

WORLD ECONOMISTS ON MONEY

The theory of money, together with the theory of value and price, is one of the oldest areas of economic theory. Indeed, we would have difficulty finding an important economist in the history of economic thought that did not include a theory of money in his theoretical system. Money showed up back in ancient systems of production, and so it is not surprising that the group of pre-eminent personalities, who have attempted to explain the mysteries of money stretches from antiquity to the present day – from Plato and Aristotle to Mundell.

We find the first hints of a theory of money in the works of the most important representatives of ancient philosophy – Plato (427 – 347 BC) and Aristotle (384 – 322 BC). According to Plato, who understood money as a „symbol“ facilitating exchange, the value of money is essentially independent of the material from which it is made. Therefore Plato is the first important author of one of the two fundamental theories of money. The author of the other fundamental theory is Aristotle, who, in contrast to Plato, emphasized the metallistic (commodity) theory of money. Aristotle summarized the theory with two claims. (1) Without regard to other purposes fulfilled by money, its basic function is to serve as a medium of exchange. (2) To serve as a medium of exchange in markets of commodities, money must itself be one of these commodities. This means that it must be a thing, which is useful and which has exchange value independently of its monetary function ... a value, which can be compared with other values.¹ Schumpeter described Aristotle's theory of money as metallistic in contrast to the non-metallist (non-commodity) theory of money, the first representative of which was Plato. The non-metallist tradition survived in the works of authors such as P. Boisguillebert, N. Barbon, J. Steuart, F. Quesnay and J. Law. The supporters of metallism included A. Smith, D. Ricardo, J. S. Mill, N. W. Senior and K. Marx.²

These two basic approaches and their various modifications influenced the further development of the theory of money. However, apart from deepening the analysis of the essence and functions of money, authors devoted attention to new problems and changes in the circulation of money, within both individual countries and on the international scale. Economists took increasing interest in the quantity of money, formulated various theories of interest, devoted attention to monetary relationships, analysed the function of the demand for money, new forms of money (and in this

connection the monetary aggregates) and the so-called transmission mechanism, including the international transmission mechanism. Theories of money have long been concerned with the relationship between money and economic activity (the relationship between monetary and real indicators) in the short and long terms (the problem of neutrality of money). These ideas are connected with various theories of monetary policy or various approaches to the (monetary and fiscal) policy mix. In the 1960s, economists began to write about the theory of optimal currency areas. They researched the problem of a common currency, and European economists in particular began to take an interest in the institutional aspects, as well as the benefits and costs of monetary union. The need to develop a theory of corporate and public finance also arose, and together with globalisation, a new theory of financial markets emerged. This review, which is not complete,³ bears witness to the growing role of money in the life of society, both on the national and international levels.

The majority of these theories are not products of isolated individuals. Although the basic theoretical idea of a certain problem, for example, the theory of an optimal currency area, is usually formulated by a pre-eminent figure in economic science, its further development is the work of many other economists, who bring new arguments, make the theory more precise and give it its final form. The quantitative theory of money, undoubtedly one of the key theories, can serve as an example.

In works devoted to the history of economic thought, such as that of M. Blaug, we usually encounter the claim that the foundations of the quantitative theory of money were formulated by J. Locke (1632 – 1704) and D. Hume (1711 – 1776). However, J. Schumpeter observes that the history of this theory began to be written already in the second half of the 16th century. He regards J. Bodin (1530–1596) as the „inventor“ of the quantitative theory. Schumpeter also mentions other names – especially Tomás de Mercado, C.B. Beccaria, J. Briscoe and John Law. He regards J. Briscoe (1694) as the first economist, who wrote an equation of exchange, although not in a satisfactory form. The mercantilists as well as classical economists were concerned with questions of the quantitative theory of money. Simon Newcomb (1885), also a famous astronomer, and Irving Fisher (1911) broke new ground in the development of the quantitative theory of money. S. Newcomb formulated and I. Fisher popularised the best-known

¹ Schumpeter, J. A. (1967).

² According to Schumpeter, W. Roscher expressed the prevailing opinion, when he said that the false theories of money can be divided into two groups: theories which understand money as something more, and theories which understand money as something less than the most salable commodity.

³ We should not forget, for example, the numerous monetary – financial crises, the latest of which is the Argentinean crisis, which raise the question of whether it is necessary to reform the international monetary system.



so-called transaction version of the quantitative theory. Therefore, the so-called quantitative equation of exchange, which is the basis of this theory ($MV = PT$), is usually called the Fisher or Newcomb-Fisher equation. The quantitative theory was developed by many other economists, from whom we shall mention at least J. Angell (the income form of the quantitative equation), A. C. Pigou and A. Marshall (Cambridge cash-balance approach), and finally Friedman's monetarist version of the quantitative theory. However, Keynes' challenge to the quantitative theory of money and the hypothesis of rational expectations (R. E. Lucas Jr.) should not be omitted.⁴

We have mentioned the quantitative theory of money, with which we will be concerned in various articles in the series „Profiles of World Economists“, to highlight in particular the immensely complex and contradictory character of the process of forming economic theories. Each economic theory reflects the state of scientific knowledge, which results from the work of many personalities in economic science. Since new scientific findings are constantly appearing, and new critical reservations are also constantly appearing, it is natural that economic theories develop and change. Therefore, economic theories cannot be understood as unshakeable eternal dogmas, absolute truths given once and for all.

In the 18th and early 19th centuries, economists such as D. Hume, A. Smith, D. Ricardo and K. Marx, who started out from the view that, as a reflection of the level of economic activity, money is determined by non-monetary („real“) factors, had the greatest influence on the further development of the theory of money. D. Hume and A. Smith also admitted that money could play a certain active role in economic life.⁵ In contrast, D. Ricardo came to the conclusion that the level and direction of economic activity does not depend on monetary factors. In his view, money is a „veil“. The following words from Ricardo remain topical: „Experience, however, shews that neither a State nor a Bank ever have had the unrestricted power of issuing paper money, without abusing that power: in all States, therefore, the issue of paper money ought to be under some check and control“.⁶ The assumption that money has a secondary importance in relation to production was a characteristic feature of the classical analysis of money, which reflected the conditions of metallistic monetary systems to a significant degree.

⁴ M. Friedman summarized his analysis of the quantitative theory of money as follows: "One thing is certain: the quantitative theory of money will continue to generate agreement, controversy, repudiation and scientific analysis and will continue to play a role in government policy during the next (i.e. the 21st – J. I.) century, as it has for the past three". See: The New Palgrave. A Dictionary of Economics (1987).

⁵ For example, D. Hume claimed, on the one hand, that the quantity of money had no lasting effects on the levels of economic activity, but, on the other hand, he admitted that, in the short term, growth in the quantity of money could directly affect the increase of economic activity. The possibility of certain active role of money was also admitted by A. Smith in the case of substitution of credit, particularly banknotes, for precious metals as a medium of circulation, which can free social capital tied up in stocks of money commodity to set production in motion.

⁶ See: Ricardo, D. (1980).

This approach began to change in the last quarter of the 19th century, when a rapid and deep transformation of the monetary systems and financial institutions of the industrially developed capitalist countries started. National financial markets and banking systems developed, as a result of which, monetary factors began to play a different role compared to that of the times of Adam Smith. The deep changes naturally affected the international monetary system, which was exposed to the impact of various crises, as a result of which it had to be profoundly transformed. The First World War accelerated this process. Attempts to revive the gold standard after the First World War were not entirely successful, and in the 1930s the international monetary system collapsed. After the Second World War, the international monetary system received a new form – Bretton Woods, which played a positive role in the post-war development of the world economy. However, it survived only until 1971, when the USA abandoned exchangeability of the dollar for gold, whereby gold definitively lost its key position in the international monetary system.

Naturally, new generations of economists attempted and still attempt to theoretically explain all these deep changes. Changes in the content and orientation of the theory of money were proclaimed in particular by the works of I. Fisher and especially J. M. Keynes, who revolutionized economic thought, including the theory of money, not only between the world wars, but also in the 1950s. The later development of the theory of money was formulated especially under the influence of Friedman's monetarist „counter-revolution“, which remains an important source of inspiration today. However, the literature also mentions many other figures, who developed the theory of money in other areas. Among these, we will mention at least J. Tobin, F. Modigliani, R. Lucas, D. Patinkin, K. Arrow, F. Hahn, H. Minsky, D. Laidler, L. Metzler, R. Musgrave, the theoreticians of financial markets and finally R. A. Mundell, one of the godfathers of the euro. These and other significant personalities, their lives, works and theoretical contributions will be considered in the serial: Profiles of World Economists. Some of these personalities received the Nobel Prize in Economics for their outstanding contributions to economic science. It began to be awarded in 1969.⁷

From 1969 to 2001, 33 Nobel Prizes were awarded for economics, shared by a total of 49 outstanding scientific figures.⁸ The largest numbers of Nobel Prizes have gone to Americans with 31, and to British economists with 8.

⁷ Since 1901, the Nobel Prize has been awarded to many outstanding scientists, public figures and writers for their contributions in the areas of physics, chemistry, medicine and literature. The fifth prize, which goes not only to important public figures, but also to some institutions, is awarded for peace. The Swedish National Bank has the credit for the origin of the Nobel Prize in Economics, establishing the respective foundation on 14th May 1968, on the occasion of the three hundredth anniversary of its origin.

⁸ The reason for the discrepancy is the fact that various Nobel Prizes have been shared between two or three economists. For example, last year, the Nobel Prize was shared between three American professors: Joseph E. Stiglitz, George A. Akerlof and A. Michael Spence.



Norway, Sweden and Canada have received two each, while Russia, Germany, France, Holland and India have gained one each.

Official reasonings of the awarding of various Nobel Prizes in economics have emphasized the extraordinary contributions of laureates to the development of the theory of money and related scientific disciplines such as analysis of financial markets and the economics of finance. The first economists, who received the Nobel Prize for „pioneering work in the theory of money“, were G. Myrdal and F. A. Hayek in 1974. They have been joined by further economists: M. Friedman, J. Tobin, F. Modigliani, W. Sharpe, M. Miller, H. Markowitz, R. Merton, M. Scholes and R. A. Mundell. Some other Nobel laureates, including P. Samuelson, J. Hicks, B. Ohlin, J. Meade and R. Lucas, also significantly contributed to the theory of money. However, it would not be correct to limit the choice only to Nobel laureates. For example, some candidates, who should have gained the Nobel Prize, died very soon after it began to be awarded: J. Viner (died 1970), M. Kalecki (1970), F. Knight (1972) and Roy Harrod (1978). In contrast to other branches of science, the Nobel Prize in economics started relatively late, and so for many outstanding figures who substantially influenced the modern theory of money the prize had not been available. Therefore

the serial Profiles of World Economists should not omit I. Fisher, some representatives of the neo-classical school and neo-liberals, and especially the greatest economist of the 20th century: John Maynard Keynes.

Literature

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