

MILTON FRIEDMAN: REMEMBRANCE OF PERSONALITY AND ECONOMIST

Iva Nedomlelová

1. Introduction

On 16th November 2007, a year passed from the death of one of the most remarkable liberal economist of the twentieth century, Nobel price winner, Milton Friedman. The aim of this article is not to list his theoretic-economical, economic-political ideas and analyze them. The aim is to recall a personality of Milton Friedman, who significantly influenced macroeconomic theory and economic policy in an outright original approach to a range of economic problems. Milton Friedman had merit in working out the methodology of economics towards positivism, in further theoretical and empirical analyses of consumption function on the basis of permanent income hypothesis. One of the main contributions was a revival of Quantity Theory of Money and Friedman's interpretation in a new quantity theory. Friedman opened new insight on Philips curve and economic policy.

2. Milton Friedman - Personality

Milton Friedman was born 31st July 1912 in Brooklyn, New York. He was the fourth child of Sára Eszter Landau and Jenő Saul Friedman. The parents originated from Ukraine. The family moved to Rahway, New Jersey, where Friedman attended grammar school. In 1928 Friedman finished high school. He was awarded a competitive scholarship to Rutgers University in New Jersey, he graduating with Bachelor of Arts in 1932. He ended up graduating with the equivalent of a double major in Mathematics and Economics. To better the financial situation he earned money as a waiter, cashier in shops and doing other different summer and temporary jobs.

Friedman oriented his interest in Economics. He was fascinated by the idea of managing the whole economic system by an easy price mechanism. In academic year 1932-1933 he started his studies of Economics at the University of Chicago. He was awarded a scholarship and spent the next academic year at University of Columbia. In 1934 he was offered an assistant job by Henry

Schultz at the Department of Economics, University of Chicago. Henry Schultz was working on his work *The Theory and Measurement of Demand* at that time. Friedman became friend with George Stigler and Allan Wallis, who significantly influenced Friedman's future professional development. Friedman also met his future wife and co-author of his books *Rose Director*.

In 1935 - 1937 Friedman operated in National Resources Committee of Federal Government of USA and participated in the preparation for the study about budgets of the households. This scientific work became an important and methodological experience for his consumption function theory. From 1937 Friedman worked for National Bureau for Economic Research. As an assistant of Simon Kuznets he co-worked in a research of population income. The conclusions of this research became the bases of Friedman's Permanent Income Hypothesis, which was published in 1957 in *A Theory of the Consumption Function*. He married Rose Director in 1938.

In 1941 -1943 Friedman dealt with tax policy at USA Ministry of Finance. He spent following two years at University of Columbia in a team of statisticians Herold Hotelling and Allen Wallis. Friedman participated in the analysis of weapon systems, war tactics and quality control statistical methods of munition. He was appointed an associate professor of Economics at University of Minnesota for the academic year 1941 - 1943. In 1946 Friedman defended this doctoral thesis at University of Columbia and was awarded Ph. D. He accepted a job offer of Department of Economics, University of Chicago as Jacob Viner was leaving. He was appointed an associate professor and in 1948 he became full professor.

Friedman was professionally influenced by a short stay in Paris, where he should evaluate Schumann's plan. This plan became the base for the *The European Coal and Steel Community*. This experience led to considering the floating exchange rates for effective functioning of common market. Friedman was not a supporter of

single currency and predicted Euro a relatively „short life“.

In the early 50s Frank Knight contributed to Friedman's studies of Methodology of Economics. It was influenced by the methodological approach of John Nevill Keynes (John Maynard Keynes's father) and Lionel Robins. In 1953 Friedman published *Essays in Positive Economics*. In this essay Friedman distinguishes positive and normative economics and hypothesizes that the verity of theory should be considered according to if its conclusions are in conformity with reality.

From 1951 Friedman managed a seminar about monetary policy. The main idea was that monetary policy can be a main instrument of economic policy under the condition of market economy. This was Friedman's clear disapproval to dominant Keynesian oriented opinion of necessity growing state's influence in economy.

In 1953 - 1954 Friedman became an associate professor at University of Cambridge, UK. His opinions were controversial against Cambridge standards; however Friedman was accepted by both opinion groups at the university. Meeting the controversial parties, D. H. Robertson and the Antikeynes's on the one hand and Joan Robinson, Richard Kahn and the Keynes's on the other hand, was a substantial contribution for Friedman's further research.

1956 Friedman *A Restatement of the Quantity Theory of Money* was published. This study „put in motion everything, what took place in next two decades concerning money theory, theory of money demand and macroeconomics on the whole.“ [12] *A Theory of the Consumption Function* was published in the following year.

From the beginning of 60 Friedman was more involved in public issues. In 1964 he became senator Goldwater economic adviser, from 1966 Friedman wrote regular commentaries about actual economic issues for Newsweek (in the same way as Paul A. Samuelson, in 1968 he was a member of The Council of Economic Advisers for president Richard Nixon. The main focus stays in research work. In 1962 *Capitalism and Freedom* was published. In this book Friedman proves ineffectiveness of state interventions in economy. As an example let us take the law of minimal wage, which fulfil according to Friedman a completely contradictory role, than the initial intention was - it leads to unemployment growth.

In 1963 Friedman publishes *A Monetary History of the United States 1867 - 1960* together with Ann Schwarz. The comprehensive empirically oriented work explained utterly different reasons for the Great Depression in the 30s than the Keynes followers. Together with Ann Schwarz Friedman proved, that there was less money in circulation than the economic situation required. This work changed the opinions of economists (and not only them) on the Great Depression.

In December 1967 Friedman held a lecture as a president of American Economic Association. This presentation significantly influenced the development of macroeconomics and economic policy. In March 1968 these ideas were published in the article *The Role of Monetary Policy* in *American Economic Review*. It was a strong critique of Keynesian policy of full employment, which was based on Phillips curve. Friedman de facto predicted stagflation of the 70s. In 1969 the book *The Theory of Nominal Product* was brought out.

Milton Friedman became a founder member of Mont Pèlerin Society. In 1970 - 1972 he was a president of the society.

In 1976 Milton Friedman was awarded Nobel price in Economics „for his achievements in the fields of consumption analysis, monetary history and theory and for his demonstration of the complexity of stabilization policy“. [15] In 1977 Friedman finished his regular teaching activities at the University of Chicago. He cooperated with the Department of Economics and contributed to their scientific work. From that time he spent spring and summer in Vermont. He spent his time on scientific work in Dartmouth College library. In the first half of 80s, his important works were published: *Free to Choose* together with Rose Friedman in 1980, *Market Mechanism and Central Economic Planning* in 1981, *Tyranny of the Status Quo* in 1984 again together with Rose Friedman.

Professor Friedman guested at many universities around the world. He was an awardee of dozens of appraisals and honourable doctorates. In 1997 he was awarded honourable doctorate at the University of Economics in Prague.

3. Milton Friedman - Economist (Selected Issues)

Milton Friedman was one of the most significant economists of the second half of the twen-

tieth century. [13] Milton Friedman significantly influenced macroeconomic theory and economic policy. He exceeded these branches of science with his considerations about freedom issues and opinions on market issues and capitalism. He evoked discussions about general issues of ideology these days.

If possible to summarize the aim of Friedman's life-work, his aim was to scientifically prove and conclusively explain the advantages of economic liberalism. Milton Friedman's name is connected to monetarism - the form of current neoclassical macroeconomics, which is the oldest discipline of so-called new conservative economics. Friedman's approach accepts the development of Keynesian theory. He worked with many of Keynes's terms, but Friedman's approach to Keynes's economics and mainly his conclusions and implications for economic policy are openly critical and dismissive. According to Friedman, the market economy is internally stable and it is able to converge to equilibrium. State interventions made in order to boost economic growth, lower unemployment etc. only disturb natural equilibrium and lead to destabilization on the market.

The beginnings of Friedman's monetarism go back to 50s; it was theoretically worked out in the 60s and 70s. Since the 70s the conclusions have started to influence the economic policy in the USA and other highly developed economies. It reached the greatest influence in the 80s.

3.1 Methodology

Milton Friedman got known in the economic public because of his strong opinions on methodological issues in economics. His scientific work stems from methodological individualism as well as the Neoclassical Economics and Austrian School. He was an advocate of methodological positivism to prove the verity of hypotheses. His opinion was significantly influenced by the nonpositivism philosophy, particularly the Karl Popper work. Friedman submitted his view on methodological positivism in his work *Essays in Positive Economics*, 1953. He starts from distinguishing positive and normative economics following J. N. Keynes a L. Robbins. According to Friedman, positive economy must fulfil four basic conditions: internally logical consistency and using terminology, which has meaningful equivalents; the

theories must be empirically tested. Further the only theory significance test is the conformity between the forecast and the economic reality. Because more theories can be in conformity with the economic reality, additional criteria are necessary to be added, e. g. simplicity and expedience.

The main point of Friedman's methodological positivism is following hypothesis: the aim of the theory is to provide correct forecast. It is not essential to test the groundwork, but the conclusions. This approach is completely different compared with the methodological realism of post Keynesian economics which focuses on realism of theoretical conditions. Friedman affirmed that hypotheses are not important (it is never possible to include all the factors, which determine the phenomenon); in case the conclusions are in accordance with the reality, the theory could be declared relevant because it explains reality.

According to Friedman, only verifying empirical fact can prove the correctness of theory. This approach explains Friedman's continuous interest in empirical development. Friedman together with Ann Schwarz used the methodological positivism to test his theory: inflation is a monetary phenomenon caused by inordinate growth of money supply. He wrote empirically oriented works on this topic: *A Monetary History of the United States 1867 - 1960*, 1963 and *The Relative Stability of Monetary Velocity and the Investment Multiplier in the US*, 1963.

3.2 Consumption Function and Permanent Income Hypothesis

Milton Friedman formulated and explained the permanent income hypothesis in his work *A Theory of the Consumption Function*, 1957. According to this hypothesis the consumption of individuals or households depends on permanent income, it does not depend on the current income of economic unit as Keynes insisted. Permanent income can be explained as an average income, which an individual expects to earn during his life using his labour and capital. It depends on household welfare (human capital, education, health included), interest rate, and expected job vacations etc.

Friedman tries to explain empirical estimates of consumption function using the hypothesis that

individuals consume constant share of their permanent income. It means that the nominal income paid to individuals at different period (regular income) does not necessarily match permanent income. According to Friedman, this difference explains inconsistent empirical finding about the run of consumption function.

Friedman's permanent income hypothesis opened a new view on the consumption function which showed a more stable consumption than presumed. Friedman prospered from this conclusion in explaining the money demand theory and its stability. Transaction money demand depends on consumption spending; these depend on permanent (not current) income. This results in a quite stable money demand.

3.3 Friedman's Interpretation of Quantity Theory of Money

The recovery of Quantity Theory of Money and its further analysis belong the revival of Quantity Theory of Money and its further analysis. Friedman made two conclusions within the Quantity Theory of Money: first, money demand is stable, second, there are short- and long-term effects of money supply changes and they result in non-neutrality of money in short-term.

Milton Friedman focused his research first on money demand analysis. He says: „The Quantity Theory is in the first instance a theory of the demand for money. It is not a theory of output, or of money income, or of the price level. „[4]

Friedman did not agree with Keynes's understanding of money demand. It was mainly because Keynes presumed that economic subjects chose only between two assets - money and bonds. According to Friedman the choice is much more various. We consider money and bonds as well as shares durable goods, real estates, equipment etc. Money is considered one of possible welfare forms. Economic units optimize the portfolio so as to maximize the utility of their assets. The utility depends on the revenue, liquidity and risk of held assets. The fall of interest rate does not lead to short-term bonds purchase, as Keynes supposed, but to a change of portfolio. Money demand is according to Friedman a function of many variables. He selects and analyses four basic factor groups which determine money demand. On the basis of their analysis Friedman

comes to the conclusion that these factors are stable and money demand is a stable function.

Friedman understands market economy as an internally stable system and deduces the conclusion that all disequilibrium phenomena e. g. economic cycle, unemployment, inflation cannot originate in market mechanism but beyond it. The reasons are state interventions based on Keynes oriented economic policy which leads to growing deficit of household budget and oversize money supply as a result of monetary expansion.

According to Friedman money supply is an exogenous variable. The central bank influences it by using monetary policy. A large and unexpected money supply change evokes a shock in money demand and it causes a shock in the development of real and nominal *GDP*, employment and other economic variables. Friedman concluded that short-term money is not neutral because its influences of real variables.

The change in money supply takes effect in the change of nominal income first as a change of real income approximately in six to nine months, hereafter in change of prices in next six to nine months. The price level change which is a result of money supply change takes effect in one to one and half years. Friedman supports his conclusion with empirical facts in his book *Monetary History of the United States*. This time lag led to the opinion of ineffectiveness of monetary policy. Friedman wrote: „The long time lag has another important impact. It leads to misinterpreting and chaos concerning effect of momentary policy as well as mistake. Because money supply effects do not take place immediately, monetary policy is considered ineffective.“[6]

The money is according to Friedman neutral in long-term run. The money supply change takes effect only together with the increase or decrease of price level. This conclusion has been made under the condition of market economy and long-term optimum resource allocation and utilization that is why the effect of money supply change can be only short-term.

3.4 Friedman's Critique of Phillips Curve

Friedman fundamentally criticised Phillips curve in his president lecture on The Role of Monetary Policy in December 1967. It was main-

ly a critique of economic policy, which is based on the imagination of interchangeability between inflation and unemployment. The idea that the inflation growth could lead to lower unemployment and vice-versa, was implemented to Keynes oriented economic policy by P. A. Samuelson a R. M. Solow.

Together with the critique of this approach Milton Friedman used these terms adaptable inflation expectation and money illusion. He explains that the observed interchangeability between inflation and unemployment is possible thanks to money illusion of economic subjects that cannot distinguish between the changes of nominal and real wages and prices.

If the money supply rises, the employees interpret the nominal wage growth as a real wage growth and they are willing to offer more labour; the companies assume, that the relative prices of their good have risen and are willing to produce more and as a result of that to employ more workers. This is why; short-term the inflation growth is connected with *GDP* growth and employment. As soon as the economic units are aware of their misinterpretation and discover that the price level increase is hidden behind the wage increase, the employees lower the labour offer, companies lesser the labour demand and the production decreases. The unemployment again reaches its initial level Friedman calls natural rate of unemployment.

According to Milton Friedman the natural rate of unemployment is defined as a rate of unemployment „...which is consistent with the equilibrium in the structure of real wages“. [8] The economy converges to this rate automatically. The unemployment rates are constant and people naturally lose and find jobs. The natural rate of unemployment is a rate which does not accelerate or decelerate inflation as a result of stable inflation expectations.

The return to natural rate of unemployment does not concurrently mean lowering inflation rate to previous level; it remains on the same level. According to Friedman the results are adaptive inflation expectations. As soon as the economic subjects realize their misinterpretation about inflation rate (money illusion), they built the inflation rate to their expectations about future prices and wage requirement. This inflation expectation changes expected inflation to real

inflation. Every money supply growth leads in higher inflation.

3.5 Friedman's View on Economic Policy

Friedman's liberal orientation of theoretical-economic and economic-political thinking took effect in critique and dismissive attitude to Keynesian and Keynes's recommendations for economic policy. In the 50s Milton Friedman was an active participant in so-called argument „fiscalism versus monetarism“. The argument concentrated on relative effectiveness of fiscal and monetary policy.

Friedman tried to explain, that fiscal policy is limited as for stimulation of economic growth. He argues with the crowding-out effect - the increase of government expenditures financed by loans (selling governmental bonds to private sector) leads to the growth of interest rates which is followed by a decrease in private investments and consumption spending. This is why the budgetary deficit does not lead to significant growth of aggregate demand. Friedman saw this concept as a dangerous spread of governmental sector in economy. Concurrently he pointed out the ineffective spending of state budget money.

Friedman regarded the monetary policy as an effective instrument in influencing the aggregate demand and national income. He warned against the Keynesian policy of cheap money - stimulating the demand by low interest rates. Friedman explains that the increase in money supply made by the Central Bank first lowers the interest rates - this is called liquidity effect. The liquidity effect is based on the economic subjects which gain more real money balances. They transform these real money balances to other financial assets, raise their price and let the interest rate fall. Following income effect of interest rates leads to the increase in investments - growing demand for credits. The interest rates grow to their indicial level. The growth of aggregate demand is a cause of inflation growth and the inflation expectation effect raises the nominal interest rate and expected inflation rate.

Friedman did not agree with the Keynes's efforts to stabilize economy and avoid cyclic variation managing interest rate targeting. Friedman called attention to wobbliness of money supply

and time lag, which disables the Central Bank to precisely target the monetary intervention to have the stabilization effect on the business cycle.

Milton Friedman recommended replacing interest rate targeting with money supply targeting. Money supply growth should be managed to respond to long-term real *GDP* growth. Friedman was aware of the difficulties with a precise prediction of *GDP* growth; that is why he emphasized mainly the constant growth of money stock by 3-5 per cent annually.

4. Conclusion

Milton Friedman, American Nobel prize winner for Economics, was one of the most important liberal economists in the 20th century. He contributed substantially to the development of economic theory, to new view on economic policy and socioeconomic issues.

His main contribution to economic theory involves the idea that household consumption is not influenced by temporary income changes, but depends on so-called permanent income. Friedman's new interpretation of Quantity Theory of Money leads to explanation of stable character of money demand and the non-neutrality of money in short-term. The reasoning was that sudden changes in money supply cause destabilization in economy, because they lead to change in prices as well as real variables.

Inflation is according to Friedman entirely a money phenomenon in case that money supply grows faster than the real *GDP*. The effects of Philips curve are only short-term; the unemployment rate fluctuates at the level of the natural rate of unemployment in a long-term horizon.

Friedman criticized mainly Keynes oriented economic policy concerning increasing supplies and budgetary deficit and the interest rate targeting policy. Friedman suggested managing the money supply. He defined „golden rule of money stock growth“. According to this rule, the central bank should maintain the constant growth of money supply.

Friedman's scientific and human bequest still deserves attention.

References:

- [1] FRIEDMAN, M. *Čím víc je svobody, tím lepší je život*. [online]. New York, 5. 6. 2006. Rozhovor M. Friedmana pro Handelsblatt. [cit. 2007-06-09] Available at: <http://hn.ihned.cz/3-18602890-Friedman-500000_d-79>.
- [2] FRIEDMAN, M. *Kapitalismus a svoboda*. 1. vyd. Praha: Liberální institut, 1993. ISBN 80-85787-33-4.
- [3] FRIEDMAN, M. *The Optimum Quantity of Money and Other essays*. Chicago: Aldine, 1969. ISBN 0202060306.
- [4] FRIEDMAN, M. *The Quantity Theory of Money - A Restatement*. In *Studies in the Quantity Theory of Money*. Chicago: University of Chicago Press, 1973, p. 4. ISBN 0226264041.
- [5] FRIEDMAN, M. *The Quantity Theory of Money - A Restatement*. In *Studies in the Quantity Theory of Money*. Chicago: University of Chicago Press, 1973. ISBN 0226264041.
- [6] FRIEDMAN, M. *The Quantity Theory of Money - A Restatement*. In *Studies in the Quantity Theory of Money*. Chicago: University of Chicago Press, 1973, p. 181. ISBN 0226264041.
- [7] FRIEDMAN, M. *The Role of Government in our Society*. [online]. The John M. Oli Lecture Library. [cit. 2007-06-08]. Available at: <<http://www.isi.org/lectures/lectures.aspx?S-By=lecture&Sfor=463835cf-f922-4c6a-b4f8-84b68e3b472e>>.
- [8] FRIEDMAN, M. *The Role of Monetary Policy*. *American Economic Review*. 1968, March, no. 58, p. 8. ISSN 0002-8282.
- [9] FRIEDMAN, M., SCHWARTZ, A. *The Monetary History of the United States*. Princeton, 1963.
- [10] HOLMAN, R. A KOL. *Dějiny ekonomického myšlení*. 1. vyd. Praha: C. H. Beck, 1999. ISBN 80-7179-238-1.
- [11] KADEŘÁBKOVÁ, B. *Úvod do makroekonomie: neoklasický přístup*. 1. vyd. Praha: C. H. Beck, 2003. ISBN 80-7179-788-X.
- [12] KLAUS, V. *Vzpomínka na Milтона Friedmana*. [online] 6. 12. 2006. [cit. 2007-07-01]. Available at: <www.klaus.cz>.
- [13] *Milton Friedman, a giant among economists*. [online]. The Economist. [cit. 2007-07-01]. Available at: <http://www.economist.com/business/displaystory.cfm?story_id=8313925>.
- [14] *Milton Friedman, Wikipedia*. [online]. [cit. 2007-07-02]. Available at: <http://en.wikipedia.org/wiki/Milton_Friedman>.
- [15] *Nobel Prize. Milton Friedman*. [online]. [cit. 2007-07-03]. Available at: <http://nobelprize.org/nobel_prizes/economics/>.

laureates/1976/index.html>.

[16] SOJKA, M. a KOL. Dějiny ekonomických teorií. 1. vyd. Praha: Karolinum, 1999. ISBN 80-7184-991-X.

Ing. Iva Nedomlelová, Ph.D.

Technical University of Liberec

Faculty of Economics

Department of Economics

iva.nedomlelova@tul.cz

Doručeno redakci: 14. 8. 2007

Recenzováno: 15. 11. 2007

Schváleno k publikování: 14. 1. 2008

ABSTRACT**MILTON FRIEDMAN: REMEMBRANCE OF PERSONALITY AND ECONOMIST****Iva Nedomlelová**

On 16th November 2007, a year after the death of one of the most remarkable liberal economists of the twentieth century, Nobel price winner, Milton Friedman. The aim of this article is not to list his theoretic-economical, economic-political ideas and analyze them. The aim is to recall a personality of Milton Friedman, who significantly influenced macroeconomic theory and economic policy in an outright original approach to a range of economic problems.

His main contribution to economic theory involves the idea that household consumption is not influenced by temporary income changes, but depends on so-called permanent income. Permanent income can be explained as an average income, which an individual expects to earn during his life using his labour and capital. It depends on household welfare (human capital, education, health included), interest rate, and expected job vacations etc.

Friedman's new interpretation of quantity theory of money leads to explaining the stable character of demand of money and insignificance of the short-term neutrality of money. He proved that sudden changes in the money supply are destabilizing in economy because they lead to changes in prices and real variables. Inflation is according to Friedman entirely a money phenomenon in case that money stock grows faster than the real GDP. The effects of Philips curve are only short-term; the unemployment rate fluctuates at the level of the natural rate of unemployment in a long-term horizon.

According to Friedman, only verifying empirical fact can prove the correctness of theory. This approach explains Friedman's continuous interest in empirical development.

The society became aware of Milton Friedman because of his strong opinions on the methodological issues in economy. Verifying hypothesis should come out from the methodological positivism.

In relation to economic policy, Friedman criticized mainly Keynes oriented economic policy concerning increasing supplies and budgetary deficit and the interest rate targeting policy. Friedman suggested managing the money stock. He defined „golden rule of money stock growth“. According to this rule, the central bank should maintain the constant growth of money stock, three to five per cent annually, depending on the real GDP growth.

Key Words: Milton Friedman, permanent income hypothesis, quantity theory of money, Phillips curve, inflation, economic policy

JEL Classification: A10, B22, E00