the economy reaches once again full employment, the unit labor cost and the prices will grow parallel with the growth of the "effective demand". When the increase of the effective demand does not cause any further production growth, only the unit labor cost increases parallel with the demand, the "true inflation", as Keynes put it, appears.

The substance of the Keynesian theory can be found in the following: the increase of the quantity of money without the adequate production real value growth causes "inflationary gap" between two "flows", which can be solved only by price increases.

Using the new term of the multiplier, Keynes tried to explain the short-range fluctuations in the production, aiming to fill the gap in the monetary theory, though he had such employment model, in which the traditional full employment is only a happy coincidence. The capitalist economies found this theory very favourable, because the simple income-expenditure mechanism could seemingly explain the inconsistencies of the modern corporate capitalism.

Two factors assured the possibility of adaptation of the Keynesian theory for the explanation of the inflationary phenomena. Firstly, the saving-investment equilibrium, adapted from Wicksell, presented a direct approach to the inflation, through the terms of the demand and supply of goods. This equilibrium is relatively understandable, can be handled easily and it can be changed from the analysis of the production level to the analysis of the factors determining the price level. This is the very reason, why we can call it favorable for the contemporary western economical sciences: the saving-investment equilibrium easily can be adapted to such conditions, at which the wages and prices rather than the real value of the production create equilibrium. Secondly, the analysis of the "General Theory" based on the allegation that the money wages are determined by exogenously. Keynes did not elaborate his money wage-concept, therefore several possibilities opened to bring different variables into the model.

During the second world war the inflation was very simple indeed for the Keynesians: during the price and wage control and the rationing they have to add some supplementary theory about applying the total demand to the supply.

In the post-war period of "open inflation" suddenly the economists found the possibility of putting together some good-looking inflationary theory out of the traditions of the Thirties. As I mentioned earlier, they transformed the model of the qualitative changes of the production to a dynamic model of the price level changes, which reacts according to the exogen changes of the total demand or supply, in case of full employment.

They have smuggled in the concept from the „imperfect competition" theory, that the prices and the wages are determined by either the demand, or administratively carved-out cost and actually introduced the distinction between the so-called "demand-pull" and "cost-push" inflations. This way they opened a virtual flood of debates in the Western economic sciences, which lasts until this day.

Finally they have added some kind of political and social message to the Keynesian theory, asserting that the struggle for better income between the different social classes, causes the inflationary process.

Somewhat simplifying the matters, we can say that these models are based on the "money illusion". However, this category is mainly used as an illustration of a short-term economical behavior, which depends on the trust in the purchasing power of money. Meanwhile, it does not have any theoretical significance as far as the long-range analytical work about the trends of the price level.

In case of a demand inflation the substance of the Keynesian message is the following: with the help of fiscal restrictions they have to reduce the total demand, according to the total supply. The necessity of the monetary policy is recognized only in a limited way, namely the higher interest rates charged by the central bank and the less availability of credit can reduce the level of the total expenditures. In the same time they suppose that the interest rate has only insignificant influence shaping the total demand, however, the credit restrictions has important role in the same matter. The monetarist view is quite the contrary: according to them, the fiscal restrictions have only minimal effects, unless they are combined with monetary restrictions. They do not consider the high interest rates as a regular way of monetary restrictions. According to them, such step, without "credit crunch" and other monetary restrictions, only leads to a certain distortion of the allocation of capital and it does not reduce the total demand effectively.

Such empirical approaches depend on the fact that the highly developed financial system makes possible several alternative financial sources, where the ultimate limit is the quantity of money.

As far as the "cost-push" inflation concerned, the Keynesian concept is remarkably unsophisticated: the "push" should be stopped, either counting on the decency of the "pushers", or applying some social pressure. The ironical paradox in the whole problem is that the Keynesians sharply criticized the neoclassical concept ("The money is a veil"), meanwhile they have tried to persuade the public opinion about the same thing and they have tried to reduce the money to mere a unit of account. In such context the cost-push only represents the natural will to reestablish the equilibrium, which was shaken because the inflation distorted the real value of the money. Therefore the income policy can lead to successes only through adequate monetary restrictions, which promotes price stability in turn.

Just before the second world war, first of all in the United States the Keynesian inflation-analysis was further developed, mainly along the lines of the well-known "inflationary gap" concept. In this aspect we have to appreciate the outstanding theoretical work of a Danish economist, Bent Hansen,⁵ who worked out his model based in the Wicksellian demand-supply theory. In his substantial contribution, which has the formal characteristics of the Swedish monetary school, he applied signi-

ficant distinction between the market of the goods and the production factors, he introduced the terms "goods gap" and "factor gap".

Turvey and Brems⁶ can be accredited for making publicity for the Hansen-theory in the United States and in the same time they tried to create a certain dynamic version of it, too.

Holzman⁷ had also tried to create a dynamic type of the Keynesian inflation model. He did not use the terms of total consumption and investment, but dealt with the distributional connection between the wages and profits, assuming that the propensity to save is higher among the capitalists, than among the workers. Holzman related the inflationary process to the struggle between the social classes for the bigger share, which leads to the price and wage increases, and that results in a higher price level, depending on the situation, whether the social groups are ready to accept the decrease in the real income, causes by the inflation.

Turvey, depending on Hansen's work, wrote another work in 1951, in which he distinguished a market for the goods and another one for the production factors.⁸ He introduces the assumption, that the prices and the wages are determined either by the demand, or by the costs. He laid down the bases for the foursome classification of the inflation.

These inflation models, based on the Keynesian theory, have been introduced only on the surface. However, these are basically the same. They try to explain the connections of the price level changes between two or more periods with equations. They deal generally with two problems: the speed of the inflationary process and the question whether the inflation would automatically stop when it reaches a certain higher price level.

The other important feature of these models the assertion, that the redistribution of the real income is the result of the inflationary process. However, some other economists emphasized that these assumptions are largely arbitrary, especially the theory, that the prices and the wages are determined by either the cost of living, or by the previous changes of the production level, according to and institutionally given constant.

These connection systems, which can be found in the models, have not considered the monetary background, they merely connected the expenditures with the income, they ignored the problem of financing the ever-growing expenditures and the effects of the growing money incomes upon the demand for money, interest rates and the expenditures.

In the post-war Keynesian theory there is only one significant achievement, which worth to mention and helped to develop the monetary theory, namely the so-called Phillips-curve⁹, which is about the connection between the wage inflation and the unemployment.

Depending on the British statistical data of the last 97 years, it has established an empirical connection between the nominal wages and the unemployment rate. The speedier increase the nominal wages, the smaller is the unemployment rate. According to Phillips, the unemployment means a certain surplus labor force supply, therefore the wage

is the price of the labor force, it decreases with the growth of unemployment and it increases when the unemployment decreases. If the economy has reached the level of full employment, the labor unions could easily coerce higher wages, but when the unemployment rate is higher, they have to be settled with more modest wage increases. If we take away the increase rate of the productivity from the wage increases (this is generally accepted as 3%), the curve readily shows the percentwise connection between the inflation and the unemployment. According to all of this the cause of the inflation is that the wages increase more rapidly than the productivity of labor.

Phillips actually concentrated his effort to the dynamics of the labor market and he considered the inflationary problems as some by-products of his survey. Obviously the Keynesian concept shared the viewpoint that the wage increase rate is a certain part or at least a function of the unemployment rate, therefore the wages as well as the prices increase more rapidly than the unemployment rate does.

However, the functional connection system between the wage rate the unemployment rate is by no means so obvious as Phillips presented it. According to some critics in case of low unemployment rate the wage increase rate is high and wildly changing, meanwhile, in case of high unemployment rate the wage increase rate is low and does not change together with rate of the unemployment.

From this connection system, using the tentative increase rate of the productivity, Phillips fixed the necessary unemployment rate in order to achieve price stability (in England 2.5%, in the United States 7-8%)¹⁰

The Phillips-curve empirically expresses the phenomena, which is called "trade off" dilemma by the Western economists, which means either price stability with high unemployment, or inflation with "full employment".

When Phillips' study appeared, it provoked crossfire from the critics. There were some justified doubts, whether the curve, which represents an empirical relationship, is really working economic law as for instance the Engel-curves, or merely arbitrarily constructed statistical product, which connects two phenomena, which are virtually impossible to compare with each other.

Some people brought up the idea, that the theoretical base of the Phillips-curve, gives a rather rude explanation for the market mechanisms in both meaning of the word: on one hand it supposes that the prices are only determined by the overdemand or oversupply on that market, it ignores the influence of the other markets, on the other hand it try to make us believe that the money price corrections and the real relative price corrections are the same and they could be squeezed in one single theory.

We can ascertain that the Phillips-curve is not only coming from the Keynes-Hicks-Patinkin-models, with the addition of the constant nominal quantity of money, but is simplify the whole thing, because the

price changes are attributed to the overdemand and oversupply in one certain market.

At last not at least it is very significant fact that the Phillips-curve consequently failed in several countries especially in the United States and England, namely because the inflation and the unemployment rate were much higher, than it could be expected empirically based on this curve.

The Keynesians set up two, scientifically not particularly convincing hypothesis about the explanation of this fact. One asserts that the Phillips-curve lost its meaning, the other says that is still valid, however, it moved a bit, due to some exogenous factors.

The highest quality critique against the Phillips-curve undoubtedly comes from the founder of the "Chicago School", Milton Friedman. According to him, if some kind of inflation is held with some monetary or fiscal expansion, (due to raise the employment level), after awhile the workers set their wage demands to this rate of inflation.

In case they want to held the higher employment level, the inflation should be accelerated in the very moment, when the measure of the wage demands shows that the working class realized the extent of the inflation.

According to Friedman, it is baseless to suppose that the nominal wages determine decisively the labor market. Phillips have adapted the nominal wage theory from Keynes, who supposed that the prices are rigid, therefore the people cannot foresee the possibility of decreasing prices. Furthermore he could imagine the downward correction of the real wages. Therefore Keynes needed to introduce the so-called "money illusion."

Keynes did not think about the possibility that in case of continuous inflation those wages, which increase slower than the prices, are not effective anyway. If the workers count on the rising prices, the empirical relationship between the inflation and the unemployment, indicated by the Phillips-curve, does not exist. The experiences of the last decade showed, too, that the increase of unemployment can go along with the increase of the wages.

Friedman's critique against the Phillips-curve has a rational nucleus, namely that the wages are determined by objective factors and the money illusion can be only a very short-term phenomena in the struggle of the two basic social classes for the distribution of the income.

We have to say against Friedman, that the inflation cannot decrease permanently the real wages, there are more substantial factors, which should not be ignored. According to the monetarists the inflation is exclusively monetary phenomena, the unemployment belongs to the sphere of the economy, therefore it could not be corrected by the means of the monetary policy. Obviously the Chicago School makes a sharp line between the real and the monetary facts of the economy. We have to emphasize that the monetarists – based on the Walras-theory of equilibrium – approaching the real wages from the marginal productioity of labor. The same way is used to approach the "natural rate" of the unem-

ployment. The truth is that the wages are not determined by the marginal productivity of labor, but by the value of the labor. According to the Marxism, the wages has a certain social and historical element, which depends on the level of the productive forces and the actual state of the class relations.

Now we arrived to the postwar "renaissance" of the quantity theory, or as they call it since the early Sixties, to the "rise of the monetarism".

The temporary succes of the "new quantity theory" can be explained mainly by the fact that it means an alternative against the Keynesian concept, which have ruled since a quarter of the century and could not cope with the inflation. The further explanation of this controversy is beyond the framework of this study.

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DIE INFLATIONSTHEORIE VON KEYNES

von

Dr. FERENC FOLTYN Universitätssoberassistent

(Zusammenfassung)

Mit der Gründung seiner Inflationstheorie, die dem Wesen nach eine Nachfrage-Theorie ist begann Keynes 1930 in seinem Werke "Treatise on Money". Er arbeitete seine Theorie dann in seinem Werk: „Allgemeine Theorie der Beschäftigung des Zinses und des Geldes“, ferner in seinem 1940 erschienenen Buch. "How to Pay for the War" aus.

Seine Konzeption besteht darin, daß die Erhöhung des Geldbestandes ohne eine entsprechende Zunahme des Realwertes in der Produktion zu einer sog. „Inflations-spalte führt, die nur durch Preiserhöhung auszufüllen ist.

Nach dem zweiten Weltkrieg versuchten die westlichen Volkswirte aus der Grundlage der Inflationstheorie von Keynes ein annehmbares Modell aufzubauen, so, daß das

Modell der quantitativen Veränderungen der Produktion zu dynamischen Modell der Preisniveauveränderung umgewandelt wurde. Außerdem wurden die Begriffe „demand-pull“ und „cost-push“ eingeführt. Den Höhepunkt der neokeynes'schen Theorie bildete trotzdem die sog. Phillips-Kurve, welche die empirischen Beziehungen zwischen der Lohninflation und der Arbeitslosigkeit analysierte und das sog. „trade off“-Dilemma schuf.

Friedman kritisierte die Philips-Kurve, weil die Löhne seiner Meinung nach von objektiven Faktoren bestimmt werden und die „Geldillusion“ von Keynes im Kampf der zwei grundlegenden Klassen um die Verteilung nur auf kurze Frist einen Einfluß ausüben kann.

ИНФЛЯЦИОННАЯ ТЕОРИЯ КЕЙНСА

Д-р. ФЕРЕНЦ ФОЛТИН

адъюнкт

(Резюме)

Кейнс в своей работе „Treatise on Money“, написанной в 1930 г. положил основу своей теории об инфляции, и в других работах, как «Занятость и общая теория процента и денег» и «How to Pay for the War», изданной в 1940, развернул эту теорию, которая по существу является теорией спроса.

Его концепция состоит в том, что увеличение количества денег без соответствующего повышения реальной стоимости в производстве создает т. н. «инфляционное отверстие», которое можно закупорить только повышением цен.

После второй мировой войны буржуазные экономисты пытались построить благовидный модель инфляции на основе теоретического наследства Кейнса, таким образом, что превратили модель количественных изменений производства в динамический модель изменения уровня цен. Кроне этого ввели понятия т.н. „demand-pull“ и „cost-push“. Несмотря на это зенитом теории некейнсизма явилось т. н. кривая Филиппса, которая рассматривала эмпирическую связь между инфляцией зарплаты и безработицей и создала т. н. дилемму «trade off».

Фридман подверг критике кривую Филиппса, потому что-по его мнению зарплаты определяются объективными факторами, и «иллюзия денег» Кейнса может оказывать влияние только на короткий срок в борьбе за распределение дохода между двумя основными общественными классами.