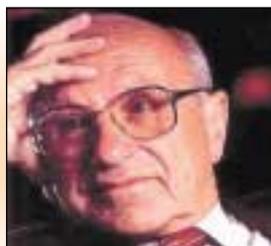


MILTON FRIEDMAN

doc. Ing. Vladimír Gonda, CSc.

Faculty of National Economy, University of Economics in Bratislava

The American economist Milton Friedman – Nobel Prize laureate for economics since 1976 – is generally recognised as an authority in the field of economics theory and practice. It is a relatively rare case where a scientist – economist has had such a great influence – direct or indirect – not only on



the direction of scientific research, but also on economic policy in practice. He is one of the most eminent world economists of the second half of the 20th century, and who, together with J. M. Keynes, has most greatly influenced the formation of current (modern) economic theory and policy.

Biography

Milton Friedman was born July 31, 1912 in Brooklyn, New York in a poor family of immigrants from Eastern Ukraine. From 1928 – 1932 he studied at Rutgers University gaining a baccalaureate in two disciplines concurrently – Mathematics and Economics. He completed his Master's degree a year later at Chicago University and gained his PhD. at Columbia University in 1946.

During the Second World War Friedman worked first at the Treasury, where he dealt with tax policy during the war period, later as a mathematical statistician for military economic research. In the post-war period (in the autumn of 1950) he spent three months in Paris as consultant to a government agency implementing the Marshall Plan. He regularly wrote commentaries on economic problems of the day for Newsweek, and was an advisor to presidential candidates (Goldwater, Nixon). These public activities were however for him merely a side-interest; Friedman consistently turned down offers for various positions in Washington. For him scientific work along with teaching and tutoring young economists has remained throughout his life the core of his interest.

Friedman's teaching activities have included: 1934-1935 assistant to professor Henry Schultz at Chicago University; in 1945 he was appointed as adjunct professor of economics at Minnesota University, in 1946 he entered the Economics Faculty of Chicago University where he was appointed full professor in 1948. Chicago has remained his intellectual home – Friedman taught here until 1977. Since 1977 his scientific work has been connected with the Hoover Institute at Stanford University, where he worked as independent scientific employee. In 1983 he became a professor emeritus of Chicago University.

Milton Friedman is married, his wife – his former classmate at Chicago University – Rose Friedman-Director is also an economist. They have published several works jointly. The Friedmans have two children – a son and daughter.

Friedman was awarded the Nobel Prize for economics in

1976 “for an original contribution to the theory of consumption, money and stabilisation policy”. Of the numerous awards he has received for his service to the development of economic theory at the world level, we mention at least the honorary doctorate awarded to him by the Economics University in Prague on April 17, 1997. In his acceptance speech on the occasion of receiving this doctorate, Milton Friedman lucidly expressed his relationship to scientific and teaching work: “A university professor has a quite special role. He is not a politician, does not have to always state his opinion on the current problems arisen around him, does not have to gather votes – he is in a position where society expects from him that he will speak the truth as he sees it.” Friedman greatly valued this special privilege.

Monetarism's Leader

Milton Friedman is recognised by the broad economics public as the main proponent of monetarism – one of the current (neo-conservative) streams of economic thought, which is characterised by an intensive elaboration of monetary theory. The key issue which monetarism from a theoretical viewpoint focuses on is the role of money in economic processes, in particular the importance of balance in the money market. He considers changes in the money stock as “the motor” of economic process, and which are the result of the applied monetary policy. This new economic school of thought began to form at Chicago University, USA in 1950's. Friedman's monetarism came about as a direct reaction to Keynesianism – to the long-term underestimation of money and monetary factors (inflation) by Keynes' followers and the overestimation of the role of state intervention in an economy.

Milton Friedman came out with his liberal views in the 50's during a period dominated by Keynesian theories, when monetarism had a negligible influence in academic circles and practically no influence on economic policy. The balance of powers gradually changed. The growing success of Friedman's theoretical view could be seen in parallel with an increase in the number of crises in the eco-



onomy at the end of the 1960's and the beginning of the 1970's (inflation growth, bureaucratisation of the state apparatus and in particular the emergence of stagflation). The turning point in the balance of powers and monetarism's victory, requiring a transfer to the new policy of macroeconomic regulation, came in the 1970's.

The main difference between Friedman's monetarism and Keynesianism lies in the neo-classical faith in the efficiency of the "self-regulating" mechanism of the market enabling growth in production without "injections" from the state budget. Whereas Keynesianists saw the capitalist economy as an unstable system requiring systematic corrections, Friedman and monetarists saw the cause of destabilisation in state intervention itself, viewing a capitalist economy as a principally harmonic system.

Friedman's Contribution to Economic Science

Friedman's contribution to the development of economic theory is outstanding. Its content lies in the fields of both pure economics and economic analysis methodology, as well as in the field of empirical analysis, economic policy or in the field of the basic questions of the theory of comparative economic systems. In the next part we will try to present, on the basis of these positions, an overview of his contribution to economic science.

a) The Field of Pure Economics and Economic Analysis Methodology

- It in this field that Friedman's contribution to macroeconomics represents the greatest breakthrough. The core of Friedman's contribution to pure economic theory is primarily his *theory of money* – a construct of the demand for money and the supply of money, monetary policy, inflation, the mutual relationship between inflation and unemployment, etc. We shall therefore concentrate on this in more detail.

Friedman's theory of money comprises an essential component of his ideas on the functioning of a market economy and directly links to work in the field of methodology and pure economics. The most significant feature of Friedman's monetarism is the renaissance of ideas on the importance of money in economic life and in explaining inflation and the belief resulting from this in the feasibility of monetary policy. Monetarists declared the slogan "money matters" or even "only money matters" and placed money at the centre of their analyses.

- An exceptionally important contribution of Friedman's to the theory of money is his *Theory of the demand for money*. Its thesis is contained in the famous work *The Quantity Theory of Money: A Restatement* of 1956. In it the author brought fundamental changes to the traditional quantitative theory – he strengthened its macroeconomic foundations, started to examine it as a theory of the demand for money (reflecting the behaviour of economic subjects in allotting asset portfolios), he postulated the hy-

pothesis on the existence of a stable dependent relationship between money supply and the whole range of variables and determined their role in predicting possible consequences of monetary and credit policy measures.

Friedman's construct – the so-called new quantitative theory of money – represents an income version of the quantitative theory; it is a portfolio-type theory or an asset-preference theory, in contrast to transaction-type theories, in which the holding of money is determined by the extent of exchange transactions in the market.

On the basis of his own analysis of the demand for money Friedman reached the conclusions that:

- demand for money is highly stable,
- changes in interest rates have only a negligible effect on the demand for money,
- the function of the rate of money circulation has a permanent nature.

These conclusions correspond to the claim of the quantitative theory that money is the primary determinant of nominal income. If thus the rate of money circulation does not change – here the rate need not necessarily be a constant – then money exclusively determines changes in the price level and nominal income, so monetary policy can, through regulating the development of the individual money aggregates (M1, M2, etc.), influence macroeconomic variables and predict their development.

The quintessence of Friedman's monetarist views is contained in the work *The Optimum Quantity of Money and Other Essays* (1969). The main direction of Friedman's analysis is the research of the behaviour of the economic system in the long-term. The importance of money is explained in a specific way and differentiates the effect of money on nominal and real parameters and differentiates between the role of money in the short and long-term.

In Friedman's monetarist construct of money has two sides – on the one hand it is highly active, being the cause of all failures and asymmetries in the economy (in the short term), and on the other hand it is neutral, influencing only the price level (in the long term).

The nominal quantity of money is determined by its supply. In abstract terms this can be seen as "money rain" – banknotes falling from the sky. On the other hand the real volume of the money stock is expressed in the amount of goods and services that can be acquired for a given nominal amount of money and is conditioned by the demand for money, which is directly related to the price level.

- At the centre of Friedman's attention lies the problem of *inflation*, which he sees as a purely monetary phenomenon. We mention his now "classic" statement that inflation is always and in all cases a monetary phenomenon in the sense that it is and can be induced only through faster growth in the money stock than in the amount of product". Temporary fluctuations in the rate of inflation can, in Friedman's view, be induced by numerous phenomena, but have a permanent effect only to the extent to which they influence the rate of growth in the money stock. Ma-



ny possible reasons for growth in the money stock can be found, including the discovery of gold, the financing government expenditure or the financing of private expenditure.

- From Friedman's many-sided understanding of the causes of inflation there logically results a recommendation for its cure. Since Friedman considers inflation as a purely monetary phenomenon, he comes to the conclusion that the battle against it can be fought only with the help of measures in the field of money circulation. He considers the only way of curing inflation to be a *limitation on the growth of volume of money in circulation*. He concurrently states that the cure for inflation is easy to prescribe, but difficult to introduce. The problem lies in *political will* for adopting unavoidable anti-inflationary measures. If thus the inflation disease is at an advanced stage, then its cure is long and has painful side effects, which cannot be avoided. Anti-inflationary measures (reducing the amount of money in circulation) leads to a slowing of economic growth, a lowering of production and (usually) higher unemployment; only after a certain time will also the desired reduction in the rate of growth of prices appear.

Milton Friedman in his works presents at many points the view that inflation is destructive for society. His analysis comes to the conclusion that it is necessary to undergo the cure for inflation despite the painful side effects. Because in fact it is not a choice between inflation and unemployment, but a choice between unemployment without inflation and unemployment with inflation.

- Up until the end of the 60's Friedman's monetarist version of inflation was developed as a *theory of volume balance in the money sector of the economy*. Fluctuations in the price level were interpreted exclusively as "jumps" in the money stock (i.e. monetary shocks) against a background of *a stable demand for money*. Later in the 70's Friedman developed his theory of inflation *on the correlation of inflation and unemployment* on the basis of a critical analysis of the (Keynesian) Phillip's curve. The key elements in the examination of the mutual links between the inflation process and the situation in the labour market are in his construct a natural rate of unemployment, (adaptive) expectations of inflation, as well as a differentiation between nominal and real parameters.

Friedman was the first to show that the standard assumption of a simple relationship between unemployment and the rate of inflation holds true only temporarily, as a transient phenomenon. In the long term (more than five years) no such relationship applies. The Phillip's curve has in the long term a vertical shape and is identical to the straight line at the level of the natural rate of unemployment, something that has important consequences for long-term economic policy.

- During his time in Europe at the start of the 50's Friedman's interest in variable exchange rates was born. Friedman was one of the first to realise and explain that the Bretton Woods currency system, founded on relatively fi-

xed currency exchange rates, must sooner or later collapse; Friedman defended the idea of a new international currency system, founded on flexible, freely floating exchange rates.

Deliberations over the possible consequences of the present currency system, which can be characterised by the fact that none of the main of the world's main currencies is linked to a commodity and is thus fully in the hands of the government, led him to paraphrase the famous statement by the former French President at the end of the First World War, one of the architects of the Treaty of Versailles, Georges Clemenceau: "War is a too serious matter to be entrusted to an army" into the context that "War is a too serious matter to be left to central bankers".

Friedman's view is interesting and sceptical on the issue of European Monetary Union and the introduction of the single European currency. Political union is, in his view, an essential condition for the successful functioning of monetary union is the fact, and not the other way round. He considers the efforts to unify Europe with the help of the single currency as a moral hazard.

- In the field of economic analysis methodology the centre point of interest is the work *The Methodology of Positive Economics (1953)*. According to Friedman it is necessary to differentiate science (i.e. positive economic theory, which gives an answer to the question: what is happening?) from normative activity, focused on the formulation of objectives. Economic science is positive – it should clarify or explain actual economic phenomena and on the basis of this predict development. The more appropriate the analysis of a matter is, the more correct will be also the prognosis. In this sense, economic theory can be both objective as well as a natural science.

Friedman focused the attention of economists on developing positive knowledge, but at the same time does not forget the normative side – economic policy (in the final result) as the resulting function of economic theory. A key point in this lies in the art of adopting a decision. Whereas the objectives of economic policy are in the case of the representatives of various schools of thought practically the same, the differences lie the ways of achieving them and in the proposed set of instruments, which itself is connected with a different interpretation of the economic reality.

- In the book *A Theory of the Consumption Function (1957)* he innovatively differentiated permanent and transitive income. In contrast to J. M. Keynes, who worked with the category of regular income and consumption he understood as its function – in the growth of regular annual income consumption grows and vice versa – Friedman looked at the matter from a longer term point of view. For example, a person who is paid each Friday does not go hungry in the course of the week so that he can afford food only at the weekend. Rather, he maintains his consumption at a certain fixed level, because he is governed by his expectations concerning income in the longer-term. Consumers do not allow themselves to be influenced by a



bad week, month or year so much that they change their habits. Instead, they use part of their savings. On the other hand in the case of an exceptionally good year they again put aside more into savings.

Permanent income is defined as a weighted average of regular income and all past levels of income (in practice this is the expected average income in the long term). Friedman's concept of permanent income together with the Modigliani hypothesis, developed in parallel, of the life cycle (which also contains long-term effects) represents to the present day the basic analysis of consumption (and saving).

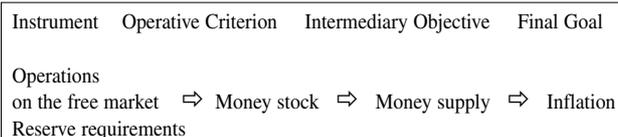
b) Empirical Analysis

In the field of empirical analysis it is necessary to mention primarily Friedman's theory of the consumption function and in particular his joint work with the historian A. J. Schwartz *A Monetary History of the United States 1867 – 1960*, in which the authors examined the role of money in the economic cycle. A comparative work was tied into this work twenty years later, comparing the experience of the USA and Great Britain for the same time period; special attention here is paid to the issue of the stability of the parameter - the rate of currency circulation.

c) The Field of Economic Policy

Friedman has come to be the principal critic of Keynesian-style economic policy. Primarily he rejects the fiscal policy promoted by Keynesianists, which he considers to be ineffective, or at best effective only to a small extent, because it leads to the crowding out of investment. He calls for state intervention in the economy to be reduced to a minimum. In this, he has argued that the destabilising impulses of state intervention and the existence of a time-delayed economic policy (the so-called recognition, decision and implementation delay), which prevents the implementation of a short-term stabilisation policy. He considers only monetary policy to be an effective instrument for regulation the economy. We shall mention that the basic building-blocks of Friedman's theory of money are the claim that *the supply of money is exogenous and the function of demand for money* (determined primarily by permanent income) *is highly stable*, from which is derived also a stable rate of money circulation. This has far-reaching consequences not only for the field of economic theory, but also (and mainly) for the field of economic policy. From the quantity equation of exchange $M.V = P.Y$ it results that if V is stable, then money solely influences prices and nominal income. Therefore monetary policy can through regulation of the money stock (monetary aggregates) effectively influence macroeconomic parameters and predict their future course.

The monetarist transmission mechanism is founded on management of the money stock with the monetary aggregate (M1 or M2) as an intermediary objective. The diagram below depicts the monetarist money transmission mechanism.



Friedman did not consider a flexible monetary and credit policy to be a suitable means for stabilising a market economy. On the contrary, it is in his view a destabilising factor. He proposed as the most suitable anti-inflationary strategy a non-activist monetary policy of ensuring a stable rate of growth in the money stock, which as a rule should have a permanent nature of the long term (the so-called Friedman's monetary rule). Specifically in the case of the USA he recommended a 3 to 5% growth in the money stock.

d) The field of the theory of comparative economic systems

In this field the central works are *Capitalism and Freedom* (1962) and *Free to Choose* (1980). In them, besides a critique of economic systems founded on non-market logic he concentrates on an analysis of the primacy of market economies and their ability for "self-regulation"; he characterises the market economy as a system of real freedom. The basic idea lies in the fact that an internal link exists between the freedom of society and the freedom of the individual (conducting business). A reduction in the role of the state, limitation of its activity (regulation of production, employment and prices) directly assists in furthering the freedom of society, and thereby also of the political and economic freedom of the individual. The only role of the state should, according to Friedman, remain the regulation of the volume of money in circulation.

In conclusion

Monetarism has been relatively successful in economic practice in many countries of the world, although it can hardly be said that it has complete dominance in a country. It has served for overcoming depressions and structural changes in a range of countries (in particular in Latin America), for the monetary recovery of Israel, the modernisation of countries in South-East Asia. Monetarist doctrine has been adopted by international organisations such as the IMF and the World Bank, OECD, EBRD, etc. Monetarist axioms have become the basis for recommendations of global financial institutions for forming the economic policy of states that have turned to it for help (including countries of central and Eastern Europe).

The targeting of the money stock as an intermediary objective has been applied in its time by numerous central banks; despite this, nowhere has monetarist currency targeting been implemented thoroughly. In the 80's central bankers realised that a central bank does not have complete control over growth in the money stock.

The practice of monetary policy has not confirmed the



stability of the link between the monetary aggregates and inflation. Some unfulfilled assumptions of the monetarist transmission mechanism in the 80's regarding the stability of the income rate of circulation of money and monetary multipliers led to central banks formulating new models for managing monetary policy (e.g. exchange rate targeting, inflation targeting).

Observe in developed market economies as well as in transitional economies in recent years the gradual withdrawal of economic thought from monetarism. Although Friedman's monetarism currently is descending from "an economic Olympus", Friedman remains a significant creator of ideas. To a significant extent he has served – also thanks to the fact that many of his theses were the subject of critical polemics from the side of numerous economists – for the further development of economic (and particularly monetary) theory.

The most important works of Milton Friedman

We know from history only a few economists who have intervened in such a cardinal way into the various areas of economic thought and left there a significant mark. Milton Friedman has dealt with the problem of prices, money cir-

ulation, the theory of consumption, economic methodology, etc., has written several articles and works. Friedman's main works were written in the 1950's and 1960's, but became well known only at the end of the 1960's and the beginning of the 1970's. Some of the most important are:

- *The Methodology of Positive Economics* (1953),
- cardinal article *The Quantity Theory of Money* (1956),
- *Theory of the Consumption Function* (1957),
- *Inflation: Causes and Consequences* (1963),
- *A Monetary History of the United States, 1867 – 1960* (co-authored with A. J. Schwartz, 1963),
- *The Optimum Quantity of Money and Other Essays* (1969),
- *The Counter-Revolution in Monetary Theory* (1970),
- *Inflation and Unemployment* (lecture delivered on the occasion of receiving the Nobel Prize on December 13, 1976),
- *Monetary Trends in the United States and the United Kingdom* (co-authored with A. J. Schwartz, 1981),
- *Capitalism and Freedom* (1962),
- *Free to Choose* (co-authored with his wife Rose Friedman, 1980),
- *Money Mischief* (1992).