MISES' MONETARY ARGUMENT IN ECONOMIC CALCULATION DEBATE: CROSS THE *Ts* AND DOT THE *Is*

ALIAKSANDR KAVALIOU*

Fecha de recepción: 10 de enero de 2018. Fecha de aceptación: 2 de marzo de 2018.

Abstract: The central thesis of this paper is that Mises' argument on the impossibility of economic calculation under non-monetary socialism is absolutely adequate and relevant. Both theoretical ideas and practical realization of socialism were focused on non-monetary socialism, which is the specific and only form of socialism. Lenin himself confirmed defeat in practical attempts to construct a non-monetary economy, and other socialist authors confirmed the futility of the attempts to find a non-monetary accounting unit for economic calculation. Re-evaluation of the results of economic calculation debates should refer to the incorrect line of argument of socialist authors. After Mises and Hayek presented arguments against any form of socialism, they were accused of retreating to an alternative line of defense. In fact, socialist authors have constantly mimicked and changed their lines of defense. The author hopes presenting this debate in the Austrian economic literature will be fruitful.

Keywords: Mises, Monetary Argument, Socialism, Economic Calculation Debate.

JEL Classification: B13, B14, B24, B25, P21, P24.

Resumen: La tesis central de este trabajo es que el argumento de Mises sobre la imposibilidad del cálculo económico bajo el socialismo no monetario es absolutamente adecuado y relevante. Tanto las ideas teóricas como la realización práctica del socialismo se centraron en esta forma específica y única. El mismo Lenin confirmó la derrota en intentos prácticos de construir una economía no monetaria, y otros autores socialistas confirmaron la inutilidad de los intentos de encontrar una unidad contable no monetaria para el cálculo

^{*} Ph.D. in Economics, Professor at the Department of Social Science, European Humanities University, Vilnius, Lithuania; e-mail: kavaliou.aliaksandr@gmail.com

económico. La reevaluación de los resultados de los debates de cálculo económico debe subrayar la argumentación incorrecta de los autores socialistas. Después de que Mises y Hayek presentaran argumentos en contra de cualquier forma de socialismo, fueron acusados de retirarse a una línea de defensa alternativa. De hecho, los autores socialistas han imitado y cambiado constantemente las líneas de defensa. Será una forma fructífera de presentar el debate en la literatura económica austriaca.

Palabras clave: Mises, socialismo, argumento monetario, Debate del cálculo económico.

Clasificación JEL: B13, B14, B24, B25, P21, P24.

I INTRODUCTION

The debate on economic calculation under socialism is one of the brightest pages in the history of the Austrian School of Economics. Ludwig von Mises and Friedrich von Hayek built up a convincing theory that proves the impossibility of effective central planning of prices and production.

The mistaken conviction that socialist authors won the socialist calculation debates in the 1920s-30s was for a long time widely spread among economists. The collapse of the socialist system induced M.Rothbard to re-evaluate the results of the discussion (Rothbard 1991). In the past two decades the economists of the Austrian School of Economics (Kirzner 1987, Huerta de Soto 2007, Salerno 1994, Hülsmann 1997) made a significant contribution to the re-thinking of the discussion outcomes. An important thesis for Mises and Hayek's victory in the practical side of the discussion was proposed.

W. Block, C.Westley, and A.Padila reconsidered the result of the debate on the change to the science valuation (W. Block, C.Westley, A.Padila 2008).

The brilliant work by Huerta de Soto combines the evaluation of the debate with the definition of socialism as an institutional aggression against private property and the entrepreneur's activity (Huerta de Soto 2008).

At the same time the economists of the Austrian school do not pay attention to the *reasons* that shaped the opinion on the socialist authors' victory in the debates.

The *permanent change of views* of socialist authors and the renovation of their ideas were among these reasons. Every time the economists of the Austrian school put forward their ponderable counterarguments, socialists proclaimed the Austrians' withdrawal to the defense line and awarded themselves the victory at each stage of the debate.

Mises' monetary argument could be regarded as vivid evidence of this situation. When the impossibility of organizing non-monetary socialism became clear, and in the USSR there was a turn to the NEP, the socialists rebuked Mises that his criticism concerned only a non-monetary form of socialism.

The aim of this article is to strengthen the line of argument of the Austrian School in the re-evaluation of the results of the socialist calculation debate, through the analysis of socialists' objections to Mises' argument, and the recognition of defeat by socialists themselves in this concrete episode of debates.

This article shows that at the time when Mises was writing Socialism Marxists did not imagine any other form of socialism except a non-monetary one, both in theory and in practice. Moreover, they fully admitted their own defeat in this part of the debates. The collapse of the non-monetary socialist economy proved Mises was right and forced Bolsheviks to search for other forms of implementation for socialism.

The article is designed as follows: the introduction is the first section, Mises' monetary argument about the impossibility of economic calculation is briefly presented in the second part; the third part reflects the views of socialist theorists on the possible practical implementation of socialism; the fourth part represents the genesis of the implementation of socialism as a non-monetary economy in Soviet Russia, the Bavarian and Hungarian Socialistic Republics, as well as the rejection to realize non-monetary socialism; the theories on possible money substitutes by socialist authors

are analyzed in the fifth part; the conclusions and their possible application in the contemporary world are drawn in the sixth part.

II MISES' MONETARY ARGUMENT

In his article on economic calculation (Mises 1920) and in *Socialism* (Mises 1922) Mises formulated the main problem of a socialist economy «in such a form so that it never disappeared from discussion: the inability of a rational distribution of scarce resources due to the impossibility of an economic calculation» (Hayek 1935).

Mises' position encompasses the interrelated arguments that ultimately boil down to the impossibility of producing and disseminating the knowledge which forms the structure of the division of mental labor in society (Huerta de Soto 2008). Absence of any of the elements — money, market, competition, capital market, entrepreneurs, ownership on capital goods, etc. — inevitably leads to the impossibility of rational calculation. Mises argued that, «in the socialist commonwealth every economic change becomes an undertaking whose success can be neither appraised in advance nor later retrospectively determined. There is only groping in the dark. Socialism is the abolition of rational economy» (Mises, 1920).

The comprehensiveness of Mises' arguments led to the fact that even the supporters of the Austrian school took one of the arguments and made it a main argument, launching a fruitless discussion on the heterogenesis of Mises' and Hayek' the ideas on the calculation debate (Salerno 1994, Yeager 1996, Hulsmann 1997).

Under the present article, Mises' monetary argument is considered for the sake of demonstrating that even only this single argument is enough to prove the impossibility of rational economic calculation under socialism.

In a solid work on money and economic cycles J. Huerta de Soto demonstrated that any government intervention in the evolutionary development of the monetary and banking spheres leads to a disruption in the coordination processes. The theorem on the impossibility of socialism can be applied both to the

banking system with the Central Bank, and to a system without a Central Bank, but with the fractional-reserve privilege granted by the government. In all cases, the violation of the principles of law in relation to money and credit distorts the system of relative prices and «keeps entrepreneurs from discovering or creating the information necessary to coordinate society» (Huerta de Soto 2012).

Mises' monetary argument refers to a case of complete lack of money, and it could be presented in the following way. The problem of scarcity and the need to distribute today's resources for the maximization of tomorrow's needs satisfaction, still exist in a socialist society. In a developed economy «the production processes are so numerous and so long, and the conditions for achieving success are so diverse that careful decisions are needed to decide whether to get down to business» (Mises 1922).

Measuring units are required for the calculation. However, the subjective value of the goods cannot be measured. In economy, which is built upon the exchange, the measuring unit is an exchange value expressed in money terms. The system of *mone*tary prices allows controlling the economizing resource usage (Mises 1922). It is impossible to reduce all subjective proportions of exchange to a single denominator without money, which serves as a universal medium of circulation (Michajlovski 1993, p. 86).

Hayek noted that there were two types of objections to Mises' criticism. The first type may be named as an «ethical» argument. i.e. losses in efficiency under socialism are compensated by more just distribution of the wealth. The second type of reaction was «to regard it as valid only as regards the particular form of socialism against which it was mainly directed (non-money one), and to try to construct other schemes that would be immune against that criticism» (Hayek 1935).

Actually, the statement about the inadequacy of non-monetary socialism under Marxist views is a form of permanent mimicry of socialist authors. This mimicry is the subjective factor of formation among mainstream economists of the opinion that socialists were winners in the debates (Kavaliou 2008). Socialism has been designed by its theoreticians exactly as a non-monetary economy and has been implemented in real life in the same way.

III THEORETICAL VIEWS ON SOCIALISM AS A NON-MONETARY ECONOMY

Mises was surprised: the fact, that «for decades people could write and talk about Socialism without touching that problem [the problem of economic calculation] only shows how devastating were the effects of the Marxian prohibition on scientific scrutiny of the nature and working of a socialist economy» (Mises 1922).

Marx's theory is full of contradictions. He understood and emphasized the role of institutions in the economy; his theory focuses more on a disequilibrium than on a static equilibrium; he understood the importance of information, although he considered it to be objective and scientific (Huerta de Soto 2008, pp. 202-204). But at the same time, in his opinion, planning bodies under socialism can act without money. They should just determine the quantity of the necessary production *in natura* and «directly» distribute products among members of society.

The prominent theoretician of Marxism Karl Kautsky presented a somewhat different version of the role of money under socialism. Money will remain, but exclusively as a tool of consumer choice within the limits of the achieved income, and will exist as a medium of exchange for as long as a better alternative will be found. At the same time, money will immediately lose the function of a measure of value in the transition to socialism (Kautski 1917).

Another socialist author O. Neurath argued that each exclusively administrative economy (planned economy) is ultimately a natural, barter system. «Socialization, therefore, requires a natural economy» (Neurath 1919, p. 216).

So, at the moment of socialist revolution the chapter of how a socialist economy would function was not worked out by the theory of socialism.

Lenin wrote in September 1917 that «We do not insist that Marx and the Marxists know the way to socialism in every single detail. This is nonsense. We know the direction of this way and what class forces are leading to it, namely on practice it will be shown only by the experience of millions when they start doing this business…» (Lenin 1917).

At the same time Lenin clearly designated the aim of revolution. He argued, that "the aim of a socialist revolution is to substitute the commodity production by a socialist one" (Lenin 1906), namely destruction of private property, organization of accounting, and control over all the enterprises and organization of product distribution "directly but not through market", without the use of money.

In another article, he stated that «money will be preserved for the entire period of the transition of society from capitalism to socialism» (Lenin 1918, p. 134), after which they will disappear. In the transition period, money cannot be destroyed immediately — it is necessary to conduct «many purely technical and organizational measures, to organize the distribution of products for hundreds of millions of people» (Lenin 1919a, p. 353).

Other communist leaders regarded socialism as a natural, non-exchange economy in essence, too. Bucharin even wrote that "theoretical political economy should disappear" under socialism (Bucharin 1920). He considered theoretical economics as a science on spontaneous market economy, only. Consequently, under an organized planning, social economy will die. Lenin objected to this thesis under the statement that the subject of political economy is wider than only market economy, but he agreed with author in the assessment of socialism as a non-monetary, non-commodity economy.

Strumilin argued "The insolvency of monetary accounting for the systematic regulation of the state economy of Soviet Russia is so obvious that it does not raise doubts in anyone. The monetary accounting of economic goods must give way to the non-money one. This question is out of dispute" (Strumilin 1920a).

Even the economists who were in opposition shared the view that the sphere of monetary circulation should be significantly reduced. Thus, the author of the monetary reform of 1923-24, Professor Yurovsky, described the system of «complete communist economy» in the following way: «Commodity-money relations completely disappear from the sphere of personal consumption, the distribution of consumer goods occurs through a system of rationed rations. At the same time, the trade in capital goods between socialist enterprises will continue, there will be a market

and a price system» (Yurovsky 1928, pp. 376-381). Obviously, under such a system, the «imputation» process is impossible, and the prices for capital goods will not reflect their importance for the economy for two reasons. First, because the real market cannot exist in the absence of the owners and the entrepreneurs, and secondly, because there are no prices for consumer goods, to indicate the direction for the investment required by society.

So, there was agreement on the need to build socialism as a non-monetary economy among the theorists of socialism.

Economic policy exactly corresponded to the prevailing theoretical ideas.

IV PRACTICE OF THE IMPLEMENTATION OF SOCIALISM

The practice of the implementation of socialism also confirms the original intention to build a non-monetary economy. «The intensive nationalization of industry, strict centralization of management processes in industry, prodrazvyorstka¹ in agriculture, a high degree of naturalization, labor duty, equalizing consumption» were elements of economic policy [Bogomazov 1983, p. 31]. The factors that conditioned the naturalization of relations were not only the breakdown of the financial and credit systems, but also the «wide dissemination of ideas of a non-monetary economy» [Bogomazov 1983, p. 35].

The representative of the People's Commissariat of Finance in his report to the Supreme Economic Council in 1918 said: «Finance is not allowed in a socialist society. Therefore, I apologize for the existence of finance, and for my own speech on this topic « (Katzenelenbaum, 1924, p. 92).

The Decrees of the Sovnarkom (Council of People's Commissars) «On the organization of exchange of goods to strengthen grain procurement» (02.04.1918), «On the organization of supply of the population with all products and personal consumption items»

 $^{^{1}\ \}textit{Prodrazvyorstka}$ is the term for Bolshevik policy of agricultural products confiscation.

(21.11.1918)» were aimed to the formation of a non-monetary system (Malafeev 1964, pp. 18-28). In order to implement the first Decree the regional food authorities transferred industrial goods to the countries for distribution (not for sale — sic!) among rural associations of peasants.

The Director of the Financial Policy Department of the Supreme Economic Council Y. Larin noted that «our success in building socialism can be measured by the degree of withering away of money» (Larin 1920).

Obviously, the absence of market money prices and attempts to establish arbitrary proportions of «direct product exchange» caused resistance of economic entities. The Bolsheviks used various kinds of coercive tools such as forcible seizure of grain, of the principle of collective responsibility. S. Strumilin noted: «Along with the apparatus of coercion, the factor of economic (sic!) interest of the population in the fastest fulfilment of *prodrazvyorstka* is being put forward. Namely: the supply of the village with the products of the city does not begin before the moment of complete fulfilment of the entire quotas within every volost» (Strumilin 1920b).

The activity of the authorities was based on the line of the Communist Party, which was that the socialist economy should be natural, non-monetary.

The program of the Communist Party in 1919 set the goals «to continue the replacement of trade with a systematic, organized distribution of goods on a nationwide scale, to strive for the most radical measures that prepare money destruction as quickly as possible replacing it with savings accounts, checks, short-term cards with the right to receive public goods, etc.» (CPSU in resolutions, p. 427). At the same time, the author of the project, Lenin, discussing on what can be included in the Party Program, asserted that: «... the program must conclude absolutely indisputable, factually established things» (Lenin 1919b, p. 154).

The policy of free food for children as well as for workers of production lines was introduced in 1919. The Decrees «On free delivery of the food products for the population», «On free delivery of consumer goods», «On the abolishment of charges payments for the usage of post, telegraph, telephone and radiotelephone» were adopted in 1920, and the Decrees «On the abolition of

charging for housing and utilities from workers», and «On the abolition of tax payments» were adopted in 1921.

As a result of such policy the share of a natural (i.e. non-monetary) part in salary was 77,5% in January, 1922 [Bogomazov 1983].

In June 1920, VCIK (Central Executive Committee) recognized the activity of the Narkomat of Finance on establishing non-monetary calculations for the destruction of the monetary system as corresponding to the basic tasks of economic and administrative development (Izvestija VCIK 1920).

Economists noted a change in the role of prices under the absence of a market:

- the price fulfilled the accounting function, it turned into a «coefficient of calculation», reflecting also the «regeneration of money» (Berkovsky 1929, p. 159);
- in the relations between state enterprises, monetary relations acquire primarily a calculation-accounting character (Preobrazhensky 1926, p. 58);
- the arbitrariness of the establishment of monetary prices was aimed at the redistribution of resources. «Price is a method of struggle for accumulation in the public sector, a means of class distribution of national income in favor of socialism» (Voznesensky 1931, p. 50).

The policy of «war communism» put the country on the brink of disaster. Turning to a new economic policy that allowed the use of many elements of a market economy meant the recognition by socialists of the practical impossibility of realizing non-monetary socialism.

The collapse of the economy forced Lenin to admit the mistake to abolish the monetary economy. He wrote: «direct exchange of goods turned into purchase-and-sale operations. And we are now forced to realize this, if we do not want to hide our head under the wing, if we do not want to be people who do not see **own defeat**» (Lenin 1921). Thus, Lenin clearly admitted the error of the non-monetary model of the economy.

Nevertheless, theoreticians continued to regard the economy of the times of «war communism» as true socialist economy. A prominent figure of the Communist Party, E. Preobrazhensky, noted: «The system that was built corresponded to the principles of socialist economy, but the conditions for its functioning turned out to be unsuitable» (Manevitch 1989). Economists-theoreticians considered the transition to the NEP as a temporary measure, and they explained the existence of money in a transitional economy as the remnants of capitalist relations (Leontiev, Hmelnitskaya 1927).

The same kind of non-monetary economy was realized by the socialists in the Bavarian and Hungarian Soviet republics in 1919.

Zastenker argued: «Despite the plan has mostly office-generated, non-practical traits, the events carried out made the proletariat the actual owner of industrial production. This is due to the decisive measures taken by the Soviet government in relation to banks and finances. Pushed by the need for money and the sabotage of the bourgeoisie, which rushed to withdraw deposits and store money and currency, the Soviet government strike to the most sensitive place of bourgeois property. Banks were placed under control of the proletarian dictatorship and were actually nationalized. The circulation of banknotes was destroyed, bank safes were opened, and their contents were recorded at the expense of the owner and requisitioned. Payment on checks was limited to 100 marks per day, just for necessary needs. The factory committees strictly supervised that the parishes should be deposited daily in banks, and expenses were incurred for the actual needs of the enterprise or trade» (Zastenker 1934, p. 117).

The analysis of the Hungarian revolution was conducted by Professor E.Varga, who was the Minister of Finance and the Chairman of the Supreme Council of the National Economy. The author's participation in the implementation of the socialist experiment enabled him «from within» to draw conclusions about the reasons for the failure of the construction of non-monetary socialism. From his point of view, neither the Hungarian nor the Russian Soviet Republic realized the main goal for which the revolutions were carried out, that is, the revolutions did not lead to an increase in the welfare of people.

The reasons for the setbacks were not random; they are laid down in communist policy itself and can be reduced to two main reasons: the unpreparedness of the masses and the internal organic vices of all politics.

The economic policy of the Hungarian socialist government included the following elements:

- the transfer of industrial enterprises, first, under workers' control, and later their nationalization;
- removal of owners and entrepreneurs from management;
- setting an 8-hour working day;
- replacement of a piecework form of wage for an hourly one;
- a universal system of state unemployment insurance;
- compulsory consolidation of enterprises into trusts and syndicates;
- establishment of the Supreme Council of National Economy;
- nationalization of banks.

All these measures were aimed at simplifying the economic activities of enterprises so as to make them manageable to the average worker. In the opinion of the heads of the Supreme Economic Council, the abolition of the commercial side of the enterprise's activities is ensured by the nationalization of the credit, the elimination of competition, the drafting of national plans for the distribution of labor forces throughout the country and all branches of the national economy (Varga 1920).

However, all these policies encountered numerous difficulties. The exercise of naturalization of wages was impossible because of the disorganization of all production and the poor functioning of the government distribution apparatus. The peasant economy gave place to a closed home economy, since the prices of the «socialist industry» were overrated. The inevitable large and persistent deficit of the state budget led to flooding the country with paper money (Zagorsky 1922, p. 127). The supply of food to the cities encountered enormous difficulties, so, the standard of living of the urban proletariat was not only lowered, but all production was also disorganized.

All of these conditions strengthened the role of money in the national economy, forcing the Soviet authorities to restore old taxes. Instead of nationalization of the loan and its gradual abolishment, it was necessary to restore credit operations, current accounts, loans (Zagorsky 1922, p. 122).

Thus, the socialists represented the new social system as a non-monetary economy, and its construction proved impossible because of the economic cataclysm. Consequently, Mises's statement that it is impossible to rationalize the economic calculation under socialism was relevant to the non-monetary form of socialism.

V THE SEARCH FOR A NON-MONETARY MEASUREMENT UNIT

In full accordance with Mises' arguments on the socialist authorities, the problem of comparing costs and results of economic activity became acute, and the search for a single measuring instrument began. Numerous projects of non-monetary economic accounting have emerged², which can be divided into systems of accounting *in-natura*, accounting in labor costs (with modifications), and accounting with elements of utility.

The first system of indicators was developed by the department of factory statistics of the Supreme Council of National Economy. It simply characterized the qualitative aspect of the enterprise performances, for example, labor per unit, materials per unit, fuel per unit of output, and so on. (Manevitch 1989, p. 45).

Tschayanoff (1920b) proposed a system of in-kind accounting for choosing the location of a production. This system does not apply to the problem of economic calculation at all, it was intended to assess the comparative efficiency of different farming enterprises. Tschayanoff generally does not investigate the problem of which concrete goods should be produced. In this model, the state determines on the basis of previous experience the number of goods needed to meet the needs and set the task for enterprises to produce a certain amount of goods. In this case, the question arises as to how to do this in the most profitable way. Tschayanoff

 $^{^2}$ Huerta de Soto (2008) has done an overview of some of the theories of non-monetary accounting. In this section several of them are presented in more detail.

suggests to compare the costs of enterprises through the coefficients (a1 units of labor and a2 units of labor, B1 unit of land and B2 units of land, etc.) — and solves the problem of selecting the enterprises that produce the product with the minimum costs. When answering the question of which enterprise should be preferred in case the costs of one resource are less in one of them, and the costs of the other in the other, depends on a fairly arbitrary weighting of the importance of a resource. With regard to the question of whether the enterprise is operating efficiently, it is necessary to compare its costs with the norms of costs, which he calls «socially useful cost norms» (Tschayanoff 1920a).

Criticism of the Tschayanoff system was implemented by Brutskus and socialist authors S. Strumilin and E.Varga. The main direction of criticism concerned the arbitrariness of weighting various resources in the evaluation of production. Varga noted: «We cannot accept labor, food, land, etc. with the same weight, when we have no scale for comparing them among themselves «(Varga 1920, p. 2). However, the Tschayanoff system was never introduced into the practice of socialism construction, and the insolvability of the problem of comparing the value of various resources led the author to the conclusion that it is necessary to use the price mechanism to search for a national economic optimum, not technical analysis (Tschayanoff 1930).

The proposal of S.Strumilin (1920a) to organize accounting in the treds (TRudovaja EDinica — labor units) corresponded to the idea of Marx. Tred was a product of 1 hour of labor of the first rank worker, provided that the production norm was 100% fulfilled. The problem of bringing different qualifications to a single denominator of labor was solved through the tariff scale, although the variety of labor types in the absence of market confirmation of the significance of one or another of its types could not lead to reliable estimates. Another unsolvable problem of the Strumilin system was the impossibility of a correct assessment of labor in enterprises with different technical equipment, as indicated by A. Tschayanoff (Tschayanoff 1920b). Indeed, a worker of the same qualification is able to produce at the same time different products in technically advanced and technically less advanced enterprises, and in the Strumilin system this work is evaluated equally.

An attempt to solve this contradiction should be considered to be the system of accounting in eneds (ENergeticheskaja EDinica—energy units) proposed by M. Smith (Smith 1921) and S. Klepikov (Klepikov 1921). This system allowed to include the contribution of the «capital» component of costs in the accounting. The labor costs were reduced to the costs of motor and heat energy. The criticism of this concept by Strumilin (1920a) and Sarabjanov (Sarabjanov 1921) was carried out from the point of view of its inconsistency with the Marxian concept of value, according to which only labor is the source of the commodity value.

Finally, the systems of Strumilin, Klepikov, and Smith do not give an answer to the main question about what goods should be produced. Under the influence of Tschayanoff's criticism, Strumilin proposed to supplement the system of labor accounting with utility accounting. However, utility accounting is impossible by definition. Utility is a subjective category that even an individual cannot express in any units of measurement, one can only talk about the comparison of the utility of goods in specific historical conditions (time, place, the amount of goods available to the person, etc.)

The Strumilin system, thanks to his official status as a Deputy Chairman of the State Planning Committee, was closest to an attempt of practical implementation. A Decree «On the labor unit of accounting in the state economy of the RSFSR» was drafted, but it was not accepted due to the rejection of the ideas on building a non-monetary economy.

The failure of all attempts to introduce non-monetary accounting systems has led to the recognition that it is impossible to solve this problem, even at a theoretical level.

Gimpelson stated: «The projects turned out to be lifeless, they had no practical significance. In historical terms, they are of interest as a kind of monument of the epoch» (Gimpelson 1973, p. 132).

In his attempt to develop a planning system, Litoshenko recognized that the authoritarian setting of the proportions of social production is only possible with an authoritarian consumption rationing system. It is impossible to take into account the changing tastes of consumers without monetary measurers (Litoshenko 1928). However, the restriction of consumption conflicts with long-term goals of socialism was pointed out long ago by both Brutskus

and Katzenelenbaum: «The permanentance of tastes is the worst kind of cultural stagnation» (Katzenelenbaum 1920, p. 97).

Thus, the search for a non-monetary measure was also unsuccessful, and socialist authors recognized the futility of this idea.

VI CONCLUSIONS

Mises' critique on non-monetary socialism was absolutely relevant. Both theoretical ideas and practical realization of socialism were based on it, as it is its specific and only form.

The impossibility of economic calculation in such a system was confirmed. The refusal to create a «non-monetary» economy was accompanied by the recognition of their defeat by the socialists.

Lenin himself confirmed defeat in practical attempts to construct a non-monetary economy, and theoreticians recognized the futility of attempts to find a non-monetary accounting unit for the economic calculation.

The modification of the practical forms of implementation of socialism did not refute the correctness of Mises' arguments about the impossibility of an economic calculation. They proved to be true also for other forms of socialism.

Money as a social institution was not invented by anyone, but was selected by people among goods that best served the functions of money. Therefore, the attempt to abolish money leads to the disappearance of the instrument that carries out economic functions of the most importance. Moreover, in today's world, the government monopoly on money does not allow society to make an effective choice.

Reassessment of the results of economic calculation debates should not ignore the subjective component. After Mises and Hayek presented arguments against any form of socialism, they were accused of retreating to a reserve defense line. In fact, it is socialist authors that have constantly mimicked and changed their lines of defense.

Further development of the ideas in this article can be carried out in two ways. Firstly, continue to split the economic calculation debate into the different episodes that took place in accordance with the proposed arguments, and prove the victory of the representatives of the Austrian school in each episode. Secondly, to analyze the discussion that took place in the USSR, which is not yet referred to in the debates. This discussion was not only of a theoretical nature, but had a sharp practical focus too.

BIBLIOGRAPHICAL REFERENCES

- Berkovsky, B.I. (1929). «K voprosu o harakteristike denezhnoj sistemy SSSR» [On the question of the characteristics of the monetary system of the USSR], *Problemy ekonomiki*, 1929, No. 7-8.
- BLOCK, W., WESTLEY, C., and PADILA, A. (2008). «Internal vs. external explanations: a new perspective on the history of economic thought», *Procesos de Mercado: Revista Europea de Economía Política*, No. 2, pp. 35-132.
- BOETTKE, P. (2001). «Economic calculation: The Austrian contribution to political economy», In: P. Boettke, *Calculation and Coordination*. Essays on socialism and transitional political economy, London and New York: Routledge.
- Bogomazov, G.G. (1983). Formirovanije osnov socialisticheskogo hoziajstvennogo mechanizma [The creation of the basis of socialist economic mechanism], Leningrad, LGU publishing [in Russian].
- Brutzkus, B.D. (1922). «Problemy narodnogo hoziajstva pri socialisticheskom stroje» [The economic problems under socialism], *Economist*, No. 1, 2, 3. [in Russian].
- Bucharin, N.I. (1920). *Ekonomika perehodnogo perioda* [The economy in transition], Moscow. [in Russian].
- CPSU in resolutions and decisions of congresses, conferences and plenums, Part I, Moscow, 1953 [in Russian].
- GIMPELSON, E.G. (1973). *Voennyj kommunizm: politika, praktika, ide-ologija* [War communism: politics, practice, ideology], Moscow [in Russian].
- HAYEK, F.A. von (1935), «The Nature and History of the Problem» in F. A. Hayek, ed. *Collectivist Economic Planning*, London: George Routledge & Sons., pp. 1-40.

- Huerta de Soto, J. (2008). *Socializm, ekonomicheskij raschiot i predprinimatelskaja funkcija* (First published in 1992 in Spanish as *Socialismo, cálculo económico y función empresarial*), Moscow, Cheliabinsk, IRISEN, Sotcium [in Russian].
- (2012). *Money, Bank Credit, and Economic Cycles*. Auburn: Ludwig von Mises Institute [Third edition].
- Hülsmann, J.G. (1997). «Knowledge, Judgment, and the Use of Property», *The Review of Austrian Economics* Vol. 10, no. 1, pp. 23-48.
- Izvestija Vcik, 20.06.1920 [in Russian].
- Katzenelenbaum, Z.S. (1924). *Denezhnoje obrashchenie v Rossii*, 1914-1924 [Money circulation in Russia, 1914-1924], Leningrad, Ekonomicheskaja zhizn' [in Russian].
- KAUTSKI, K. (1917). *Na drugoj den' posle social'noj revolycii* [At the next day after social revolution], Petrograd, Luch [in Russian].
- KAVALIOU, A. (2008). «Ekonomicheskij raschiot pri socializme: sovremennoje ponimanije diskussii» [Socialist calculation debate: a contemporary understanding], *Vestnik BNTU*, No 2, pp. 52-60.
- KIRZNER, I. (1987). «The Economic Calculation Debate: Lessons for Austrians», *The Review of Austrian Economics*, 2, pp. 1-18.
- KLLEPIKOV, S.A. (1921). «Opyt postrojenija sistemy hoziajstvennyh izmeritelej v promyshlennosti» [The experience of the creation of measuring economics units in industry], *Narodnoje hoziajstvo*, No. 3. [in Russian].
- KPSS v rezoliucijah i reshenijah s'ezdov, konferencij I plenumov CK [CPSU in resolutions of meetings, conferences and Central Committee plenums], vol.1 (1953), Moscow [in Russian].
- LARIN, Y. (1920). «Ot slov k delu» [From the words toward work], *Ekonomicheskaja zhizn'*, 28 January [in Russian].
- LEONTIEV, A., HMELNITSKAYA, E. (1927). *Ocherki perehodnoj ekonomiki* [Essays on transitional economy], Leningrad [in Russian].
- Lenin, V.I. (1906). «Zamechanija na pervyj proekt programmy Plehanova» [Comments on First Project of Plekhanov' Program], *Polnoje sobranije sochinenij*, v.6. [in Russian].
- (1917). «Iz dnevnika publicista. Krestiane i Rabochije» [Extracts from publicist' diary. Peasants and Workers], *Polnoje sobranije sochinenij*, v.34. [in Russian].

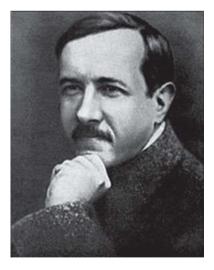
- (1918). «Ocherednyje zadachi Sovetskoj vlasti» [Next tasks of Soviet authority], *Polnoje sobranije sochinenij*, v.36 [in Russian].
- (1919). «I Vserossijskij s'ezd po vneshkol'nomu obrazovaniju» [I Congress on non-formal education], *Polnoje sobranije sochinenij*, v.38 [in Russian].
- (1919b). «Doklad o partijnoj programme» [Report on Party Program], *Polnoje sobranije sochinenij*, v.38 [in Russian].
- (1921). «Doklad o novoj ekonomicheskoj politike na VII Moskovskoj gubpartkonferencii 29-31.10.1921» [On new economic policy: report at Moscow party conference, 29-31.10.1921], *Polnoje sobranije sochinenij*, v.44, [in Russian].
- LITOSHENKO, L.N. (1928). «Problemy effektivnyh kapital'nyh vlozhenij» [The problems of effective investments], *Planovoje Hozyajstvo*, No. 1, 3 [in Russian].
- MALAFEEV, A.N. (1964). *Istorija cenoobrazovanija v SSSR (1917-1963)* [The History of Price Formation in the USSR (1917-1963)], Moscow, Mysl' [in Russian].
- MANEVITCH, V.E. (1989). *Ekonomicheskije diskussii 1920 godov* [Economic discussions in 1920s], Moscow, Ekonomika [in Russian].
- MICHALOWSKI, J. (1993). *Liberalizm contra Socializm. Spor o rachunek ekonomiczny* [Liberalizm contra Socializm. Discussion on economic calculation], Lublin [in Polish].
- MISES, L. von (1920). «Economic calculation in the Socialist commonwealth», republished in Hayek, F.A. von. (1935) *Collectivist Economic Planning*, London: George Routledge & Sons.
- ([1922], 1981). *Socialism: An Economic and Sociological Analysis*, Indianapolis, Liberty Fund, Inc.
- NEURATH, O. (1919). *Durch die Kriegswirtschaft zur Naturalwirtschaft,* Munich, G.D.W.Callwey.
- Preobrazhenskij, E.A. (1926). «Zakon cennosti v sovetskom hoziajstve» [The Law of Value in Soviet Economy], Vestnik Kommunisticheskoj Akademii, 1926, No. 14. [in Russian].
- Rothbard, M. (1991). «The End of Socialism and Calculation Debate: Revisited», *Review of Austrian Economics*, 5, no 2, pp. 51-76.
- Salerno, J.T. (1992). «Mises and Hayek Dehomogenized», *Review of Austrian Economics*, 6, no 2, pp. 114-146.
- SARABJANOV, V.V. (1921). «Ob izmerenii trudovoj stoimosti: po povodu statej Klepikova I Smith» [On value calculation by labor.

- Some comments on Klepikov and Smith articles], *Narodnoje hoziajstvo*, no 4 [in Russian].
- Sмітн, M.N. (1921). «Ob izmerenii stoimosti» [On calculation of value], *Narodnoje hozyaystvo*, No. 3 [in Russian].
- STRUMILIN, S.G. (1920a). «Problemy trudovogo uchiota» [The Problems of labor accounting], *Ekonomicheskaja zhizn'*, No. 237 [in Russian].
- (1920b). «Menovyje ekvivalenty i problema snabzhenija» [Trade equivalents and the problem of supply], *Ekonomicheskaja zhizn'*, 30 October [in Russian].
- Tschayanoff, A.W. (1920a). «Problema hoziajstvennnogo uchiota v socialisticheskom gosudarstve» [The problem of economic accounting in socialist state], *Economicheskaja zhizn'*, no 225, 231 [in Russian].
- (1920b). «Substancija cennosti i sistema trudovyh ekvivalentov» [The Value substrate and the system of labour equivalents] *Economicheskaja zhizn'*, no 247 [in Russian].
- (1930). «Tehniko-ekonomicheskije voprosy stroitelstva socialisticheskogo zemledelija» [The technical and economic questions of the creation of socialist agriculture»], *Nauchnoje slovo*, no 4 [in Russian].
- VARGA, E.S. (1920). «Ischislenije stoimosti proizvodstva v bezdenezhnom hoziajstve» [The calculation of the cost of production under non-money economy], *Ekonomicheskaja zhizn'*, No 259 [in Russian].
- Voznesenskij, N. (1931). «K voprosu ob ekonomike socializma» [On Economic System of Socializm], *Bolshevik*, No. 23-24 [in Russian].
- Yurovsky, L. (1928). *Denezhnaya politika Sovetskoj vlasti (1917-1927)* [Monetary Policy of Soviet Government (1917-1927)], Moscow [in Russian].
- YEAGER, L.B. (1994). «Mises and Hayek On Calculation and Knowledge», *Review of Austrian Economics* 7, no 2, pp. 93-109.
- Zastenker, N. (1934). *Bavarskaja Sovetskaja Respublika* [Bavarian Soviet Republic], Moscow, CPSU Publishing [in Russian].
- ZAGORSKY, S.O. (1922). «Review on E. Varga. Die wirtschaftspolitlischen Probleme der proletarischen Diktatur. Wien: Genossenschaftsverlag der «Neuen Erde», 1920», Sovremennyje zapiski, 1922. Vol. X, pp. 396-407 [in Russian].

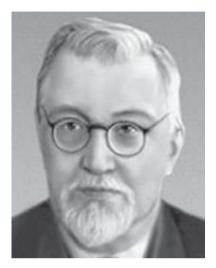
APPENDIX



Eugen Varga (November 6th 1879 — October 7th 1964)



Alexander Tschayanoff (January 17th 1888 — October 3rd 1937)



Stanislav Strumilin (January 29th 1877 — January 25th 1974)



Yevgeni Preobrazhenski (February 15th, 1886 — February 13th 1937)



Yuri Larin Lurie (June 17th 1882 — January 14th 1932)



Boris Brutskus (October 15th 1874 — December 6th 1938)



Nikolai Bukharin (October 9th 1888 — March 15th 1938)



LeonYurovski (October 24th 1884 — September 17th 1938)