



Munich Personal RePEc Archive

Bruno Leoni and the Socialist Economic Calculation Debate

Ferlito, Carmelo

INTI International College Subang, Subang Jaya, Malaysia, Institute for Democracy and Economic Affairs, Kuala Lumpur, Malaysia

31 March 2013

Online at <https://mpra.ub.uni-muenchen.de/67745/>

MPRA Paper No. 67745, posted 09 Nov 2015 05:39 UTC

BRUNO LEONI AND THE SOCIALIST ECONOMIC CALCULATION DEBATE

CARMELO FERLITO

Abstract: The Italian contribution to the Socialist Economic Calculation Debate (SECD) cannot be limited to the important and fundamental works by Pareto and Barone. In fact, if their contributions are still ambiguous and we have to wait for the Mises' paper in 1920 in order to get the needed clarifications, during the 1960s Bruno Leoni follows the Austrian footsteps on the topic, stimulating in Italy a great debate. Bruno Leoni's role is important because of the debate he promotes and the scholars he involves, but also because he places the matter of the socialist economic calculation in the broader context of the rule of law.

Key Words: Bruno Leoni, Socialist Economic Calculation Debate, Austrian Economics.

JEL Classification: B25, P21, P22.

I
THE SOCIALIST ECONOMIC CALCULATION DEBATE (SECD): AN
INTRODUCTION

The Socialist Economic Calculation Debate (SECD) involved in the first part of the 20th century a great number of important economists. The purpose of the present paper is not to summarize the debate, since this work is already done and the scholars which are looking for the best summaries have to start with Huerta de Soto (2010, chapters 4, 5 and 6)¹ and White (2012, chapter 2)

Mises and Hayek faced, in particular during the 1920s and 30s, many socialist economists on one central point: is it possible to have a rational economic calculation under a socialist society? Actually, the question has to be considered much more deep than a simple economic problem. In fact, in answering to the question a perspective on human society arises. The point is: can the plan from a single man or institution (the central planner) replace the free action of the persons in a complex society?

Following Huerta de Soto (2010), we can think to the society (and market is one peculiar institution inside the society) as the place where the individuals meet each other, with their expectations and plans. In trying to accomplish their plans, all persons are entrepreneurs.

According to the Austrian vision, a *dynamic* equilibrium, in which human actions try to coordinate in order to accomplish the plans, is possible to be reached only if actions are free. This doesn't mean that all the plans will be reached and we can obtain a *static* and *perfect* equilibrium like in the neoclassical theory. But, in a free society the people are free to learn from their mistakes, so they are free to amend their plans and expectations, according to what they learn from the mistakes and from the interaction with other people.

According to the socialist view, instead, it is possible for a central planner to collect all data in order to produce a perfect economic calculation. In this way, it is the central authority that supplies the information to the actors in terms of prices, goods to be produced, quantities, etc... These idea became so common during the 1920s and 30s, that a certain degree of central planning was widely accepted outside from the Marxist environment. Keynes is the most important example, while the neoclassical theory is the "liberal" and mathematical version of this intellectual mistake.

For more than half a century, the belief that deliberate regulation of all social affairs must necessarily be more successful than the apparent haphazard interplay of independent individuals has continuously gained ground until to-day there is hardly a political group

¹ The bibliography on the debate is really huge. Here we'd like to suggest to read Lavoie (1981), Rothbard (1991) and Boettke (2001).

anywhere in the world which does not want central direction of most human activities in the service of one aim or another. (Hayek, 1935a, p. 1).

The fundamental objection coming from the Austrian side is that a central plan can work only in a static society, in which all data are known and the content of information never changes between the starting and the ending moments of the economic process. This, of course, is not the real world. The first mistake is that data cannot be known, as already recognized by Pareto². Actually, data doesn't exist in the beginning of economic process. They start to be generated by the actors, when they decide *to do something*. These actions (i.e., to think what should I produce in order to get a profit) take place in space and in time, crossing each other. It is the price-mechanism that permits that coordination between the actions and the plans³, so they can be redirected according to the modified content of information: discovering mistakes, acquiring new information, new actors...

With no price-mechanism and with no money⁴, no economic calculation is conceivable. Economists (neoclassical, socialists, Marxists) never recognized the nature of the challenge by Mises and Hayek. They always debated on a static level. But, as Huerta de Soto (2010, p. 8) explains, Mises always said that economic calculation, from a static perspective, poses no problem in a socialist commonwealth. The problem arises when we shift to the real world, when the basic fact is the coordination between unpredictable actions in the space and time, according to expectations that can continuously change. The nature of the problem, thus, is totally dynamic.

The other classical objection against the Austrians is that the problem can be solved with accurate mathematical methods and with computers. This is not true, because the problem is not practical, it is theoretical. The essence of the matter is that information is not known and is continuously generated during the action process and it changes in time according to the new information.

Finally, also every "competitive solution", as a mix between free market and economic plan, cannot work, because it doesn't solve the fundamental problem: the source and changeable nature of the information in time and space⁵.

What we will analyze in the paper is the contribution of an Italian scholar, Bruno Leoni, to the debate. As we will see, his contribution is important because it takes place in a country, Italy, and in a period, the 1960s, in which the environment, political and economic, is completely against the free market. The voice of Bruno Leoni is, in that context, almost the only one following the Austrian School of Economics.

² Quoted in Hayek (1975a).

³ Hayek (1935a), pp. 7-8.

⁴ Hayek (1935b), p. 206.

⁵ Hayek (1940).

II SOME ITALIAN PRECURSORS OF BRUNO LEONI: PARETO AND BARONE

As we saw, the peak on the socialist economic calculation debate (SECD) is reached in the inter-wars period, when in general the economic debate lives a moment of glory that probably will be experienced no more in the future⁶. The other important topic developed in these years regards business cycle theory; also in this field the Austrian economists contribution, in particular Mises and Hayek, is recognized as fundamental. In general, the German speaking scientific environment is the more dynamic one, while the English world will emerge only in a second moment, after the Keynes' *General Theory* (1936).

Regarding the SECD⁷, although the peak of the debate is developed around Mises (1935) and Hayek (1935c), important contributions come from other parts of the world. Okon (1997, 2009, 2011) tells us as that the Yamamoto's thought is crucial for the debate in Japan, but something interesting comes also from Italy, in a peculiar way. It has to be noted that we have two important Italian authors which bring out an analysis on the topic before Mises (1935). They are Pareto (1902, 1996) and Barone (1935). Actually, the 1890-1914 period can be considered very bright for the Italian economic analysis⁸, as stated by Schumpeter (2006, p. 822), referring in particular to Pareto:

The most benevolent observer could not have paid any compliments to Italian economics in the early 1870's; the most malevolent observer could not have denied that it was second to none by 1914. The most conspicuous component in this truly astounding achievement was no doubt the work of Pareto and his school [...] even independently of Pareto, Italian economics attained a high level in a variety of lines and in all applied fields.

In writing this Schumpeter has in mind Vilfredo Pareto, Maffeo Pantaleoni, Enrico Barone and Antonio De Viti de Marco, all of them born between 1848 and 1858⁹. Schumpeter (2006, p. 825), adds that Barone «blocked out the theory of a socialist economy in a manner on which the work of our own time has not substantially improved». The Austrian economist devotes a lot of attention to Pareto, and also deeply describes the Barone's 1908 article¹⁰, but concluding, with his traditional emphasis, that

[t]hree leaders, von Wieser, Pareto, and Barone, who were completely out of sympathy with socialism, created what is to all intents and purposes the pure theory of the socialist

⁶ See Shackle (1983).

⁷ For a general account on the SECD, see Huerta de Soto (2010).

⁸ We can only mention here the fundamental role played by Maffeo Pantaleoni in the further development by Pareto and Barone. On Pantaleoni see Bellanca and Giocoli (1998).

⁹ Faucci (1990), p. 187.

¹⁰ Schumpeter (2006), pp. 952-955.

economy, and thus rendered a service to socialist doctrine that socialists themselves had never been able to render. (Schumpeter, 2006, p. 952).

Here we cannot deep the analysis of Pareto's and Barone's thought. We will talk about that analyzing Leoni (1965b, 1965c). Barone's paper, actually, caught a lot of attention and admiration, and we have to think that even Hayek wanted to publish it in his Hayek (1935c). But both Pareto and Barone weren't able to deep the matter as Mises (1935) did. In particular, they failed to clearly assert and specify that the problem involved in the economic calculation is not a mathematical one, but a problem related with the possibility to obtain information, eventually needed to the mathematical problem¹¹.

Next we should mention the contribution of Vilfredo Pareto. We have an ambivalent assessment to make of Pareto's influence on the subsequent debate over socialist economic calculation. His influence was negative to the extent that he focused on the mathematical analysis of economic equilibrium, an approach which always presumes from the beginning that all information necessary to achieve equilibrium is available. This approach gave rise to the idea, which Enrico Barone later developed and many other economists repeated ad nauseam, that the problem of economic calculation in socialist economies could be mathematically resolved in the very same way it had been raised and resolved by mathematical equilibrium economists in the case of a market economy. Nonetheless, neither Pareto nor Barone is totally responsible for the incorrect interpretation just mentioned, since both explicitly drew attention to the impossibility of solving the corresponding system of equations without the information the market itself provides. Specifically, in 1897, Pareto went so far as to assert, in reference to solving the system of equations which describes equilibrium: "As a practical matter, that is beyond the power of algebraic analysis ... In that case the roles would be changed; and it would no longer be mathematics which would come to the aid of political economy, but political economy which would come to the aid of mathematics. In other words, if all these equations were actually known, the only means of solving them would be to observe the actual solution which the market gives". Pareto expressly denies the possibility of accessing the information necessary even to formulate the system of equations which would make it possible to describe equilibrium, and he simultaneously touches on a secondary problem: the algebraic impossibility of solving, in practice, the system of equations which formally describes equilibrium. (Huerta de Soto, 2010, pp. 100-101).

Actually, both Pareto and Barone specified that the problem is not a mathematical one. In Pareto (1996, pp. 233-234) we can read:

Les conditions que nous avons énumérées pour l'équilibre économique nous donnent une notion générale de cet équilibre. Pour savoir ce qu'étaient certains phénomènes nous avons dû étudier leur manifestation; pour savoir ce que c'était que l'équilibre économique,

¹¹ «Economic choice does not consist in comparing the items in a list, known to be complete, of given fully specified rival and certainly attainable results. It consists in first creating, by conjecture and reasoned imagination on the basis of mere suggestion offered by visible or recorded circumstance, the things on which hope can be fixed. These things, at the time when they are available for choice, are thoughts and even figments»; Schackle (1972), p. 96, quoted in Lachmann (1994b), p. 240.

nous avons dû rechercher comment il était déterminé. Remarquons, d'ailleurs, que cette détermination n'a nullement pour but d'arriver à un calcul numérique des prix. Faisons l'hypothèse la plus favorable à un tel calcul; supposons que nous ayons triomphé de toutes les difficultés pour arriver à connaître les données du problème, et que nous connaissions les ophélimités de toutes les marchandises pour chaque individu, toutes les circonstances de la production des marchandises, etc. C'est là déjà une hypothèse absurde, et pourtant elle ne nous donne pas encore la possibilité pratique de résoudre ce problème. Nous avons vu que dans le cas de 100 individus et de 700 marchandises il y aurait 70.699 conditions (en réalité un grand nombre de circonstances, que nous avons jusqu'ici négligées, augmenteraient encore ce nombre); nous aurons donc à résoudre un système de 70.699 équations. Cela dépasse pratiquement la puissance de l'analyse algébrique, et cela la dépasserait encore davantage si l'on prenait en considération le nombre fabuleux d'équations que donnerait une population de quarante millions d'individus, et quelques milliers de marchandises. Dans ces cas les rôles seraient changés: et ce ne seraient plus les mathématiques que viendraient en aide à l'économie politique, mais l'économie politique que viendrait en aide aux mathématiques. En d'autres termes si on pouvait vraiment connaître toutes ces équations, le seul moyen accessible aux forces humaines pour les résoudre, ce serait d'observer la solution pratique que donne le marché.

Huerta de Soto (2010, p. 101) explains how the Barone's perspective is very similar to the Pareto's one.

Following Pareto, Enrico Barone, in his well-known 1908 article devoted to the application of the paradigm Pareto initiated to the collectivist state, explicitly asserts that even if the practical difficulty of algebraically resolving the above system of equations could be overcome (which is not theoretically impossible), it would in any case be inconceivable (and therefore would be theoretically impossible) to obtain the information necessary to determine the technical coefficients required to formulate the corresponding system of equations.

In fact, Barone (1935, pp. 287-288) states that it

is not impossible to solve on paper the equations of the equilibrium. It will be a tremendous - a gigantic - work: but it is not an *impossibility* [...] But it is frankly *inconceivable* that the economic determination of the technical coefficients can be made *a priori* [...] This economic variability of the technical coefficients is certainly neglected by the collectivists [...] It is on this account that the equations of the equilibrium with the maximum collective welfare are not soluble *a priori*, on paper.

These words drove Schumpeter to believe that Barone clearly solved the problem of the economic calculation in a socialist society¹². But even Schumpeter was misguided¹³, and following Huerta de Soto we have to conclude that the

¹² This point is well developed in Lavoie (1981).

¹³ Huerta de Soto (2010), p. 125. Schumpeter (2003, pp. 172-173), states: «given a socialist system of the kind envisaged, is it possible to derive, from its data and from the rules of rational behavior, uniquely determined decisions as to what and how to produce or, to put the same thing into the slogan of exact economics, do those data and rules, under the circumstances of a socialist economy, yield equations which are independent, compatible—i.e., free from

Pareto's and Barone's statements are not so clear to consider them as solvers of the problem¹⁴.

Despite these clear (though isolated) warnings, we stated earlier that our assessment of Pareto's and Barone's contributions is ambivalent. In fact, though both authors explicitly refer to the practical obstacles to solving the corresponding system of equations, and they also mention the insurmountable theoretical impossibility of obtaining the information necessary to describe equilibrium, by initiating a new scientific paradigm in economics, one based on the use of the mathematical method to describe the equilibrium model at least in formal terms, they are inexorably forced to assume that, at least in these formal terms, the necessary information is available. Hence, regardless of the reservations Pareto and Barone voiced in passing, a very large number of the economists who have continued the paradigm they initiated still fail to understand that the mathematical analysis of equilibrium has, at most, a hermeneutical or interpretive value which adds not one iota to the possibility of theoretically solving the problem faced by all governing bodies which aim to acquire the practical information necessary to coercively plan and coordinate society. (Huerta de Soto, 2010, pp. 100-101).

Until Mises (1935) we have to consider the debate and the problem still not properly approached. We wish to remark here only that the Italian contribution to the SECD is but of secondary importance. In general, the Italian economics preserves a very high degree of development until the Second World War. If in the Thirties Hayek discovers Barone, this one is not the only Italian economist to be appreciated abroad, in particular in the German environment. The Italians are very active in promoting and developing a monetary theory and a business cycle analysis that's very close to the ones that in the same time are arising from Austria and Germany through the pens of Hayek and Arthur Spiethoff¹⁵. We have to mention in particular Costantino Bresciani-Turroni¹⁶, Gustavo del Vecchio¹⁷, Marco Fanno¹⁸ and the original contribution (but still German-oriented) by Guido Menegazzi¹⁹.

The Keynesian revolution will change the situation in Italy too and the context in which Bruno Leoni will bring out his contribution is completely different. The common ground between Italians and German speaking

contradiction—and sufficient in number to determine uniquely the unknowns of the problem before the central board or ministry of production?

1. The answer is in the affirmative. There is nothing wrong with the pure logic of socialism. [...]

The only authority standing for denial that we need to mention is Professor L.von Mises. [...]

The economist who settled the question in a manner that left little to do except elaboration and the clearing up of points of secondary importance, was Enrico Barone».

¹⁴ On the differences between Mises and Barone see also Rothbard (1991).

¹⁵ On the connection between Hayek's and Spiethoff's approach on business cycle see Ferlito (2010a). On the Spiethoff's business cycle theory see Ferlito (2010b). On the links between the Italian analysis and the Austrian Business Cycle theory see Ferlito (2012), paragraph 3.

¹⁶ See Hagemann and Rösch (2001), pp. 193-195; Pavanelli (2000), p. 531; Realfonzo (2000), p. 534.

¹⁷ Realfonzo (2000), pp. 545 and 554.

¹⁸ See Nardi Spiller (2010) and Nardi and Pomini (2007).

¹⁹ See Ferlito (2011b).

environments disappears and the new leading economists belong to a different school, no more free-market oriented, but more close to the Keynesian “gospel” and the socialistic utopia. In Italy the new revolution takes place combined with the neo-ricardian approach by Piero Sraffa. It is what we will see in the next section.

III ITALIAN ECONOMICS IN THE 1960S: HINTS

Leoni’s work on the topic arises in a hostile environment. Bruno Leoni writes and promotes a general debate on the SECD in the beginning of the Sixties; these are years in which in Italy the economic freedom thought is suffering and in the politics the liberal influence of Luigi Einaudi is finished. In 1962 the first centre-left coalition (Christian-democrats and social-democrats) takes the power (Amintore Fanfani, the famous economic historian, is Prime Minister); it is the year in which the government promotes the nationalization of electrical supply. The Sixties are very famous in Italy because of the increasing role of unions, proclaiming long strikes and creating a lot of inflationary troubles.

The economic theoretical situation, instead, is lead by two Sraffian economists, Luigi Pasinetti and Paolo Sylos Labini²⁰. Indeed, it is in 1960 that, finally, Piero Sraffa publishes *Production of Commodities by Means of Commodities*²¹. But this work has to be considered only as the arrival point in the Sraffian reflection, started in the Twenties. Communist and friend with Antonio Gramsci, Piero Sraffa²² meets Keynes in London in the early Twenties, thanks to Gaetano Salvemini and Mary Berenson. In 1927 he moves to Cambridge, thanks to Keynes, which makes it possible for the young economist to publish important papers and to start the collection of the Ricardo’s work; we have to recall in particular the Sraffa-Hayek²³ debate on money and capital, following the Hayek-Keynes debate on the same topic.

As stated by Gustavo del Vecchio, Sraffian economics is like coming back to Ricardo²⁴. Lachmann (1973, 1994a) speaks about neoricardian revolution. With his analysis, however, he becomes an example for the young generation of economists that’s growing up in Italy, in particular because of the criticism against the Italian tradition, against Pantaleoni and Barone. In particular, Sraffa

²⁰ Of course, the scenario is more complex and we have to mention the relevance of Giuseppe di Nardi and Federico Caffè, the great leader of Political Economy School, suddenly and misteriously disappeared the day after his retirement. But the scope of the present paper forces us to limit our hints to Pasinetti and Paolo Sylos Labini, because of their Sraffian approach.

²¹ See Sraffa (1960). The book is published in Italian and English in the same year.

²² For a biographical sketch on Sraffa, see Ruffolo (2005), pp. 257-288.

²³ See Sraffa (1932a, 1932b) and Hayek (1932). On the Hayek-Sraffa debate see in particular Lachmann (1994a).

²⁴ See Faucci (1990), p. 206.

wishes to deeply criticize the marginalistic approach, suggesting to go back to the classical approach. In this path, Roncaglia (1990, p. 235) shows three steps: the critics to Marshall, the critic edition of Ricardo's works and the publishing of Sraffa (1960). As well explained also in Lachmann (1994a), Sraffa (1932a) can be considered the start of a neo-ricardian revolution against the subjectivist approach; the young Italian only apparently is Keynesian; he uses Keynesian instruments, but he is fully Ricardian²⁵.

We cannot deep here the development of the Sraffa's thought. It is interesting to read Roncaglia (1990), which identifies two economists that after the Second World War collect the Sraffa heritage in order to develop new approaches still strictly related with Sraffa. We can identify the *Ricardian* approach by Pasinetti²⁶ and the *Smithian* approach by Sylos Labini²⁷.

Pasinetti²⁸ develops a growth model starting with Ricardo but including also the post-keynesian distribution theory (the distribution of wealth between salaries and profits is linked with the investments, through the consumption propensity and the growth rate). The other fundamental contribution is the theory of the vertically integrated industries. The Pasinetti purpose is to build up a new theory, connecting Keynes and Kalecki, Leontief and Sraffa, the Harrod-Domar model²⁹.

Sylos-Labini, instead, which studied also with Schumpeter at Harvard, traces back his research development to Smith, but starting with the Schumpeter's heritage on the different market typologies, stressing in particular the role of innovation and big corporations in an oligopolistic. His methodological approach comes from Smith, while his major works are the attempt to build a Keynesian framework on the market typologies. From Schumpeter he takes the role of innovations, but the general approach is the Keynesian macroeconomics à-la-Sraffa. Concerning business cycle theory, instead, he develops a model based on Schumpeter, Keynes and Marx³⁰.

IV

THE LEONI'S CONTRIBUTION TO THE SECD

We have to be sincere since the beginning. The Leoni's contribution to the SECD is not important *in itself*. As we will see, he stresses and repeats the Mises' original contribution, published in 1920. However, as we already pointed out, the

²⁵ On the neo-ricardian revolution see Lachmann (1973), chapter 3.

²⁶ Roncaglia (1990), pp. 248-251.

²⁷ Roncaglia (1990), pp. 255-258.

²⁸ On Sraffa's and Pasinetti's role in the ricardian revival see Lachmann (1973), chapter 3, section B.

²⁹ Roncaglia (2003), pp. 509-511.

³⁰ See Ferlito (2011a).

Leoni's effort is really important considering the general hostile environment that we can find in Italy, at that moment, regarding the free-market approach.

Bruno Leoni promotes the debate through *Il Politico*, a liberal journal, still published nowadays, in which even Hayek publishes around ten papers between 1951 and 1970³¹. In *Il Politico* Hayek signs a Leoni's memory in 1968³². For this journal Leoni writes several papers on the SECD and, more important thing, invites many prominent scholars to join the debate. It is useful to take a look to the contents of the journal issues regarding the topic.

Il Politico, Quaderno No. 1: La ricomparsa della pianificazione economica in occidente³³, 1963.

- Bruno Leoni, *La ricomparsa delle teorie della pianificazione economica in occidente*, p. 5; *The revival of «Economic Planning» in the West*, p. 7.
- A.A. Shenfield, *La pianificazione economica in Gran Bretagna: pretese e realtà*, p. 9.
- Leon Derwa, *Planisme et liberté économique*, p. 26.
- Agustin Navarro Vazquez, *La recente rinascita della pianificazione economica in alcuni paesi occidentali*, p. 47.
- Walter Stervander, *A Note on Structural Planning in Sweden*, p. 61; *La pianificazione strutturale in Svezia*, p. 67.
- Hans F. Sennholz, *The Alliance for Progress*, p. 74; *L'Alleanza per il Progresso*, p. 83.
- Ralph Harris, *Information and Plannign*, p. 92; *Informazioni e pianificazione*, p. 96.
- Lawrence Fertig, *Economic Planning in Some Western Countries*, p. 100; *Pianificazione economica in alcuni paesi occidentali*, p. 108.
- Sergio Ricossa, *Sulla recente ricomparsa della pianificazione in Italia*, p. 117; *On the Recent Revival of Economic Planning in Italy*, p. 119.
- James M. Buchanan, *Sovranità nazionale, pianificazione nazionale e libertà economica*, p. 121.
- Paul Hatry, *Some Remarks on the Latest Tendencies towards Economic Planning in Some Occidental Countries*, p. 128; *Qualche rilievo sulle più recenti tendenze alla pianificazione economica in alcuni paesi occidentali*, p. 130.
- Henry Hazlitt, *«Planning» versus the Free Market*, p. 132; *«Pianificazione» contro il mercato libero*, p. 139.

Il Politico, XXX, 3: Problemi della pianificazione sovietica³⁴, September 1965.

- Bruno Leoni, *Il problema del calcolo economico nell'economia di piano*, p. 415.
- Bruno Leoni, *Il contributo del Pareto allo studio del problema del calcolo economico in una società di piano*, p. 455.
- Alec Nove, *Les problèmes actuels de la planification soviétique*, p. 461.
- Alec Nove, *La funzione dei prezzi nell'economia sovietica*, p. 474.
- Basile Kerblay, *La planification en tant que facteur de l'industrialisation soviétique*, p. 490.
- Basile Kerblay, *Les avancées, les reculs et les perspectives de l'agriculture soviétique*, 505.
- Agostino de Vita, *I grandi aggregati dell'economia sovietica*, p. 518.
- Renato Roncaglia, *Pianificazione sovietica e commercio estero*, p. 548.
- Gino Martinoli, *Impressioni di un viaggio nell'Unione Sovietica*, p. 566.
- Feliks Gross, *Beginnings of Major Patterns of Political Parties*, p. 582.

³¹ A complete list of the Hayek's writing with the Italian edition is in Ferlito (2009), where the list of Hayek's contributions to *Il Politico* can be found too.

³² Hayek (1968). Bruno Leoni dies in 1967, killed asking for the monthly rent to one of his tenants.

³³ *The revival of «Economic Planning» in the West*.

³⁴ *Problems of the soviet plan*.

- Justus M. van der Kroef, «The One» «the Two»: the Dialectical Rationale of the Sino-Soviet Dispute, p. 599; «L'Uno» e «i due»: la base logica dialettica della controversia cino-sovietica, p. 609.
- Joseph S. Roucek, Communist China's Shadow over South America, p. 620.
- Umberto Melotti, Note sul concetto di rivoluzione, p. 631.

Il Politico, Quaderno No. 2: Nuovi studi sulla pianificazione³⁵, 1965.

- Bruno Leoni, *Il mito del piano*, p. 5; *The Myth of the «Plan»*, p. 9.
- James M. Buchanan, *Are Rational Economic Policies Feasible in Western Democratic Countries?*, p. 13; *È possibile attuare delle politiche economiche razionali nei paesi democratici occidentali?*, p. 21.
- Walter Hamm, *Recent Experience of Economic Planning in the Federal Republic of Germany*, p. 31; *Recenti esperienze di pianificazione economica nella Repubblica Federale Tedesca*, p. 37.
- Paul Hatry, *La programmation économique en Belgique*, p. 43.
- Sergio Ricossa, *Economic Planning in Italy since 1943*, p. 53; *La programmazione economica in Italia dal 1943*, p. 57.
- Jacques Van Offelen, *Recent Experience of Economic Planning in Western Countries*, p. 61; *Recenti esperienze di pianificazione economica nei paesi occidentali*, p. 67.
- Daniel Villey, *La planification en France*, p. 73.
- A. De Graff, *Recent Experience of Central Economic Planning in the Netherlands*, p. 83; *Recenti esperienze di pianificazione economica centrale nei Paesi Bassi*, p. 87.

The list of scholars joining the debate promoted by Leoni is really amazing. We can find very important names like Buchanan, Nove, Sennholz, Hazlitt. As it is possible to argue reading the contributions titles, the claim for a debate comes mainly from the emerging situation in Eastern Europe, where the situation of the socialist economies is a reality. But we can find also some historical records about central planning experiments in Western countries.

We don't need to talk too much about Leoni (1963). It is just an introduction to a special issue (Quaderno) of *Il Politico*, titled *The revival of «Economic Planning» in the West*. The *quaderno* collects papers from a conference, held in Belgium on September 1962 organized by the Mont Pelerin Society, the famous liberal think-tank founded in Swiss in 1947. As Leoni (1963, p. 451) states, the special issues can be divided into two parts; five papers (Derwa, Harris, Buchanan, Hatry and Hazlitt) talk about the theoretical problems concerned with economic planning; the others (Shenfield, Navarro, Stervander, Sennholz, Fertig, Ricossa) deal with practical examples of economic planning in some Western countries. It is interesting to note as Buchanan affirms that no national central plan is compatible with an international integration (in that years the European Economic Community is moving her first steps). Hazlitt, instead, stresses the link between plan and political constraint.

In the Quaderno no. 2 too, the paper by Leoni is an introduction. All the papers are devoted to plan experiences in the Western countries, while Buchanan, again, faces theoretical terms of the matter. Leoni (1965c) is longer than Leoni (1963) and it can be considered as a brief summary of the evolution of

³⁵ *New studies on economic planning.*

the SECD; in particular, Leoni wishes to criticize the widespread belief that central planning is better than free market.

«Programming» or «planning» of a country's economic process is today presented as a sort of scientific device which could make the same process more rational, more coordinate, better calculable and foreseen, by overcoming the deficiencies of the market economy.

The country's government should see to this «progress» or a committee of experts appointed by it who would be concerned, through their researches and suggestions and finally through the orders of the authority that appoints them, with eliminating or at least «correcting» the so-called «market-anarchy».

Today no idea seems more popular, at any rate in certain environments of amateur economists and amateur political economists, and at the same time more mistaken. (Leoni, 1965c, p. 9).

Then Leoni (1965c, pp. 9-10) stresses that Pareto and Barone recognize that the central planner has to face the same troubles of private entrepreneurs, «to produce the consumers goods *on demand* and to produce them *at economic costs*». According to Leoni, Pareto and Barone realize that the nature of the problem is not mathematical, but of experience; it means that economic calculation can be possible only through the free action on the market, doing mistakes, trying something, under the guidance from the price mechanism. But then the Italian author affirms that the intuition by Pareto and Barone is developed only later on by Brutzkus, Pierson, Mises and Max Weber.

Leoni (1965c, p. 10) clarifies the central point coming from Mises and the others and that Pareto and Barone missed to clearly express: the central planner cannot follow the way to act of the entrepreneurs, because in a planned economy disappears the fundamental criterion of verification, the mean to transmit information, the price mechanism. This objection, according to Leoni (1965c, p. 11), has to be applied to central planning at any grade, not only to full communist societies.

Leoni, as Huerta de Soto (2010), emphasizes as the problem is not mathematical, but basically related to the creation and transmission of information, that can occur only when people are free to act.

The problem of economic calculation is an ever-recurring problem of comparison between subjective judgements of value expressed at every moment, in a monetary economy, in the market prices, not with the purpose of establishing impossible measurements or equivalences between the various individual valuations, but only to express priorities among needs which each interested individual considers more urgent, in every single moment of his participation in the economic process. (Leoni, 1965c, p. 12).

However, we have to stress a different accent in the Leoni's analysis if compared with Mises and the detailed Huerta de Soto (2010). The traditional Mises (1935) stresses the importance of the price mechanism in the creation and transmission of information. Leoni's perspective is not different, but the way to

express this follows a more accountancy language; we believe that this is due to the accountancy theoretical tradition in Italy, that is very strong due to great teachers like Fabio Besta.

[A]lthough all that remains valid that Pareto and Barone, had established concerning the impossibility of determining the economic process by means of a priori calculations, the possibility does not thereby follow at all that the central planner provides for the production with the method of the private operators.

The latter in fact can always carry out their experiences in market-regime availing themselves of the criterion of verification, simple and classical, which consists in comparing costs and proceeds both expressed in market prices. (Leoni, 1965c, p. 10).

As we will see also discussing about Leoni (1965a), the Italian scholar refers to the comparison between costs and proceeds in order to have a verification criterion. This is only apparently in contrast with Mises' terminology. In fact, Leoni states immediately that this criterion is possible because the terms of the problem are expressed in market prices. Thus, the centre of the problem comes again to be the possibility that only in the market market prices can arise, in order to generate that information that Leoni calls costs and proceeds.

As this problem cannot be solved with a-prioristic methods, without the free interaction in the market, the central planner has only

two possibilities: to try and foresee without any objectively valid method the needs of all the individuals and the most adequate manner of satisfying them, or to renounce to any non arbitrary attempt whatever of foreseeing and satisfying those needs, and to proceed at random disregarding the valuations of the individuals. (Leoni, 1965c, p. 12).

We can consider Leoni (1963) and Leoni (1965c) important mainly because they introduce the debate in the special issues of *Il Politico*. A deep analysis can be found, however, in Leoni (1965a), while Leoni (1965b) analyzes the Pareto's contribution to the debate³⁶.

Leoni seems to be convinced that Barone solves the problem implied by the SECD. He states that Mises simply deepens the analysis, while Barone already solves the problem. His way to be misguided is opposite to the Schumpeter's one. If the Austrian economist is convinced that Barone demonstrates that economic calculation in a socialist society is possible, the Italian affirms exactly the contrary. Huerta de Soto (2010) clarifies the matter. Schumpeter was wrong and misguided. Barone's statements are a little bit confused, but for sure he is sceptical about the possibility to solve a mathematical problem. What he misses to clarify and to stress heavily is what instead Mises does: the mathematical problem not only cannot be solved, but cannot be formulated too, because in a planned economy the price mechanism, generating the information eventually

³⁶ A collection of writings by Leoni on SECD and economic plan can be found in Leoni (2007, 2009).

needed for such equation system, is not working at all, replaced by arbitrary thoughts of the planners.

What about Pareto? Leoni devotes to his contribution to the SECD a short paper³⁷. As for Barone, Leoni (1965b) sees in Pareto a precursor of Mises' analysis. In fact, Pareto's works on the topic are published between 1896 and 1902. Again, Leoni (1965b, pp. 454-455) states as for Pareto the problem for the central planner is the same like for the private entrepreneur, to use his own resources in the better way. But for solving this problem Pareto stresses that are necessary the costs, arising only from the market process. Till now, Pareto states, no socialist thinker was able to replace the market mechanism with another one.

In fact, only in the market costs can be determined because only in the market the prices can emerge³⁸. Without prices any economic calculation is not conceivable, and prices don't exist outside from the market. The central planner can only invent counting stratagems³⁹. And Pareto also criticizes deeply the possibility to determine the prices through the production costs⁴⁰.

Leoni (1965b, p. 458) recalls how Pareto states that economics can do no predictions and without predictions any plan is useless. What is different between Pareto and Mises, according to Leoni (1965b, p. 459), is the aim of the analysis. If Mises was looking for a demonstration that economic calculation is not possible in a planned economy, Pareto wishes to build a general and "pure" theory, valid for all the kind of economic systems.

The longest contribution of Leoni to the SECD is Leoni (1965a). In this paper we can find his clear view on the matter, starting with a definition: «The problem of the economic calculation can be defined in general as the problem to assess, which is the relationship between *costs* and *proceeds* of the satisfaction process in the economic choices»⁴¹.

Thus, an action has to be defined as useful if proceeds overcome costs. The author explains that economies of any type, either centralized or free, have to solve this fundamental problem: the economic calculation intended as a mean to measure either the success or the failure of a certain economic concern.

Leoni stresses that the economic calculation problem has not to be confused with the problem to produce *a costi economici*, that's to produce in an effective way:

il primo problema ha infatti natura propriamente contabile, mentre la soluzione del secondo implica l'impiego di attività e capacità d'ordine imprenditoriale, tecnico e

³⁷ See Leoni (1965b).

³⁸ Leoni (1965b), p. 456.

³⁹ Leoni (1965b), p. 456.

⁴⁰ Leoni (1965b), p. 457.

⁴¹ Leoni (1965a), p. 415. The paper is in Italian, any English translation comes from us.

organizzativo, senza le quali la produzione non può avere successo⁴². (Leoni, 1965a, p. 418).

Following this distinction, Leoni (1965a, p. 418) distinguishes between Pareto and Barone (more concerned with the problem to produce in an effective way) on one side, and Mises and Weber (which study the pure problem of the economic calculation) on the other one. The two problems are related, but they cannot be confused.

The simple conclusion of Leoni, following Mises, is that only in a free market economy a solution can be brought out, because in the free market economy the information is exchanged between the actors through the prices. And the prices are the only valid mean to compare costs and proceeds. In a planned economy, in the absence of a market, the problem becomes technical, as economic choices are replaced by technical problems.

In the central part of the paper, Leoni analyses the historical setting of the debate, devoting a lot of pages to Mises, the critiques against him and the replied from Mises again. But in his conclusion, the Italian author again stresses that no technical solutions can be found to solve the problem, the nature of which is strictly economic, referring to the human action. So, the only possible approach is the one coming from Mises, centred on the human interaction as generator of market prices as only way to rationally discover the success of an entrepreneurial choice.

We finally have to refer to Leoni (1972), the book that made Leoni famous all over the world. Even if it is not an economics book, in it we can find some notes on the SECD. His considerations on the matter are not the central focus of the volume, but they are really deep and we can consider them more important than what we can find later in the papers we talked about until now. In fact, in *Freedom and Law* the theoretical impossibility of economic central plan is considered only a part in a more general problem, regarding the possible action of the legislator.

[T]his demonstration [that a centralized economy does not work] may be deemed the most important and lasting contribution made by the economists to the cause of individual freedom in our time. *However, its conclusion may be considered only as a special case of a more general realization that no legislator would be able to establish by himself, without some kind of continuous collaboration on the part of all the people concerned, the rules governing the actual behavior of everybody in the endless relationships that each has with everybody else.* No public opinion polls, no referenda, no consultations would really put the legislators in a position to determine these rules [...]. The actual behavior of people is continuously adapting itself to changing conditions. (Leoni, 1972, pp. 18-19).

⁴² We could translate this passage as follows: «the first problem, in fact, has a pure accounting nature, while the solution of the second one implies the use of entrepreneurial, technical and organizational activities and skills; without them, production cannot be successful».

The argument is stressed later on with a critique to the free-market economists, accused to don't realize the connection. Leoni states that the idea of *certainty of the law* is not compatible with the free market.

The fact that the central authorities in a totalitarian economy lack any knowledge of market prices in making their economic plans is only a corollary of the fact that central authorities always lack a sufficient knowledge of the infinite number of elements and factors that contribute to the social intercourse of individuals at any time and at any level. The authorities can never be certain that what they do is actually what people would like them to do, just as people can never be certain that what they want to do will not be interfered with by the authorities if the latter are to direct the whole law-making process of the country.

Even those economists who have most brilliantly defended the free market against the interference of the authorities have usually neglected the parallel consideration that no free market is really compatible with a law-making process centralized by the authorities. This leads some of these economists to accept an idea of the certainty of the law, that is, of precisely worded rules such as those of written law, which is compatible neither with that of a free market nor, in the last analysis, with that of freedom understood as the absence of constraint exercised by other people, including the authorities, over the private life and business of each individual. (Leoni, 1972, p. 90).

In this intuition, that the problem of the economic calculation is only a part of a biggest problem regarding the theoretical conflict between certain of law and rule of law, we can find the major Leoni's contribution to the debate. And we cannot find it in his specific papers on the matter, but in his major work, *Freedom and Law*, still nowadays a milestone in the liberal thought.

V CONCLUDING REMARKS

What we wished to show with the present paper is that the debate about the possibility of a rational economic calculation in a socialist society has not to be considered concluded with the papers of the great economists during the first part of the last century. Pareto, Barone, Mises, Hayek, Keynes, Lange, are just the most famous names involved in the debate.

The disputes goes ahead and finds a great advocate for the free market in Bruno Leoni, the Italian scholar more active in promoting the liberal thought in Italy after World War II. His contribution is not important under a general theoretical perspective. In fact, mainly he repeats what already stated by Mises and Hayek, rediscovering the importance of Pareto and Barone.

However, he promotes, through *Il Politico*, a deep debate during the Sixties, the years in which Italy is becoming, as many other Western countries, a socialist and central planned State. His voice is quite isolated in a general scenario in which the government intervention seems to be the only effective way to control

economic problems⁴³. Not only the Italian government is shifting toward a centre-left coalition (Fanfani), but also the economic debate is dominated by two brilliant Sraffian economists, Luigi Pasinetti and Paolo Sylos Labini, while Sraffa himself publishes in 1960 his main book.

Then, with Leoni (1972), the Italian scholar will give his more important note on the debate: to put the economic calculation problem into a wider frame. The planning action is not only to be referred to the economic context, but to the more general realm of the legislative action. The certainty of law is not compatible with a true free market society.

⁴³ Regarding this problem it is a "must" to read what Hayek wrote referring to the relationship between economic intervention, inflation and full employment. Hayek argues how the politics that link inflation and full employment simply misdirect the labour market, creating persisting disturbances and, in the medium and long run, generating a more deep unemployment. See Hayek (1950, 1975a, 1975b, 1975c).

BIBLIOGRAPHICAL REFERENCES

- BARONE, E. (1935): «The Ministry of Production in the Collectivist State». In F.A. von Hayek, ed., *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism*. Routledge & Kegan Paul: London, pp. 245-290.
- BELLANCA, N., and GIOCOLI, N. (1998): *Maffeo Pantaleoni. Il principe degli economisti italiani*. Polistampa: Firenze.
- BOETTKE, P.J. (2001): «Economic Calculation: The Austrian Contribution to Political Economy». In P.J. Boettke, *Calculation and Coordination. Essays on socialism and transitional political economy*. Routledge: London and New York, pp. 29-46.
- FAUCCI, R. (1990): «Materiali e ipotesi sulla cultura economica italiana fra le due guerre mondiali». In G. Becattini, ed., *Il pensiero economico: temi, problemi e scuole*. Utet: Torino, pp. 183-231.
- FERLITO, C. (2009): «Appendice bibliografica». In A. Ebenstein, *Friedrich von Hayek. Una biografia*. Rubbettino: Soveria Mannelli, pp. 609-647.
- (2010a): «Crisi economica e andamento ciclico». In C. Ferlito, *Contro la crisi. Combattere la crisi, difendere il mercato*. Solfanelli: Chieti, pp. 21-51.
- (2010b): «Sproporzionalità e ciclo economico da Tugan-Baranovskij a Spiethoff». In C. Ferlito, *Contro la crisi. Combattere la crisi, difendere il mercato*. Solfanelli: Chieti, pp. 91-118.
- (2011a): «Sylos Labini's Unpublished Notes on Schumpeter's Business Cycles». *The Quarterly Journal of Austrian Economics*. Vol. 14, N.º 1: pp. 88-129.
- (2011b): «Il pensiero economico del giovane Guido Menegazzi». *Studi Storici Luigi Simeoni*. Vol. LXI: pp. 133-146.
- (2012): «Garrison's Capital-Based Macroeconomics: the Role of Deficit, Credit Control and Taxation». In C. Spiller and M.-A. Galindo Martin, eds., *Public Finance: Lessons from the Past and Effects on Future*. Nova Science Publishers: New York, pp. 105-122.
- HAGEMANN, H. and RÖSCH, M. (2001): «The reception of Italian economic thought in Germany and Austria from 1900 to Second World War». In P.F. Asso, ed., *From Economists to Economists. The International Spread of Italian Economic Thought, 1750-1950*. Polistampa: Firenze, pp. 177-207.
- HAYEK, F.A. VON (1932): «Money and Capital: A Reply». *Economic Journal*. Vol. 42: pp. 237-249.
- (1935a): «The Nature and the History of the Problem». In F.A. von Hayek, ed., *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism*. Routledge & Kegan Paul: London, pp. 1-40.
- (1935b): «The Present State of the Debate». In F.A. von Hayek, ed., *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism*. Routledge & Kegan Paul: London, pp. 201-243.

- (1935c), ed.: *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism*. Routledge & Kegan Paul: London.
 - (1940), «Socialist Calculation: The Competitive “Solution”». *Economica*. Vol. VII: pp. 125-149.
 - (1950): «Full Employment, Planning and Inflation». *Institute of Public Affairs Review*. Vol. IV, N.º 6.
 - (1968): «Bruno Leoni, the Scholar». *Il Politico*. Vol. XXXIII, N.º 1: pp. 21-25.
 - (1975a): «The Pretence of Knowledge». In *Les prix Nobel en 1974*. Nobel Foundation: Stockholm.
 - (1975b): «Inflation, the Misdirection of Labor, and Unemployment». Speech addressed in Rome, 8 February, for the international meeting «Il problema della moneta oggi».
 - (1975c): *Unemployment and Monetary Policy. Government as Generator of the “Business Cycle”*. The Institute of Economic Affairs: London. Occasional Paper N.º 45.
- HUERTA DE SOTO, J. (2010): *Socialism, Economic Calculation and Entrepreneurship*. Edward Elgar: Cheltenham and Northampton.
- LACHMANN, L.M. (1973): *Macro-economic Thinking and the Market Economy. An essay on the neglect of the micro-foundations and its consequences*. The Institute of Economic Affairs: London.
- (1994a): «Austrian Economics under Fire: The Hayek-Sraffa debate in Retrospect». In L.M. Lachmann, *Expectations and the Meaning of Institutions*. Routledge: London, pp. 147-163.
 - (1994b): «G.L.S. Shackle’s Place in the History of Subjectivist Thought». In L.M. Lachmann, *Expectations and the Meaning of Institutions*. Routledge: London, pp. 235-242.
- LAVOIE, D. (1981): «A Critique of the Standard Account of the Socialist Calculation Debate». *The Journal of Libertarian Studies*. Vol. v, N.º 1: pp. 41-87.
- LEONI, B. (1963): «La ricomparsa delle teorie della pianificazione economica in Occidente». *Il Politico*. Vol. 3: pp. 451-452 and in *La ricomparsa della pianificazione in Occidente*. Quaderno N.º 1 of *Il Politico*: pp. 5-8.
- (1965a): «Il problema del calcolo economico nell’economia di piano». *Il Politico*. Vol. 3: pp. 415-453.
 - (1965b): «Il Contributo del Pareto allo studio del problema del calcolo economico in una società di piano. *Il Politico*. Vol. 3: pp. 454-460.
 - (1965c): «Il mito del piano». In *Nuovi studi sulla pianificazione*. Quaderno N.º 2 of *Il Politico*: pp. 5-12.
 - (1972): *Freedom and the Law*. Nash: Los Angeles.
 - (2007): *Collettivismo e libertà economica*. Rubbettino: Soveria Mannelli.
 - (2009): *Law, Liberty, and the Competitive Market*. Transaction: Piscataway.
- MISES, L. VON (1935): «Economic Calculation in the Socialist Commonwealth». In F.A. von Hayek, ed., *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism*. Routledge & Kegan Paul: London, pp. 87-130.

- NARDI SPILLER, C. (2010): «Business Cycles in Italian Tradition». In C. Nardi Spiller and M.A. Galindo, eds., *Issues in Economic Thought*. Nova Science Publishers: New York, pp. 21-44.
- NARDI SPILLER, C., and POMINI, M. (2007): «Profit rate, money and economic dynamics in Fanno's thought». In A. Giacomini and M.C. Marcuzzo, eds., *Money and markets. A doctrinal approach*. Routledge: London and New York, pp. 222-237.
- OKON, H. (1997): «Katsuichi Yamamoto's Place in Austrian Economics and Libertarian Thought». Paper presented at Austrian Scholars Conference, April 4-5, Auburn, University, Auburn, ALA, USA.
- (2009): «A Japanese contribution to the calculation debate: K. Yamamoto's *Economic Calculation*». Paper presented at the 22nd conference of the History of Economic Thought Society of Australia (HETSA 2009) held on 14-17 July, Fremantle Campus, University of Notre Dame, Australia.
 - (2011): «An Early Study of the Possibility of Rational Economic Calculation in the Socialist Society in Japan: K. Yamamoto's *Economic Calculation* (1932)». Paper Presented at the conference of the European Society of History of Economic Thought.
- PARETO, V. (1902): *Les Systèmes Socialistes*. Giard et Brière: Paris.
- (1996): *Manuel D'Économie Politique*. Libreria Droz: Geneve.
- PAVANELLI, V. (2000): «Note sulla teoria austriaca del ciclo e le sue implicazioni di politica economica nel dibattito italiano degli anni Trenta». In V. Gioia and H. D. Kurz, eds., *Science, Institutions and Economic Development. The Contribution of "German" Economists and the Reception in Italy (1860-1930)*. Giuffrè: Milano, pp. 521-541.
- REALFONZO, R. (2000): «Note sulla teoria austriaca del ciclo e gli economisti italiani nel periodo tra le due guerre». In V. Gioia and H. D. Kurz, eds., *Science, Institutions and Economic Development. The Contribution of "German" Economists and the Reception in Italy (1860-1930)*. Giuffrè: Milano, pp. 543-560.
- RONCAGLIA, A. (1990): «Le scuole sraffiane». In G. Becattini, ed., *Il pensiero economico: temi, problemi e scuole*. Utet: Torino, pp. 233-274.
- (2003): *La ricchezza delle idee. Storia del pensiero economico*. Laterza: Roma and Bari.
- ROTHBARD, M.N. (1991): «The End of Socialism and the Calculation Debate Revisited». *The Review of Austrian Economics*. Vol. 5, N.º 2: pp. 51-76.
- RUFFOLO, G. (2005): *Cuori e denari. Dodici grandi economisti raccontati a un profano*. Einaudi: Torino.
- SCHUMPETER, J.A. (2003): *Capitalism, Socialism & Democracy*. Taylor & Francis e-library: London and New York.
- (2006): *History of Economic Analysis*. Taylor & Francis e-library: London and New York.
- SRAFFA, P. (1932a): «Dr. Hayek on Money and Capital». *Economic Journal*. Vol. 42: pp. 42-53.

- (1932b): «A Rejoinder». *Economic Journal*. Vol. 42: pp. 249-251.
 - (1960): *Productions of Commodities by Means of Commodities*. Cambridge University Press: Cambridge. Ed. It. *Produzione di merci a mezzo di merci*. Einaudi: Torino, 1960.
- SHACKLE, G.L.S. (1972): *Epistemics and Economics*. Cambridge University Press: Cambridge.
- (1983): *The Years of High Theory: Invention and Tradition in Economic Thought 1926-1939*. Cambridge University Press: Cambridge.
- WHITE, L.H. (2012): *The Clash of Economic Ideas. The Great Policy Debates and Experiments of the Last Hundred Years*. Cambridge University Press: Cambridge.