INTEREST AND PROFIT

by Carlo Panico

The analysis of the relationship between the rates of interest and profit deals with how to integrate the theory of money with that of value and distribution. In this analysis the notion of 'money' or 'market' interest rate is distinguished from that of 'average' or 'natural' or 'real' interest rate. The level of the latter is determined either by the same factors affecting the rate of profit or by other factors, including monetary ones. Its movements are related to those of the rate of profit through the operation of competitive market forces. The *daily* variations of the 'money' or 'market' interest rate, instead, are not systematically related to those of the rate of profit. The analysis of the relationship between the rates of interest and profit thus considers the following questions: which functional relations describe the operation of the competitive market forces linking the 'average' or 'natural' interest rate and the rate of profit; which are the factors affecting the two rates and which of the two is independently determined.

In the history of economic thought different views have been proposed on this issue. The dominant view is that the 'average' or 'natural' or 'real' interest rate is independent of monetary factors and depends on the same forces determining the rate of return on the capital invested in the process of production. The alternative view states that monetary factors are relevant, both temporarily and permanently, in determining the equilibrium level of economic variables, including the interest rate.

For Smith and Ricardo the 'natural' interest rate is a *portion* of the rate of profit. The difference between these two rates represents the remuneration of the entrepreneur for the greater risk and trouble of investing in the production sector, rather than in financial assets. The rate of profit is determined on the basis of the 'surplus' theory, by taking as given the social product, the available technology and the real wage rate. The 'natural' interest rate is thus determined by the rate of profit, and no direct influence of monetary factors on the former rate is allowed.

In the second half of the 1820s, Tooke and J.S. Mill argued, in opposition to Ricardo, that the 'average' interest rate too can be influenced by monetary factors. Their position was stimulated by the observations of the long-lasting rise in the interest rate which occurred during and after the Napoleonic wars and which was the result, according to them, of the

policy followed to finance the Government debt, rather than of a change in the conditions of production implying a higher level of the rate of profit.

Tooke and Mill failed to take full account of the competitive market forces which relate the movements of the rates of interest and profit, and ended up by claiming that these two rates can undergo long-lasting movements in opposite directions. This position, which is not to be found in their subsequent writings, was rejected by other contemporaries. In an important publication on the working of the banking sector, Gilbart (1834, p. 168-9) argued that competitive market forces tend to produce similar movements in the 'average' interest rate and in the rate of profit. Thus, if the former is autonomously determined, the latter depends on it.

In his unfinshed notes on monetary problems, published after his death by F. Engels, Marx too put forward a monetary determination of the 'average' interest rate. He studied at length the literature on money and banking and developed the view that the most powerful pressure-groups operating in the financial markets are able to affect permanently the interest rate (and therefore their share of the surplus-value produced) through the introduction of financial innovations and their influence on state interventions regulating the legal and institutional arrangements of these markets. By presenting a detailed analysis of the working of financial markets in terms of supply of and demand for liquid means, he showed how both the 'market' and the 'average' interest rates are determined, rejecting the notion of a 'natural' interest rate determined on the basis of technological or material laws of production, and pointing out the analytical conditions allowing a determination of the 'average' interest rate, independent of the rate of profit and based on historical and conventional elements.

Marx's notes, however, contained some contradictory elements. He did not abandon the idea that the rate of profit is determined by the given level of the real wage rate within the surplus theory of value and distribution. Besides, while on some occasions he agreed with Ricardo that the 'average' interest rate is a *portion* of the rate of profit, on others he proposed the same view held in the 1820s by Tooke and Mill, i.e. that the 'average' interest rate and the rate of profit can undergo independent movements.

The analysis of the operation of competitive market forces coming into action when a divergence between the rates of interest and profit comes about was little worked out by Marx. Nonetheless, from those parts of his notes, where he discussed how the money-dealing capitalists appropriate a part of the surplus-value generated in the production process, it is possible to derive some analytical elaborations of a particular way through which competitive forces operate (see Panico, 1980). The banking sector, like the other industrial sectors, has to

earn at least the general rate of profit on the capitals and wages anticipated to carry on its activity. Changes in the interest rates affect the revenues (interest received on bank loans and financial assets) and the costs (which include payments for wages, interest on deposits and the rate of profit on the capital advanced) of the banking firms. This produces adjustment processes tending to restore the conditions of equilibrium between revenues and costs, which are influenced by the movements of the rates of interest and profit.

With the rise to dominance of the marginalist theory of value and distribution after the 1870s, the analysis of the relationship between the rates of interest and profit took a new form. In the perfectly competitive equilibrium proposed by this theory, the risks and troubles faced by the entrepreneur investing in the industrial sector are neglected. Thus, the 'natural' interest rate is *equal* to the rate of return on the *real* capital employed in production. Walras (1874-7, p. 289-90) explicitly stated that the money markets, so relevant in the real world, are a 'superfoetation' in marginalist equilibrium theory. Later on, Wicksell (1906) and Fisher (1907), who presented a developed analysis of the role played by monetary factors in disequilibrium, concluded that in equilibrium no room can be allowed for the action of monetary forces.

This view, accepted by Keynes in *A Treatise on Money*, was rejected in *The General Theory of Empoyment, Interest and Money* (Keynes, 1936). The *Treatise* was based on the separation between the 'real' department of economics, where the equilibrium or natural levels of economic variables are determined, and the 'monetary' department of economics, where equilibrium values are taken as given (or rather known from the 'real' department) and the cyclical fluctuations are analysed. In this book the instability of the demand for investment and the analysis of liquidity, in the form of 'bear and bull' positions, are both present. Their presence, however, does not imply the abandonment of the dominant approach, which asserts itself in the determination of the 'natural' interest rate.

From 1932 Keynes proposed an alternative view. He rejected the separation between real and monetary departments and proposed a 'monetary theory of production', where monetary factors are directly relevant to determine the equilibrium level of economic variables. According to this view, the traditional causal relationship between the rates of interest and profit is reversed. The level of the latter depends upon the former.

The introduction of a 'monetary theory of production' coincided with the abandonment of the concept of 'natural' interest rate. A new 'monetary' theory of the rate of interest was proposed to determine the 'average' or 'durable' (as Keynes named it) level of this rate. This theory

stresses the historical, conventional character of this rate by claiming that *any* level of interest which is accepted with sufficient conviction as *likely* to be durable, *will* be durable (Keynes, 1936, p. 203). He pointed out that the policy of the monetary authority is a major determinant of the 'common opinion' as to the future value of the interest rate. But he also added that other elements of an economic and institutional character can affect this 'common opinion', for instance by persuading the public that the monetary authority will not be able to maintain its present policy.

The analysis of liquidity preference, which examines how an agent chooses the allocation of his wealth, also allowed Keynes to deal with the competitive forces relating the movements of the rates of interest and profit. The analysis referred to a single interest rate. Yet, in Chapter 17 of the *General Theory*, he tried to describe the effects of a wide portfolio allocation on the relationship between the rates of interest and profit. At the time, some other attempts to analyse the structure of the interest rates and the effects of a large portfolio allocation on the economy were carried out by Hicks (1935) and Kaldor (1939). The latter explicitly described his work as an attempt to extend Keynes's analysis to the case of several interest rates. Some years later, Markowitz (1952) and Tobin (1958) gave formal precision to this analysis.

Thus, both on the analysis of the factors determining the 'average' interest rate and on that of the competitive market forces linking the movements of the rates of interest and profit, Keynes opened the way to important developments. Taken together, these contributions can provide a basis to argue for a monetary determination of the rate of profit, i.e. for a theory of distribution where monetary factors can be directly allowed in the determination of the rate of profit, while the real wage rate is determined as a residuum.

Sraffa's rehabilitation of the surplus theory of value and distribution seems to move along these lines. Taking probably advantage of his direct partecipation in the debate on the *General Theory* before and after its making, Sraffa (1960, p. 33) suggested that to analyse contemporary market economies, it is preferable to consider the rate of profit as an independent variable (determined by the level of the money interest rates), instead of following the classical political economists of the last century who took the real wage rate as independently determined.

Sraffa's suggestion has been carried forward by subsequent work (see Panico, 1980, 1985, 1988; Pivetti, 1985, 1991), which has proposed a 'monetary theory of distribution'. This has developed, on the one side, Marx's and Keynes' idea of a 'conventional' determination of the interest rate, by underlining the role that the policy of the monetary authority can have in the

formation of the expectations of financial operators. On the other side, it has introduced within a Sraffian price system, the analysis of the competitive market forces linking the movements of the rates of interest and profit, such as those set in motion by portfolio choice and by the tendency towards equilibrium between costs and revenues of the banking sector.

The emphasis on monetary policy has raised the problem of the role of other Government policies in the theory of distribution. This problem has been neglected by the recent development of Sraffa's suggestion. It was considered by Kaldor (1958, 137-9), having in mind the theory of distribution he had proposed in 1955-56, which the literature has considered alternative to the monetary theory of distribution. Kaldor did not provide a formal treatment of the role of the Government sector within his theory of distribution, although he had explicitly referred to the need to do it. A recent debate on this theme (see Panico, 1993) has, however, shown the possibility to reconcile the two Post Keynesian views on income distribution, considered alternative by the literature. By following Kaldor's suggestions on how monetary and fiscal policies contribute to maintaining steady growth conditions, the debate has shown that distributive variables can depend both on the rate of accumulation, as pointed out by Kaldor, and on the money rate of interest, as suggested by Sraffa. In the presence of a Government sector, the equilibrium condition in the commodities market, which establishes a functional relation between the rate of profit and the rate of accumulation, also includes as a variable the Government deficit net of interest payments. This constraint can be associated with that describing the relationship between the rates of interest and profit on the basis of portfolio choice to define the rate of profit and the Government deficit net of interest payments compatible with steady growth, when the rate of accumulation is taken a given and the money interest rate is exogenously determined along the lines suggested by Keynes in the *General Theory*.

The recent debate on the role of the Government sector in the Post Keynesian theory of distribution thus strenghtens what has been defined the alternative view on the relationship between the rates of interest and profit, since it clarifies the influence on these rates of the decisions taken by both the monetary and the fiscal authority.

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