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**REVISITING THE SOCIALIST CALCULATION DEBATE: THE ROLE OF
MARKETS AND FINANCE IN HAYEK'S RESPONSE TO LANGE'S CHALLENGE**

Paul Auerbach

Dimitris P. Sotiropoulos

Kingston University London, UK

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Abstract

In the early twentieth century, a range of writers produced visions of a socialist economy whose distinguishing characteristic was an allocation of resources using a 'technical' perspective. In the 1930s, Oskar Lange took up the challenge of Ludwig von Mises' claim of the 'impossibility' of constructing a socialist economy on such an engineering basis. He readily acceded to the need for efficiency calculations to be made in value terms rather than using purely natural or engineering criteria, but claimed that these values could emerge without a market for capital goods, and without private ownership of capital. Friedrich Hayek replied stressing the dynamic aspects of competition in the context of the capital market; the latter is to be seen as a discovery procedure wherein production possibilities must not be taken for granted. Thus, socialist calculation is impossible because of the absence of those markets for capital and risk that evaluate the success or failure of different investment decisions under capitalism. Appraising this debate, we emerge with two findings. First, Lange's contribution was based on a one-sided, static conception of the capitalist economy, and therefore of the construction of a socialist alternative. Second, the Austrian approach only surreptitiously concedes the key role of finance in its defence of the dynamic properties of capitalism. And yet it is the very gyrations and instability emerging from the financial sector in capitalism that was one of the central factors motivating the search for an alternative engineering method of allocation in the first place. The latter point invites us to reconsider the place of finance in various schools of economics in mainstream thinking.

Keywords: Lange; von Mises; Hayek; risk; finance.

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Address for correspondence: Paul Auerbach, School of Economics, Kingston University London, Penrhyn Road, KT1 2EE, Surrey, UK. E-mail: P.Auerbach@kingston.ac.uk.
Sotiropoulos: D.Sotiropoulos@kingston.ac.uk.

1. Introduction

Theoretical and political debates on the character of socialist planning and the so-called ‘law of value’ under socialism had emerged at the end of the nineteenth century and became an issue of significance in the wake of the Bolshevik Revolution at the 1920s. The issues raised soon attracted the attention of the liberal thought of the period. In an essay published in 1920, Ludwig von Mises challenged socialist and engineering-technocratic schema stating that every attempt to abolish markets and money will result in economic disaster: the construction of a viable socialist economy is an impossible task.¹ In fact, the aim of Mises’ theoretical and political intervention was not focused solely upon the nature of socialist economies. He was also concerned with all forms of state intervention, including that which was taking place in Austria and Germany at the time (though he approved of state subsidies to the opera). It was not, however, until the 1930s when Friedrich Hayek re-circulated Mises’ article that the socialist calculation debate actually started. The most famous reply came from two eastern European economists: the Romanian Abba Lerner and the Polish Oskar Lange. This paper will not go through the details of this debate but focus on the reasoning of two of the protagonists: Lange and Hayek.

Lange took up the challenge of Mises’ claim of the impossibility of constructing a socialist economy. He readily acceded to the need for efficiency calculations to be made in value terms rather than using purely natural or engineering criteria, but claimed that these values could emerge along lines consistent with neoclassical value theory, without the need for a market in capital goods and without private ownership over the means of production. Lange drew heavily upon the dominant neoclassical tradition to defend socialism, or at least to defend a version of it that he considered appropriate. Lange’s argument was that the neoclassical static form of equilibrium can be easily replicated by the socialist economy. The version of socialism he chose to refer to as his standard was rather a type of capitalism without capital markets. In this regard, Lange managed implicitly to set forth two important arguments. First, he showed that a version of mainstream thinking that underestimates the role of capital markets in capitalism can be utilized to defend the paradigm of central planners. Second, a system that had abolished private property over the means of production and therefore capital markets and finance not only could replicate the much advertised efficiency of capitalism but would also enhance economic stability. We must not forget that the debate takes place in the 1930s, when the consequences of the great depression were central in everyone’s mind. Taming the financial instability of the capitalist system without sacrificing economic efficiency would seem an appealing alternative to the free market system in a period when the latter was generating many unresolved contradictions.

Hayek along with the other Austrians understood very well the message of this critique. How could a liberal economist respond to a ‘neoclassical’ defence of the state ownership of the means of production? There was only one way out of this uncanny encounter: the conceptualisation of the capitalist economy must be clearly differentiated from

¹ We will analyse Mises’ argument in section 2 below.

the neoclassical universe of perfect competition and static equilibrium. This departure was never clearly stated in the writings of Mises and Hayek and never properly emphasized. Hayek's argument stressed the dynamic aspects of competition in the context of the capital market: market competition is to be seen as a discovery procedure wherein production possibilities must not be taken for granted but emerge from the process of competition in the context of the capital market. Thus, socialist calculation is impossible because of the absence of those markets for capital and risk that evaluate the success or failure of different investment decisions under capitalism. Efficient economic calculation is unthinkable in the absence of disequilibrium prices for capital and risk.

But here we encounter an unexpected twist. While Lange degraded socialism to a mere replication of capitalism's efficiency achievements, Hayek implicitly realized the danger of undermining functional capitalist behaviour and therefore the nature of capitalist relations. If we see economic behaviour in capitalism as the outcome of capitalist social relations of power, then Hayek's perspective renders capital markets as a central arena in the organization of capitalism as a system of exploitation. He also perceives every movement towards collective ownership of the means of production as a real threat to the reproduction of the logic of capitalism. In this sense, he implicitly ends up giving an unexpected endorsement to socialism that is much deeper and sophisticated than the superficial 'defence' of Lange: every serious state intervention in the capital market threatens to eliminate the capitalist spirit, making the existence of the system vulnerable in the context of the reproduction of its power relations. This last point gives us the chance to revisit the socialist calculation debate, interpreting finance as *trauma* for mainstream discussions.

2. The background of the debate: the so-called 'market socialists' and the initial intervention of Mises in 1920

The debate between the supporters of socialism and those of capitalism, long before the Bolshevik Revolution of 1917 was interlinked to another theoretical dispute: the one between the labour ('objective') and the 'subjective' theories of value. Nevertheless, this connection was not as straightforward as one might think: the defenders of socialism drew upon both theoretical traditions. In order to understand this we must have in mind two different issues.

On the one hand, as we shall see below, the established version of socialism in these debates (at least at the first decades of the twentieth century) was a society with state ownership of the means of production.² If we assume that saving and borrowing take place only within the capitalist class (i.e., labourers do not save nor borrow), then this rather awkward version of socialism is close to a capitalism without capital markets, that is to say capitalism without finance.

² This was indeed the dominant perspective, but surely not the only one. Discussions within Marxist revolutionary circles in the period were rich in scope and content. The key issue was not the replication of the efficiency of capitalism, but the overcoming of the nature of capitalist political and economic domination. In this line of reasoning, the key problem with socialism is not the role of the central planning bureau but the structure of 'soviets' as forms of workers' democratic control against the power and violence of capital. This issue remains beyond the aims of this paper.

On the other hand, traditional Marxism (though not Marx himself) argued that the labour theory of value is prior to every possible type of economic and social organization (section 2.1); market socialists put forward the very same idea with regard to the neoclassical theory of value (section 2.2). Both of these traditions argued for an *ontological primacy* of each theory of value over the institutional configuration of society. Taking that for granted, the abovementioned model of socialism could, at least in principle, replicate the workings of capitalism because the equilibrium conditions could be specified and met without any reference to the price of capital. This was in fact the meeting point between the two different defences of this type of socialism, with their common focus on static theories of value. They both understated the role of finance in capitalism and implicitly accepted that there can exist institutional conditions which would enable the replication of capitalist economic efficiency in the absence of finance (that is, without any reference to the valuation of capital). In fact, the key issue in these discussions was not socialism, but capitalist finance.

2.1 Socialism and labour theory of value: Mises vs. Traditional Marxism

The Marxist tradition with few exceptions³ had adopted the viewpoint of the labour theory of value. This set up a specific perspective on both socialism and capitalism. Without going through the details of numerous analytical interventions we shall summarize the basic idea, referring primarily to the argument of Hilferding (1949).⁴ Traditional Marxism perceived capitalist social relations as extrinsic to labour itself; the latter thus retained ontological priority in the context of any type of social organization. From this point of view, traditional Marxism came to resemble a radical reading of Classical Political Economy (Smith and Ricardo), having abandoned Marx's project to criticize it. Labour was understood as a transhistorical source of value pertaining to every possible social configuration, even to socialism itself. The only difference is that while in capitalism the value-creating character of labour remains hidden, in socialism it is openly manifested. 'The difference between socialism and capitalism, then, aside from whether private ownership of the means of production exists, is understood essentially as a matter of whether labor is recognized as that which constitutes and regulates society – and is consciously dealt with as such – or whether social regulation occurs nonconsciously' (Postone 1993: 60-1). With the transhistorical ontology of the labour theory of value taken for granted, the elimination of markets for the means of production does not actually pose any significant problem for the organization of economic life: the price system is still viable thanks to labour time calculations.

Having that in mind, we can understand why the reaction of Mises in 1920 was mostly waged against the proponents of the labour theory of value, especially in the German speaking world. In his thinking, the latter offered a thorough validation of every kind of radical state interventionist social experiment against the free market. And the problem for

³ Clearly Rubin and his 'value form' analysis was one of those (see Milios et al. 2002).

⁴ Here we follow Postone's argument (see Postone 2003; ch. 2). Hilferding's major work, *Finance Capital* (1909), became a dominant theoretical intervention at the beginning of the 20th century and is still considered a benchmark in discussions of political economy and heterodox financial theory. We refer to his dispute with Böhm-Bawerk on the labour theory of value (see Hilferding 1949).

him was not just Bolshevik Russia, but the very fact that these state intervention issues were gaining ground in Germany and Austria as well (see Hayek 1935a: 122). Therefore, the main theoretical enemies that appeared in the pages of Mises' paper were: Marx, Engels, Lenin, Trotsky, Kautsky, Neurath and Bauer; in other words, the 'fathers' of Marxism, the Bolshevik leaders and the leading authors of German Social Democracy.

Mises' idea was simple. Following the established pattern in the literature, he equated socialism to the ownership of the means of production by the state. This was the dominant perspective on socialism, not only in heterodox discussions of the period but also in the debates in the years to come. Dwelling upon the Austrian tradition of Böhm-Bawerk, he argued that any movement towards socialism would be a disaster. Why? Because 'rational production becomes completely impossible' as soon as one gives up the conception of a freely established monetary price for the means of production (Mises 1935: 104). In other words, 'every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics. [...] Socialism is the abolition of rational economy. [...] There is only groping in the dark' (ibid.). From this point of view, finance (which coincides with capital markets in the absence of other forms of credit) is *sine qua non* for capitalism: the latter cannot function properly unless there is a price for capital.

According to Mises, economic rationality and efficiency is associated with the existence of a 'price' for capital. This price is a valuable economic parameter for the making of efficient choices between alternative economic plans. For Mises markets are not perfect. Monetary calculation, especially in the case of capital, 'has its inconveniences and serious defects, but we have certainly nothing better to put in its place' (ibid.: 109). However, economic life cannot afford to part with this type of imperfection – it cannot be conceived in the absence of the capital market. It is meaningless to speak of prices in general and economic action when there are no indicators of expected profitability. The latter presupposes a market for capital and therefore finance. Hence, the crucial role of finance is not only to channel saving to investment; even more importantly, its role is to measure the efficiency of capital when the future is not known.⁵

2.2 Market socialists: neoclassical theory of value as defence of socialism

As we shall see below, Lange's intervention did not rely upon the labour theory of value but was rather heavily influenced by the so-called early 'market socialists'. Before discussing his viewpoint in section 3, we shall briefly mention two well known market socialists: Friedrich von Wieser and Enrico Barone. Both wrote at the end of the nineteenth century. Neither of them was a socialist, and socialism was not their central analytical preoccupation. Their interventions were mostly critiques directed at the labour theory of value and not at the possibility of realizing a central-planned economy (Lavoie 1985: 83). While they followed different methodological approaches, they both came to the same conclusion. They believed

⁵ For a clear summary of the Mises argument see Lavoie (1985).

that the newly founded subjective or marginalist theory of value had a validity that was independent and transcended any established social regime. In this sense, they adopted the same analytical premise as their opponents: they also believed that their value theory retained ontological priority over any institutional organization, or type of society.

Accordingly, the neoclassical theory of value must not be seen as a bourgeois apologia; it is not an enemy but an ally of the revolution. In Wieser's worlds, the marginalist approach to value is so little 'a weapon against socialism, that socialists could scarcely make use of a better witness in favour of it' (cited in Lavoie 1985: 82). Or to use Barone's formulations, 'it is obvious how fantastic those doctrines are which imagine that production in the collectivist regime would be ordered in a manner substantially different from that of "anarchist" production' (Barone 1935: 289). Although both authors made it clear that they did not write for or against socialism, they expressed serious doubts about the workability of a socialist system (Lavoie 1985: 83). They both put forward the notion that there exists a 'formal similarity' (ibid.: 48) in the general logic of laws and choices that applies to either capitalism or socialism. This is the very same idea of similarity, coming from a different perspective this time, as the one we saw above with regard to the proponents of the labour theory of value.

This perspective sets forth the belief that socialism is just a peculiar form of 'capitalism' governed by the same 'laws' of production and value. The only difference comes from the different structure of ownership over capital. Such conceptions of capitalism and socialism fail to grasp the most important aspect of capitalist societies, namely the nature of social power relations. Of course, some might argue that the 'collective' ownership of capital by itself amounts to a striking institutional shift in the organization of society. But, does this shift challenge the nature of the capitalist relations of exploitation and political domination? The answer is definitely no. The Soviet Union (like other manifestations of 'real-existing socialism') never ceased to be a class society. The ruling class was comprised of a layer of higher state and party officials on the one hand (who staffed both the political and the administrative-control mechanisms of the 'planned' economy that secured the collective/state-capitalist appropriation of surplus value), and on the other, the managers of the state enterprises.⁶ The essential question surrounding socialism is not with the status of the ownership of capital but the nature of worker control over the social conditions of production and reproduction. We do not intend here to elaborate more on this question. But since the issue of the nature of capitalist power was left untouched in these discussions, the debate over capital as 'collective property' was not actually concerned with the building of socialism *but indirectly touched upon the very role of capital markets and finance in capitalism*. From this point of view, *the main contributors in the socialist calculation debate were in fact discussing the importance of finance for capitalism in the name of central planning*. In what follows we shall revisit the debate from this viewpoint.

In this regard, the real achievement of the market socialists was to defend the neoclassical theory of value against the labour value version of it and *implicitly raise the*

⁶ See Milios and Sotiropoulos (2009; ch. 10).

issue of finance. They unintentionally questioned the status that finance retains in the newly established neoclassical paradigm. And their initial answer underestimated this role; it rendered finance redundant and insignificant for the efficiency of production. After all, wasn't this the major outcome of the 'formal similarity' position? If the neoclassical law of valuation is independent of the institutional framework of the society, then the regulation of the supply and the demand of savings throughout the economy can be organized by a central planner, at least in principle. As we shall see below, in this line of thought the role of finance is totally redundant and insignificant since the optimization conditions must be met without any reference to the price of capital. To use Barone's reasoning, the central planning board can simply replace Walrasian auctioneering in the financial markets (Barone 1935). In fact, as we shall see below, this is the route followed by Lange.

3. Lange's challenge to the mainstream: central planning board in the role of the Walrasian auctioneer

Lange entered the socialist calculation debate in 1936 without actually making any new theoretical contribution. He drew heavily upon the issue of 'formal similarity' between socialism and capitalism from the perspective of market socialists: both presumed an ontological primacy of neoclassical value theory over both capitalism and socialism. In this sense, the neoclassical theory of value becomes a weapon for socialists and aids in the configuration of the socialist regime. The conception that had led Wieser and Barone 'to doubt that socialism was impractical is extended by Lange to a practical analogy used to show that socialism is as practicable as capitalism' (Lavoie 1985: 124). This point was raised against the Austrian critique. The challenge that Lange put forward against the neoclassical orthodoxy of the mid 1930s was simple but brilliant: *socialism can easily imitate the efficiency of market capitalism if the central planning board is able to supplant the Walrasian tâtonnement process.*⁷

As expected, the version of socialism defended by Lange was a form of economy with competitive markets for labour and consumption goods, but not for capital: 'in the socialist system as described we have a genuine market (in the institutional sense of the word) for consumers' goods and for the services of labour [...] But there is no market for capital goods and productive resources outside of labour' (ibid.: 61). With the assumption introduced in section 2 above, this is close to a version of capitalism without finance. In that case, the Walrasian trial-and-error process can be carried out even more efficiently by the central planning bureau than by a market process with private property; the bureau can replicate the role of finance in capitalism without giving up the optimization conditions associated with competitive capitalist markets:

⁷ In this sense, Lange simply repeated Taylor's earlier point (see Lange 1936: 56, 66; Lavoie 1985: 118-9). In 1929 Taylor offered a planning model in which the socialist central bureau could achieve a practical equilibrating solution using a trial and error method (thus resembling the Walrasian auctioning process).

there is not the slightest reason why a trial and error procedure, similar to that in a competitive market, could not work in a socialist economy to determine the *accounting prices of capital goods and of the productive resources in public ownership*. Indeed, it seems that it would, or at least could, work much better in a socialist economy than it does in a competitive market. For the Central Planning Board has a much wider knowledge of what is going on in the whole economic system than any private entrepreneur can ever have; and, consequently, may be able to reach the right equilibrium prices by a much shorter series of successive trials than a competitive market actually does (Lange 1936: 67; emphasis added).

We can briefly summarize Lange's argument as follows.⁸ In an economy with no capital market, consumers are free to maximize their utility in the genuine markets for consumer goods. Nevertheless, capitalists, or rather managers of public firms, cannot be guided by the standard profit maximization rule since there is no market 'price' for capital. They have no basis on which to estimate the profitability prospects between alternative uses of a given amount of investment. According to Lange, this maximization condition can be replaced by two equivalent ones. This is the message of the canonical textbook microeconomics. On the one hand, profit maximization leads to optimum output when marginal cost (MC) meets the price (p) of the product ($p=MC$). This is the first rule to be met by managers. According to neoclassical theory, marginal benefit (p) must not exceed nor fall below marginal cost for the output to reach the optimum level. This rule can be satisfied without any calculation of profitability. On the other hand, the central planning bureau must also instruct the managers to choose a combination of factors that minimizes the average cost of production (ATC). In plain terms, this means that there are no profits above or below to normal level that would induce the producers to increase or decrease the level of production (or to induce inflow or outflow of capital from that branch of industry: the market is in equilibrium). Likewise, this condition can also be met without any knowledge of the profit rate and thus in the absence of capital markets.

The above argument has one important implication: the socialist economy of Lange can perfectly replicate the equilibrium position of neoclassical theory without any reference to the prices of capital and without any market for investment and saving. Capital markets and finance are redundant. In this respect, the result would be quite the same from a different theoretical route in the case of labour theory of value. In Lange's socialism there is an equivalent process of consumer's utility maximization while the profit maximization condition can be met by the abovementioned two complementary rules imposed upon firm managers. The central planner will announce shadow prices to the managers and they will accordingly apply the profit maximization conditions to production. They will request resources upon these prices for the expansion of production. If the result is suboptimum (it does not clear the market) the central planner will take this into account in the new price announcement. For Lange, the function of prices is a 'parametric' one: 'although the prices are a resultant of the behaviour of all individuals on the market, each individual separately regards the actual market prices as given data to which he has to adjust himself. [...] Market

⁸ See Lange (1936: 60-71), Lavoie (1985), Block et al. (2002: 53-4).

prices are thus parameters determining the behaviour of the individual' (Lange 1936: 59). This parametric function of prices does not change with socialism; it is only the forms of the 'equations' that change. The only difference is that the role of the Walrasian auctioneer will be carried out by the planning bureau, presumably in a more efficient way than under capitalism. The equilibrium values of these parameters will be still determined by the 'objective equilibrium conditions'. As 'Walras has so brilliantly shown this is done by a series of successive trials (*tâtonnements*). [...] Thus the accounting prices in a socialist economy can be determined by the same process of trial and error by which prices on a competitive market are determined' (ibid.: 59, 66).

At the end, Lange's defence of socialism is weak. His conclusion is that the economy outlined in his model can become as efficient as capitalism. Since finance has no role to play in the neoclassical universe, its functioning can thus be replicated by the central planning board leading to the very same outcome. Nevertheless, this is not much of a defence of socialism, since it functions merely as an indirect critique of the canonical neoclassical argument. There could be an alternative reading of Lange's point: since the capital market is insignificant in the organization of capitalism and the establishment of competitive equilibrium, then socialism as a regime of public ownership of the means of production can become a real economic alternative. In fact *the real contribution of the market socialist approach was not a genuine defence of socialism but a brilliant critique of mainstream thinking, which was unable to grasp the importance of capital markets and finance*. This challenge triggered the reaction from the Austrian economists. In fact, as we shall argue in the next section 4, Hayek's critique against market socialists was also a way of emphasizing the central role of finance in capitalism, which in his view cannot be supplanted by any concentrated bureau or institution. It is this latent aspect of the debate that has passed unnoticed in the literature.

4. Hayek's contribution to the debate: why capitalism is unthinkable in the absence of finance

The engagement of the Austrians in the socialist calculation debate at the 1930s gave them an opportunity to refine and publicize their viewpoint with regard to the nature of capitalism. In fact, as Kirzner (1992: 100) suggests, this debate was 'important as a catalyst in the development and articulation of the modern Austrian view of the market'. The Austrians, and Hayek in particular, critically distanced themselves from the established neoclassical orthodoxy of the era (the so-called model of perfect competition) while remaining strong proponents of the market system. In a sense, their response to the market socialists was an effort to defend the spirit of capitalism in the era of the 'great transformation' (to use Polanyi's well-known expression; Polanyi 2001), in which significant state interference with the economy, in its different versions was becoming a dominant paradigm of governance. In what follows we shall focus solely on Hayek's contribution to the Austrian view of the debate. While the latter continued to emphasize and develop his perspective throughout the post Second World War period, the socialist calculation debate revealed an aspect of his

argumentation that remained, to a significant extent, veiled in his later interventions: the crucial role of finance.

Hayek first continued in the spirit of von Mises' argumentation. Nevertheless, the context of the discussion has changed: it is not labour theory of value any more but the neoclassical value theory that is the fulcrum of debate. The proponents of socialism (in this debate) had adopted the 'tools' of the enemy in order to make their own point. Hayek uses Lange's definition of socialism as his point of reference, admitting that 'it is essentially in this form that Marxism has been interpreted by the social-democratic parties on the Continent, and it is the form in which socialism is imagined by the greatest number of people' (Hayek 1935a: 18). His argument can be seen as a wider criticism not only of other 'loose' ideas of socialism (ibid.: 20)⁹ but also of the heart of the neoclassical static conception of equilibrium.

Hayek understands very well that market socialists draw upon the fallacies of the dominant neoclassical paradigm. In fact, it is rather the latter that is the target of his critique. He fully grasps the fact that a thorough defence of an unstable capitalist system cannot come from its elevation in the form of the standard neoclassical model of perfect competition and static equilibrium. The market system is not perfect but it is the only path to meaningful economic organization. In what follows, we shall reproduce the parts of his reasoning that we consider as most important. The central point is based upon a certain empiricist conception of knowledge: it cannot be aggregated and cannot be 'produced' in the absence of capitalist competition, with emphasis on the second part of the argument. In an alternative formulation, the required knowledge of the existing 'objective' production possibilities will not be available to anyone without competitive capital markets, even if one could collect and aggregate all the decentralized information spread throughout the economy, because it is only through the process of competition that these processes emerge. Hence, every negation of competition will lead to inferior results in terms of efficiency. No other economic regime can replicate or imitate the success of competitive free-market capitalism.¹⁰

For Hayek, 'maximization' and 'efficiency' are indeed the basic and proper economic aims but 'the real economic problem which society faces (...) it is a problem of the utilization of knowledge not given to anyone in its totality' (Hayek 1945: 519-520). The issue involved with the concept information or knowledge is a double one. No economic regime, including a socialist one, ever reaches a static equilibrium. The character of every economic configuration is dynamic, rather than static. It is indeed characterized by genuine *disequilibrium*: changes are frequent and unpredictable both in capitalism and socialism; and equilibrium is never actually attained. Therefore:

all action will have to be based on anticipation of future events and the expectations on the part of different entrepreneurs will naturally differ. The decision to whom to entrust a given amount of resources will have to be made on the basis of individual promises of future return. Or, rather, *it will have to be made on the statement that a certain return is to be expected with a certain*

⁹ These are versions of socialism that lie in between socialism and the free-market system (Hayek 1945: 521).

¹⁰ In what follows we shall base our analysis on the following papers: Hayek (1935a; 1935b; 1945; 1948a; 1948b; 1978).

degree of probability. There will, of course, be no objective test of the magnitude of the risk. But who is then to decide whether the risk is worth taking? The central authority will have no other grounds on which to decide but the past performance of the entrepreneur. But how are they to decide whether the risks he has run in the past were justified? And will its attitude towards risky undertakings be the same as if he risked his own property? (Hayek 1935b: 233-4).

According to Hayek, unlike the imaginary neoclassical universe, real life decisions are made upon the basis of expected unknown future incomes. We can attach ‘certain degrees of probability’ to the latter but at the end there is no ‘objective’ measure of risk. This poses a much more difficult economic problem than the one usually acknowledged. It is one thing to address the difficulty the central planner has in collecting the immense amount of information needed in order to carry out the task of effective planning. But there is also ‘another problem of even greater importance’ (Hayek 1935b: 210: 154) and obviously more fundamental. The dispersed technical knowledge that the central planner is supposed to collect *does not even exist* in the first instance (ibid.: 210-211). It is of course ‘absurd’ to assume that all this knowledge can be ‘concentrated in the heads of one or at best a very few people who actually formulate the equations to be worked out’ (ibid.). But even if there was a way to collect this knowledge and implant it in a single mind the more fundamental problem that would be encountered is that ‘much of the knowledge that is actually utilized is by no means “in existence” in this ready-made form’ (ibid.). In other words, the market competitive process not only disseminates existing decentralized knowledge (dispersal or communication of knowledge) but more importantly it contributes to its very production (the learning or discovery process).¹¹ In other words, *competition not only helps in discovery, but actually generates in the first place much of the knowledge to be subsequently dispersed*. It is usually the dispersal of knowledge aspect of Hayek's reasoning that is emphasized in the secondary literature. Nevertheless, it is the first one (discovery) that is crucial in the understanding of the full message of Austrian tradition (see Kirzner 1992: 139-140).

What are the implications of the above reasoning in the case of capitalism without a market for the factors of production? As we read in the above passage, future investment choices in any type of economy rely upon expectations of future circumstances. Such expectations encompass a certain anticipated return combined with a degree of confidence (probability) in its achievement. No economic action with regard to the future can be undertaken if there does not exist some estimation of risk. This estimation cannot be objectively known. It is thus open to change and revision. Yet market information is the only meaningful indication available to the entrepreneur or anyone else for deciding upon future economic events and embarking upon investment projects. The entrepreneur's subjective decisions concerning investment and risk-taking will thus be made taking into consideration existing prices for capital and risk which, for all their defects, represent the best information available as a basis for decision-making.

In this fashion, market prices are *disequilibrium* prices, in the sense that as signals or communicators they are far from optimal performers. This conclusion also holds for prices of

¹¹ For these issues see also Kirzner (1992; ch. 6 and 8).

capital and for risk. Instead of informing economic actors of the 'correct' path to follow, they offer incentives and disincentives that motivate them to explore and *discover for themselves* the true profitable alternatives. To put it simply, prices under competitive markets do not only spread information already discovered and given; they motivate the very discovery process. In their absence, this type of motivation will cease to exist. Therefore, even if someone manages to collect and concentrate all the existing information at any point in time it will be worthless because the negation of competition will significantly impoverish the real content of that information.¹²

This aspect of Hayek's argumentation was not so clear in his writings of 1930s and 1940s. Probably he was not fully aware of the consequences of his problematic. Perhaps he hesitated for tactical reasons to attack directly and thoroughly the neoclassical orthodoxy as well. But Hayek did not fail entirely to emphasize it. The competitive market process is reliant on market data at any particular point of time in the sense that:

provisional results from the market process at each stage alone tell individuals what to look for. Utilisation of knowledge widely dispersed in a society with extensive division of labour cannot rest on individuals knowing all the particular uses to which well-known things in their individual environment might be put. Prices direct their attention to what is worth finding out about market offers for various things and services. [...] We shall see that the fact that a high degree of coincidence of expectations is brought about by the systematic disappointment of some kind of expectations is of crucial importance for an understanding of the functioning of the market order. [...] Competition is essentially a process of the formation of opinion [...] It creates the views people have about what is best and cheapest, and it is because of it that people know at least as much about possibilities and opportunities as they in fact do. [...] Yet this knowledge which is assumed to be given to begin with is one of the main points where it is only through the process of competition that the facts will be discovered (Hayek 1948a: 106, 95; Hayek 1978: 181, 185).

In other words, markets do not only disseminate (imperfect) information but primarily motivate economic actors to conform with specific economic behaviour. As Kirzner (1992: 160) summarizes: 'the importance of prices for coping with the Hayekian knowledge problem does not lie in the accuracy of the information which equilibrium prices convey concerning the actions of others who are similarly informed. Rather, its importance lies in the ability of disequilibrium prices to offer pure profit opportunities that can attract the notice of alert, profit-seeking entrepreneurs. Where market participants have failed to co-ordinate their activities because of dispersed knowledge, this expresses itself in an array of prices that suggests to alert entrepreneurs where they may win pure profits'. In plain terms, economic actors are living in a disequilibrium and uncertain world. The market system is the only tool they have to aid in calculations about the unwritten future. Efficient economic calculation is unthinkable in the absence of disequilibrium prices of capital and for risk. It was this point that was overlooked by the market socialists when they adopted the conception of perfect competition (Hayek 1948b: 188). In the absence of competitive markets there will cease to

¹² See Hayek (1948a, 1978). See also Kirzner (1992; ch. 8), Lavoie (1985).

exist the capitalist spirit of action. From this point of view any state interference with the market is a serious threat to the latter.

5. In the place of an epilogue: finance as 'trauma' in the mainstream thinking

We can summarize the main findings of the above analysis as follows. Lange drew heavily upon the dominant neoclassical tradition to defend socialism, or at least to defend the version of it that he considered as appropriate. The neoclassical system emphasizes the static character of the economic equilibrium. The argument of Lange was that this static form of equilibrium can be easily replicated by the socialist economy. The version of socialism he chose to refer to as standard was rather a type of capitalism without capital markets. In this regard, Lange managed *implicitly* to set forth two important points. First, he showed that a version of mainstream thinking that underestimates the role of capital markets can be easily utilized to defend the social paradigm of central planners. Second, the abolition of capital markets – and therefore of finance – not only could replicate the much advertised efficiency of capitalism but would also achieve more economic stability. We must not forget that the debate takes place in the 1930s, when the consequences of the great depression were central in everyone's mind. Taming the financial instability of the capitalist system without sacrificing economic efficiency would seem an appealing alternative to the free market system in a period that the latter was generating many unresolved contradictions.

We must mention here that in the German speaking discussions there was an on-going debate on the role of the stock and commodity exchanges with regard to speculation and instability at least from the late 1880s. 'Debate in Germany over the nature and social impact of stock and commodity exchanges had first grown acrimonious in the wake of the major economic downturn of 1873-1879, which put an end to the boom times of the Empire's "founding era", as well as the rather spectacular charges of political manipulation and collusion levelled at Bismarck and the German financial elite by a range of conservative and socialist critics' (Lestition 2000: 289). This debate – which opened the road for government legislation and committees of inquiry – attracted the attention of famous scholars: even Max Weber and Frederick Engels were engaged (see Weber 2000; Engels 1989). The main issue that had dominated public scene at the time was 'whether it was possible or socially useful to regulate the kinds of "speculation" that were carried on at the exchanges' (Lestition 2000: 289). Market regulation, state intervention and socialism were on the public agenda for many different reasons.

Hayek along with the other Austrians understood very well the message of these critiques, the most stimulating of which was undoubtedly coming from the market socialists. How could a mainstream liberal economist respond to a neoclassical defence of the state ownership of the means of production? There was one way out of this uncanny encounter: they had to clearly differentiate their view of capitalism from the neoclassical ideal universe of perfect equilibrium. This departure was never clearly stated in the writings of Mises and Hayek (Kirzner 1992: 111) and never properly emphasized. Both writers were rather insecure in pushing their argument to its limits. Nevertheless, their argument amounts to the strongest

defence of the market system that one can articulate. For when they defended the free market system they not only responded to the proponents of socialism but also to everyone who had argued for strong state interference in the workings of the economy. It was not just socialism but every alternative 'half way house' which would negate to some extent the decentralized market system. Or to put it differently it was not just Stalin as a central planner, but also Hitler as a fascist dictator and Roosevelt as a democratic "New Dealer" who were the objects of this critique. It was not just Lange and Lerner, but also Keynes and Kalecki, who were to be refuted.

In order to defend the market system, Hayek realized that he had to revise and criticise mainstream theory. Admittedly, the debate on socialist calculation triggered the process of elaboration and clarification of Austrian ideas (Kirzner *ibid.*). Against the challenge of the market socialists, Hayek actually highlighted the importance of the competitive market system primarily as a *disequilibrium* process. But since socialism, the debated concept, was perceived as a market system without capital markets, the debate implicitly touched upon the role of finance (under the simplifying assumption that only capitalists save and borrow). It was the role of finance in generating prices for risk that was obscured by the dominant neoclassical paradigm of perfect competition. From this point of view, Hayek's argument can be seen as a suggestion that capitalism is unthinkable in the absence of finance, that is, without a market for risk. This is so because the pure market system provides the motives for economic actors to *generate and discover* the knowledge ('alertness to and the discovery of as yet unknown information' Kirzner 1992: 104) which is at the same time to be dispersed and communicated to other parts of the economy.

In that sense, the real alternative to the market system is definitely not a process that can just collect the decentralized knowledge, because even if this were possible it would deprive the economic system of the proper motives to achieve efficient targets: it would not stimulate discovery and economic action according to the norms of the capitalist system. Markets disseminate imperfect information but also motivate discovery and learning; they generate the information to be communicated. From our point of view, although the Austrians never put it that way, *this must be seen as a process of shaping economic behaviour according to the spirit of capitalism*. For discovery and learning are just the outcomes of an active engagement in proper economic actions. *The market system thus motivates a particular way of acting and it is only as a consequence of these actions that knowledge is discovered*. From this perspective, the real message of Hayek's response to market socialists – an argument that was never properly stated during the period of the debate – was that capitalism needs the capital market to organize proper business behaviour and reproduce itself. With the establishment of central planning there will not be a 'discovery process' on the part of managers, hence no proper capitalist behaviour and therefore no efficiency in capitalist terms. In the end, every serious restriction of capital markets threatens the reproduction of the capitalist spirit.

But here we encounter an unexpected twist. While Lange degraded socialism to a mere replication of capitalism's efficient achievements, Hayek implicitly realized the danger of undermining capitalist behaviour and thus the nature of capitalist relations. If we see

capitalist behaviour as the outcome of the capitalist social relations of power, then Hayek's perspective renders capital markets central in the organization of capitalism as a system of exploitation. He also perceives at the same time every movement towards collective ownership of the means of production as a real threat to the logic of capitalist reproduction. In this sense, he implicitly ends up giving an unexpected endorsement to socialism that is much deeper and sophisticated than the superficial 'defence' of Lange: every thorough state intervention in the markets, and in the capital market in particular, threatens to eliminate the capitalist spirit, making the existence of the system vulnerable in the context of the reproduction of its power relations.

This last point gives us the chance to revisit the socialist calculation debate, interpreting finance as *trauma* for mainstream discussions. We shall use the concepts of Lacanian psychoanalysis as an analogy in order to clarify our point.¹³

Of course, from a radical Marxian point of view, mainstream thinking in all its versions is just a theoretical ideology (using the Althusserian definition of the term; see Althusser and Balibar 1997): mainstream ideas misinterpret capitalist reality, but not in an arbitrary way. These systematic ideas are always interwoven with particular capitalist exploitation strategies stemming from reality itself. Mainstream theory systematizes ideas and perceptions that arise and are held in place by social and economic power relations themselves (the "given" ideological representations of everyday "experience") without transforming their ideological content. Nevertheless, there is one more issue involved here. Mainstream economic reasoning always had the problem of properly incorporating finance and thinking seriously about financial instability and crises. It seems that finance besides a mystery has always been a *trauma* for the mainstream economic edifice.

Mainstream thinking offers an interpretation of the capitalist system by symbolizing capitalist reality in a particular way. It sets forth and reproduces practises containing particular symbols, ideas, concepts, questions and visions that all together comprise what we may call as the symbolic "misrecognition" of reality. Nevertheless there is one element that resists this symbolization and will always do so for mainstream analytical speculations: finance. It is not that mainstream thinking does not have theories of finance; it is that these theories are unable to grasp the fundamental aspects of finance, its crisis-prone character and its key role in the organization of capitalist production. The recent financial meltdown is an eloquent indication of this fact. The pre-crisis confidence in the strength of the system was accompanied by a post-crisis unease that led to fatal economic policy mistakes. In order words, finance is the *real* of capitalism, a place that cannot be properly symbolized, a factor that can never be completely absorbed into the mainstream ideological discourse. It will always be left over, unable to find its way to the established economic language, most especially in the contemporary forms of capitalism.

To speak metaphorically, the above argument suggests that finance is a *trauma* for the mainstream thinking. The socialist calculation debate manifests this idea very well indeed. The response of Lange was a provocative event, perhaps not deeply significant but in any

¹³ For instance see Žižek (2006), Sean (2005).

case an important focal point. It should remind mainstream economists that their neglect of finance as an active and creative force in capitalist reproduction can be easily used as an argument for the negation of the market system. The reaction of the Austrians was a result of the existence of this trauma as it was brought back into the conscious memory. But since the unsymbolized *real* cannot intrude into reality without the breakdown of the capitalist apologia, the argument of the Austrians played the role of *fantasy* for the mainstream thinking. It became the last defence against the traumatic encounter with the *real*; that is to say with finance as manifestation of the exploitative and contradictory character of the system. This is the true contribution of the Austrian tradition to mainstream thinking. This tradition will always be mentioned as a defensive argument of last resort for the free market system when the latter is in crisis, an imaginative context for capitalist apologia. It will always be the speculative border which cannot be crossed without serious consequences for the nature of economic reasoning purporting to defend the capitalist system.

References

- Althusser, L. and Balibar, E. (1997) *Reading Capital*, London: Verso.
- Barone, E. ([1908] 1935) 'The Ministry of Production in the Collectivist State,' in F. A. Hayek (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, London: Routledge and Kegan Paul Ltd.
- Block, W., W. Barnett II, and S. Wood (2002) "Austrian Economics, Neoclassical Economics, and Finance," *The Quarterly Journal of Austrian Economics*, 5(2): 51-66.
- Engels, F. (1989) 'The Socialism of Mr. Bismarck', in K. Marx & F. Engels, *Collected Works*, vol. 24, *Marx and Engels: 1873-1874* (pp. 272-280), New York: International Publishers.
- Hayek, F. A. (1935a) "The Nature and the History of the Problem," in F. A. Hayek (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, London: Routledge and Kegan Paul Ltd.
- Hayek, F. A. (1935b) "The Present State of the Debate," in F. A. Hayek (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, London: Routledge and Kegan Paul Ltd.
- Hayek, F. A. (1945) "The Use of Knowledge in Society," *American Economic Review*, 35(4): 519-530.
- Hayek, F. A. ([1946] 1948a) "The Meaning of Competition," in F. A. Hayek (ed.) *Individualism and Economic Order*, Chicago: The University of Chicago Press.
- Hayek, F. ([1940] 1948b) "Socialist Calculation III: The Competitive Solution," in F. A. Hayek (ed.) *Individualism and Economic Order*, Chicago: The University of Chicago Press.
- Hayek, F. A. ([1968] 1978) "Competition as a Discovery Procedure," in F. A. Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas*, London: Routledge.
- Hilferding, R. ([1904] 1949) 'Böhm-Bawerk's Criticism of Marx', in P.M. Sweezy (ed.) *Karl Marx and the Close of His System' by Eugen Böhm-Bawerk and 'Böhm-Bawerk's Criticism of Marx' by Rudolf Hilferding*, New York: Kelley.
- Kirzner, I. M. (1992) *The Meaning of Market Process: Essays in the Development of Modern Austrian Economics*, London and New York: Routledge.

- Lavoie, D. (1985) *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered*, New York: Cambridge University Press.
- Lestition, S. (2000) "Historical Preface to Max Weber, 'Stock and Commodity Exchanges'," *Theory and Society*, 29(3): 289-304.
- Milios, J., Dimoulis, D. and Economakis, G. (2002) *Karl Marx and the Classics, An Essay on Value, Crises and the Capitalist Mode of Production*, England: Ashgate Publishing Limited.
- Milios, J., and D. P. Sotiropoulos (2009) *Rethinking Imperialism: A Study of Capitalist Rule*, New York and Hampshire: Palgrave Macmillan
- Mises, L. ([1920] 1935) 'Economic Calculation in the Socialist Commonwealth,' in F. A. Hayek (ed.) *Collectivist Economic Planning: Critical Studies on the Possibilities of Socialism*, London: Routledge and Kegan Paul Ltd.
- Polanyi, K. (2001) *The Great Transformation: The Political and Economic Origins of Our Time*, Boston: Beacon Press Books.
- Postone, M. (1993) *Time, Labour, and Social Domination*, New York: Cambridge University Press.
- Sean, H. (2005) *Jacques Lacan*, London and New York: Routledge.
- Weber, M. ([1924] 2000) 'Stock and Commodity Exchanges', translated by S. Lestition, *Theory and Society*, 29: 339-371.
- Žižek, S. (2006) *Lacan*, London: Granta Books.