THE IMPORTANCE OF THE ECONOMIC CALCULATION DEBATE

The question of economic calculation is important because it represents the basis to evaluate whether socialism is a valid system. Hence it is argued by the defenders of free market economics that socialism is unable to establish a rational relationship between money, prices, and the allocation of resources. This is because it replaces the system of the private ownership of the means of production with state control of the economy. The result is that planning becomes the major expression of the attempt to define the character of economic activity. It is argued that this situation can only result in waste and the inability to relate the supply of goods to demand in an adequate manner. Van Mises argued that rational calculation without private ownership is unlikely to occur. This standpoint was refuted by market socialists like Oscar Lange, who argued that the role of a central planning agency could be reconciled with an effective pricing system. It could be possible to establish equilibrium prices, but Hayek has maintained that economic centralisation of the state can never allow for the complex character of dispersed knowledge that is expressed by an effective pricing system. This standpoint is connected to the perspective of competition and rivalry between different capitalists: “But the Austrian school contended that the specific form of rivalry that is a necessary component of the entrepreneurial market process leads to a beneficial coordinating process that makes complex capitalist production in a monetary system possible.”(1)

In other words the Marxist view that economic rivalry can be overcome is considered to be unrealistic. The inter-dependent relationship of the producers, via the role of the market, can only be realised by competition between them, and this situation is considered to be the basis to allocate resources in contrast to the Marxist rejection of these aspects of economic activity. The underlying assumption of the defenders of capitalism is that it corresponds with the character of human nature, and so does not require unbelievable levels of co-operation between human beings. Instead the dependence between the members of society is established by means of rivalry which is related to the role of the market. This means Marx's perspective of bringing the so-called anarchic aspects of capitalism under conscious planned control is ambitious because this standpoint denies the acquisitive character of human beings and their activity. Marx's approach implies a level of co-operation and altruism that can never be realised. Indeed, it would seem that Marx's viewpoint implies rejection of the role of the market and the replacement of the contending competition of the various producers with a single centralised plan. (2) Marx believes that the waste of resources that occurs in terms of the operation of the competitive market would be overcome by the development of a plan. This standpoint is disputed by the supporters of the market who would argue that the ability to create the level of consumption goods required by society implies that production cannot occur without the role of competition, or the creation of goods that are sold, or not, on the market. This aspect of capitalism has been ignored by the criticism of Marxists, which centres on the importance of the relations of production. As a result, Marxists have tended to ignore the significance of the calculation debate, and its view that socialism is not rationally possible.

In other words : “For Marx, socialism means first and foremost the abolition of all market relations, the relegation of the entire social production process to the conscious design of the workers in common. By expropriating the expropriators, the proletariat is supposed simultaneously to terminate the anarchic and rivalrous aspects of private production and to re-establish the bond between producers and their means of production.”(3) This standpoint is connected to the rejection of the role of money in the post-capitalist economy. Hence, this view implies that the role of prices is unnecessary because of the rejection of its compatible aspects in terms of money and markets. Hence in order to establish a socialist response to the calculation challenge it has to present a conception of socialism that is different to the one that is advocated by Marx. Instead the conception of socialism has to be made compatible with the importance of markets and prices. This means the exploitation of the capitalism has to be overcome, but its adherence to market mechanisms has to be upheld in a modified form. The question remains as to whether this conception of socialism is principled, and a genuine alternative to capitalism.

The defenders of capitalism emphasise the importance of prices for the process of calculation: “Prices thus act as guide posts in the imperfect coordination of anarchic production, permitting the integration of separately made decisions across the entire society. When any one decision maker uses a price in his accounting calculations, he is unconsciously taking into account the entire complex of producer and consumer evaluations that resulted in that price being what it is. Without some social institution such as prices to connect the separate production decisions, the partially coordinated anarchy of production would degenerate into total chaos.”(4) This means that the character of prices under socialism must be different, and as a result the process of calculation cannot occur. The various aspects that express the role of prices under capitalism are distorted under socialism, and so the market does not operate efficiently, and the significance centralised state planning agency means that prices are not determined by the role of competition and the importance of profits. The Marxist denial of the importance of profits, because it represents exploitation within the process of production, means that the incentive to create goods that have the quality to be sold is undermined. Therefore the role of quality control is not defined by the importance of market mechanisms, and it is instead decided by the bureaucratic practice of the state planning agency. This organisation also decides the level of prices using various criteria that do not correspond to the significance of the imperatives of the market. Hence the aspirations of the consumer, via the incentive to make profits, do not decide the character of price. Instead the state acts in a dogmatic manner to try and impose the prices of the many items in circulation. This means prices are defined by the decree of the state and not by the process of economic calculation, which takes the form under capitalism of the role of the consumer, price and the market.

Von Mises does not claim that prices are at an equilibrium level under capitalism; instead they have a rational character that is amenable to calculation. This means the market socialism argument that equilibrium prices are possible under socialism is irrelevant. It may be possible to establish equilibrium prices in terms of the influence of the state planning agency, but they are still not an expression of the process of calculation that requires the role of market competition, the importance of the consumer and the entrepreneur. These aspects allow for a genuine process of exchange, which means that the products of the means of production are decided by the act of sale in order to realise a profit. In contrast, under socialism, the price of the means of production are not subject to competition, and as a result the imposition of prices must be arbitrary: “It must be emphasized that Mises is explicitly and consciously talking about money prices as the result of the bidding activities of competitive private owners, not about abstract accounting prices that could conceivably be set by

a central planning board....Mises viewed such abstract accounting prices as imaginary constructs for the equilibrium world....not to be confused with money prices that that pertain to the real world of continuous change.”(5) It is possible to imagine that prices under socialism represent the process of calculation because they express the illusory criteria of equilibrium. But this does not have a content that corresponds to effective calculation because prices concerning the means of production are not based on the importance of competition, and nor are the preferences of the consumer related to the dynamic of price and the market mechanism. Hence the socialist economy is based on the priorities of the planners and is not directly influenced by the prices established by the interaction of competition, profit and the market.

Indeed it can be argued that socialism is based on a form of calculation, that of labour time, which is false, or at least misleading. This is not to deny that labour is part of the value of a commodity, and will be expressed in its final price. However, the actual character of the price cannot be understood outside of the context of the interaction of the aim of profit, price and the role of the market. Furthermore, the illusion represented by the emphasis on the role of labour time is that it is possible to reduce prices to a few simple equations. Instead there are a massive amount of prices, and their complexity cannot be reduced to the bureaucratic criteria of the central planning agency. In this context price cannot be defined by the decree of the planning process, but is instead the outcome of competition and consumer preference. This situation represents a dynamic process of change that cannot be reduced to the static criteria of equilibrium prices. The central planning board could never be able to establish a satisfactory criterion for price in a constantly changing world of actual fluctuating price levels. The only basis by which it could operate would be to impose an arbitrary level of price and ignore the actual and effective criteria by which price is effectively established. These problems are not resolved by the criteria of labour time, which would imply that homogeneous and similar quantities could reflect the complex and dynamic character of price. Furthermore, the emphasis on labour time implies that the greater the level of expenditure of labour, the higher is the price. This criterion is rendered nonsensical by the influence of competition and market demand. But primarily the problem is that different types of the application of labour are incommensurable. It is not possible to establish an understanding of the utilisation of different forms of labour that would enable it to be compared in similar terms of value and price. Marx has suggested that labour time can be reduced to a similar homogeneous character. But is argued that this view is controversial and cannot be proved. Instead we know that prices are influenced by the relationship of the dynamics of profit, market and competition. The argument is that the attempt to apply a relationship between prices and labour time would have completely arbitrary results.

These criticisms of Marx would seem to suggest that the theoretical elaboration of a socialist economy would have to be based on different criteria. The argument of the market socialists is that it is possible to combine the application of the role of money, prices and markets with the role of state ownership of the majority of the economy. The critics of this standpoint would contend that it is not possible to develop a socialist economy combined with aspects of capitalism. Instead only a capitalist economy based on private ownership is functional and able to establish prices that are based on the principles of calculation. These objections have been rejected on the basis that the principle of the state ownership of the means of production is diluted, but this concession raises questions about whether the actual aim of socialism is still being upheld. In other words an intransigent socialism still has to uphold the aim of ownership by the state of the commanding parts of the economy. However, it could be argued that the apparent difficulties in developing a socialist economy based on the criteria of calculation should not be used as a pretext to reject socialism. Instead we have to intensify efforts to develop an understanding that socialism can be compatible with the role of calculation. If we admit defeat on this question, this pessimistic intellectual stance would be an admission that capitalism was superior and more rational than any form of socialism. We would be accepting that capitalism is more effective than socialism despite the generation of exploitation and poverty. Primarily we would be suggesting that an aspect of human behaviour – the role of calculation – cannot be defined in terms of the standpoint of socialism. Instead of making these gloomy conclusions we have to intensify efforts to connect the role of calculation with the character of socialism.

The problem is that the market socialists, who attempted to defend the conception of calculation within a socialist economy, did not have a starting point of understanding how to allocate resources and create consumer goods that was superior to capitalism. Instead they had an approach based on the importance of mathematical equations: “Evidently Dickinson is not merely proposing a central planning scheme that is conceivable under “unrealistic” theoretical assumptions but one that he thinks will be workable in practice. The supreme economic council gathers statistics from which it constructs a Walrasian system of simultaneous equations, which it then solves. Dickinson makes it plain that he does not meant that these equations are to be solved “metaphorically”, the way consumers and entrepreneurs in a market “solve” them. He is not proposing a simulated market in production goods; he is really saying that the equations could be solved mathematically.”(6) Hence the problem with this approach is that we did not have the elaboration of a theoretical understanding that could provide genuine guidance to practical issues, such as what is a socialist economy. Instead the issue of socialism was defined in the illusory terms of mathematical equations, and so the calculation question was resolved formally and without any essential practical significance. This meant socialism could be described in immaculate terms, and yet it could still be considered inferior to the actual and practical functioning of capitalism. Formally, the market socialists had a victory over the defenders of capitalism, but this was entirely illusory and based on the conception of an immaculate socialism that lacked genuine concrete importance.

This emphasis on mathematical statistics and equations meant that it was straightforward for the defenders of capitalism to suggest that the issue of complexity had been ignored. The level of information that is required in order to develop an effective economy can never be resolved in terms of a planning agency acting as a means of gathering statistical information. This role could not resolve the problem of calculation within socialism, even if this issue appeared to be formally tackled in terms of the elaboration of various equations: “In Mises own response to the equation-solving solution....he emphasized that Walrasian equations can only describe the unrealizable state of equilibrium and cannot guide the decisions of real producers who are necessarily outside of this static world.”(7) Thus the defenders of capitalism seemed to have an advantage in that they were able to elaborate the actual functioning of an economic system, and in that manner capable of emphasising its superiority, whilst the theorists of socialism seemed to have conceived a flawed and theoretical conception of the economic system that they were advocating.

In other words it was relatively simple to criticise an elaboration of an economy based on the importance of formal statistics as being abstract and not related to the real world. Indeed Hayek was able to extend this criticism and suggest that it was not feasible for a central planning agency to collect and utilise the statistics of economic activity in a manner that was efficient and effective. Consequently, the various market socialists were not able to convince many people that they had been able to establish a conception of what could be 'real' prices under socialism. Instead their imaginary constructs were criticised as being the justification of a fictional world, or perfect socialism. It could be argued that there was no simple way in which these problems could be avoided because socialism only existed in the limited and regressive form of the USSR. In this context fictional socialism could provide answers to the calculation issue, even if they were limited and inadequate. However, the question has to be asked as to whether this standpoint was satisfactory? Was it not possible to elaborate more impressive and convincing conceptions of socialism? The failure to be more effective meant that the defenders of capitalism could simply make the point that it was not possible to simplify complex economic data, and this view seemed to be a convincing reply to the supporters of socialism. The issue of the dispersal of knowledge seemed to be an insurmountable criticism that the advocates of socialism could not provide an adequate answer. Instead they only confirmed their limitations by conceiving of ever more complex collection of equations in order to define socialism.

Indeed the supporters of capitalism suggested that the very attempt to develop imaginary constructions was unrealistic. In this context the conception of socialism is inadequate: “The state of economic equilibrium is a very commonly used imaginary construction, and like most, it is not realistic. What we imagine happens in this unreal world does not directly tell us anything about what would happen in the real world.”(8) This criticism could to some extent be rejected if the supporters of socialism tried more effectively to answer the objections of the defenders of capitalism in their elaboration of the conception of socialism. Instead they tried to outline what was meant by a socialist economy in a manner that deliberately avoided answering the criticism of the various advocates of the free market. This situation made it appear that the views of the bourgeois economists were unanswerable. In actuality this situation still reflected a theoretical limitation. It was possible, and not impossible, to outline a convincing defence of socialism, and in this manner answer the views of the supporters of capitalism. Hence the problem was that the advocates of socialism were trying to make an argument for their standpoint without addressing the various limitations in their standpoint. Addressing these deficiencies meant effectively answering the views of their critics. Instead the flawed conception of market socialism seemed to be immaculate because it was conceived without tackling the various difficulties inherent in their particular standpoint.

It could be argued that the critics of the theorists of socialism can only envisage the historical possibility of capitalism, and so cannot comprehend the validity of an alternative economic system. This point is true, but this dogmatic standpoint was promoted by their ability to criticise a conception of socialism based on the role of equilibrium prices. It was vital that the proponents of an alternative to capitalism develop a more valid understanding of calculation. Primarily the supporters of market socialism implied that the dispersed knowledge of the consumers under capitalism, which is translated into the priorities of the capitalist, would be available to a central planning board. This is an unrealistic assumption, and implies that their conception of calculation would be dogmatic and not based on the complex activity of the economy. Thus the tendency was to incorporate increasing aspects of capitalism into their model in order to answer the supporters of private ownership. The logical result is that equilibrium prices are reduced to the role of competition, but this poses the question as to whether a socialist economy is actually a theoretical and practical possibility.

The basis of the limitations of the market socialists is that they consider socialism in terms of the possibility to develop equilibrium prices rather than the complex choices of the consumer, and then this type of economy is modified and projected into an alternative type of economy: “The subjective equilibrium condition, is met, Lange asserts, by permitting consumers to maximise their utility in the market for consumer goods as with capitalism, and by having producers no longer guided by the standard of profit maximization obey two rules imposed on them by the central planning board.”(9) These rules are that the aim of profit maximisation is connected to the importance of marginal cost in order to produce prices that are acceptable to the consumer. But is this a conception of a genuine socialist economy because there a lack of recognition of the role of industrial democracy in order to develop a democratic plan and instead the central planning board is supposed to have incredible powers of knowledge in order to establish prices that are acceptable to consumers. Hence to some extent the role of the market is replaced by that of the socialist planning board. Thus it is questionable to what extent the role of the consumer does influence the level of prices, and instead they are still defined by bureaucratic decree in terms of the principles of equilibrium price.

Hence the issue of the complexity of dispersed knowledge within economic activity has not been solved by people like Lange. Instead they still assume that the possibility of economic equilibrium is realised by the role of the central planning board. Thus he arrives at the following confident conclusion: that: '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 trails than a competitive market actually does.'(10) This view implies that the role of the Central Planning board can replace that of the market, and so suggests that the market only has a secondary role. This unfortunate and unwanted conclusion seems to be to the only basis whereby the problem of the complexity of knowledge can be resolved. But this standpoint is dogmatic because what is being assumed is that the knowledge of the central planning board can be equal, if not greater than that of the competitive pricing system. This standpoint would be disputed by supporters of capitalism: “The calculation argument contends that a competitive pricing system utilizes the dispersed particular knowledge of all its numerous participants. The issue depends on whether the planning board could ever consciously master all of the knowledge that is contained in a competitive price system but that is not mastered by any individual entrepreneur.”(11)

This flaw in Lange's understanding seems to be puzzling because he has effectively accepted the importance of prices established by market criteria. But in his haste to establish that the market is still secondary when compared to the role of the central planning board he has to assume that this organisation can somehow comprehend massive amounts of data. It is this view that is utopian and unreal in his standpoint. It would not be a concession to the defenders of capitalism to admit that the role of market pricing would supply vital information that could be of use in relation to developing a socialist economy. Instead his emphasis on the role of equilibrium prices, which would be established by either the state, or plant managers, means that he cannot arrive at this conclusion. He does allow for the importance of prices to be established by the market, but he also assumes that the state or plant managers would have a vital role in changing them. The problem is that he is assuming the possibility to arrive at an equilibrium situation when the actual complexity of an economy means that it is more dynamic than this condition. Thus the question of the character of prices cannot be reduced to a simple quality; instead it is the expression of the complex interaction of consumer preference, the aim of profit, and the role of the market. Is it possible to develop a socialist economy that is compatible with these aspects? Lange provides some of the answers to these questions, but the complicated aspects of this issue are glossed over by an ultimate reference to the role of a central planning board which established equilibrium prices.

In other words and important problem with the various models of socialist economy is that they outline a static understanding which is not able to rival the dynamic aspects of capitalist economic activity. This meant a collection of precise principles defined the conception of the economics of socialism, but the relation of this aspect to the importance of prices established by the role of the market, was never coherently outlined. Indeed it could be argued that this issue was glossed over with the conception of equilibrium price: “The calculation problem.....is not merely the static computational difficulty of solving Walrasian equations to obtain the equilibrium values of the prices; it involves the deeper problem of the rivalrous dissemination of knowledge, including, but not limited to, the knowledge of prices.”(12) In other words there was a serious methodological problem in the approach of the market socialists, because they preferred to outline a conception of socialism which was not able to grapple with the importance of the calculation problem. Instead they 'resolved' this issue in the imaginary form of equilibrium price, and so did not recognise that this type of price could not be valid in an actual economy.

Consequently it seemed a relatively simple matter for critics of market socialism like Mises to contend that the role of state planning had not been reconciled with a market and price system in theory. (13) This means the emphasis of the defenders of socialism is on the role of planning and not prices as the major expression of calculation. Hence the role of prices, except in the imaginary terms of equilibrium prices, is not related to a comprehensive and convincing conception of calculation. It would appear that only the defenders of capitalism have established a systematic and apparently invincible understanding of the concept of calculation. But this challenge can be tackled if the understanding of equilibrium price is rejected, and the role of the state planning board is replaced by industrial democracy. This de-centralised model of socialism would suggest that knowledge of the economy could no longer be expressed by one monolithic apparatus, and instead it was diffused within the various smaller forms of the economic unit. The particular industrial firm would know about its prices, and whether they can attract the custom of consumers. It would not be possible to administer a de-centralised economy without the role of industrial democracy, or workers control. Hence knowledge about economic activity would represent the connection of production of the given firm and the role of the consumer. In this context state planning would provide nothing more than advice about economic activity. The board would not be able to impose its imperatives onto each de-centralised aspect of the economy. Indeed, the economy would express the primary importance of moral aims, such as overcoming exploitation and providing cheap goods for the society. Hence an end to alienation, combined with liberation of the consumer would be a primary goal for socialism.

However, it could be argued that this outline of a conception of an economy has not yet resolved the issue of calculation. Indeed it has been argued by the defenders of capitalism that only this system has resolved this question. Hence we still have to establish whether calculation is important under socialism, and if this matter has still to be resolved. This means the urgent issue is to examine whether calculation can be an important aspect of a socialist economy. A related question to be addressed is whether it is possible to tackle the issue of calculation in an economy that is not dominated by market imperatives? The answer to this question must be in the affirmative, or else we are admitting that there is not a rational and coherent basis for socialism. This scepticism is not a satisfactory approach because it implies that only capitalism can calculate and act according to effectively organised principles of activity. However, the fact that many supporters of socialism have ignored this issue would seem to suggest that they implicitly accept the apparent superiority of capitalism. This unsatisfactory standpoint has to be rejected. Furthermore, the dogmatic Marxist view that an economy can be developed without money, and the market, must also be rejected. This is because such an economy would lack the role of calculation, and so would imply a tendency towards dis-organisation and chaos. Instead moral principles, the view that money is not permitted, would replace an emphasis on the importance of a rational development of the economy. But it should never be forgotten that the principle of calculation is still secondary in relation to the aims of socialism. These aims include overcoming the domination of capital within the relations of production and ending the exploitation of labour. Thus the elaboration of the role of calculation must be compatible with these aims. In this context the system of profit making must be replaced with the development of industrial democracy. Profit becomes the voluntary expression of the efficiency of this new type of productive activity rather than the coercive creation of a surplus based on the exploitation of labour.

Hoff assumes that calculation within socialism may assume the actuality of an economy without money.(14) This means the question of calculation and cost becomes defined in a limited manner: “To avoid any misunderstanding it must be emphasised that the term, as it is used in this definition, does not necessarily imply the existence of money, exchange, prices or markets; nor is it implied that the cost element are reduced to a common denominator; nor is any definite way of determining quality or value prescribed.”(15) However, this type of economy would imply that the very premises of calculation had been replaced by those of abundance. People would be able to meet their needs without reference to decisions made according to calculation. This situation is likely to be unrealistic because what would make any type of economy practical is its relation to the criteria of calculation. It is the ability to decide in rational terms which implies that priorities and choices can be made in an organised and reflective manner. Furthermore, it has been shown in history that a society without any markets and money becomes organised in a coercive manner, and based on the domination of an elite state. The very ability to organise a socialist economy in a democratic manner implies that goods are produced and exchanged in terms of the role of calculation. This is because calculation implies the promotion of impulses for economic activity that are freely accepted and so do not require the application or pressure of coercion. Hence the limitation of capitalism is that its conception of calculation requires the subordination and exploitation of labour within the relations of production.

Hoff adopts a controversial definition of socialism: “A socialist society is a society in which (1) the private ownership of the means of production is abolished and (2) business initiative is invested in a central authority which alone directs industrial activity.”(16) The problem with this definition is that it is assumed that the extreme centralisation of the economy is the primary basis for the development of calculation. This standpoint is an illusion. What we have tried to establish is that only in terms of a de-centralised form of an economy is calculation both valid and practical. Hence the role of the individual consumer must be taken into account within socialism, and also the importance of the specific workplace. The combination of these aspects could provide the basis of a valid conception of calculation. In contrast, an emphasis on the state planning agency implies that one central organisation can assimilate the complex knowledge generated by the economy. This is an impossible task, and instead will result in an illusory understanding of calculation. This means that the rigid principles about how we conceive of socialism have resulted in a potentially flawed definition of calculation. If we are to retain a sense of importance of calculation we have to modify our understanding of socialism. The approach of extreme centralisation has to be rejected and replaced with an emphasis on de-centralised forms of economic activity. It is also important to emphasise that the egoism and individualistic character of capitalism has been replaced with an emphasis on the importance of co-operation and solidarity. The economic activity of socialism is based on the recognition that there are common aims which means people consciously act together in order to realise them. However, this ethical aspect of socialism does not mean that the task of establishing calculation has been realised. Instead it will be necessary to combine moral principles with an understanding of the importance of efficiency. Thus in terms of developing the co-operative character of economic activity the needs of society are realised in the most productive and economical manner. The realisation of this aim means the resolution of the calculation problem. But it is be questioned whether this task can be resolved if the powers of economic initiative exclusively belong to a central planning agency. Instead individuals should still have the ability and capacity to define their own contribution to the economy, whether as producer or consumer. It is this aspect which has not been realised by societies like the USSR, because the question of evaluating economic contribution has been exclusively determined by a state planning agency. Instead the goal of increased production and the 'just' distribution of goods should involve the role of collective groups and individuals. This means that socialism should be understood as a system that promoted the level of participation of people. Only in those terms can the calculation problem be solved in a progressive manner.

In other words the calculation issue can always be solved in the inadequate manner of the criteria established by the state planning agency, or by making regressive moves towards the formation of a mixed economy with emphasis on the role of private ownership. But this would represent either the imposition of bureaucratic decree in order to define economic rationality, or alternatively making unprincipled concessions to capitalism. Instead the ability to realise individual needs in a collective manner requires the highest level of participation of the people, or the reconciliation of the principles of de-centralisation and centralisation. This means that calculation under socialism is different to that which occurs under capitalism and the system of private ownership of production and the exploitation of labour. Hoff makes the point: “It must be stated beforehand that that which is a necessary assumption for calculation in a capitalist society, need not necessarily be so in a socialist one. There is.... nothing to prevent calculation in the socialist society from being conducted on other and better lines.”(17)

Under capitalism it is prices, and price alterations, that provide an indication of how scarce resources should be allocated in order to realise effective demand. Thus it is price alterations that provide indicators of what should be produced, and in what quantities. Falling prices implies an over-supply of goods and the necessity of reduced production in order to establish a correspondence between supply and demand. Rising prices implies that there is a shortage of goods and implies that production should be increased. Thus the indicators provided by the price mechanism imply what should be produced in order that demand be realised, or represents the most efficient allocation of resources under a competitive capitalist system. The crucial question for socialists to ask is to what extent this role of the price mechanism can be utilised without undermining the aims and principles of a socialist economy. What is problematical is that the role of the price mechanism has traditionally gone together with private ownership and the importance of the capitalist. Primarily the price mechanism is an indicator of the level of profits of the capitalist, and this also could mean that goods for the market have priority over products for the realisation of need and social welfare. However, it could be suggested that this problem can be tackled in terms of ensuring that priority is given to the allocation of resources in order to meet need, and then the individual would also have income in order to purchase goods that met their individual requirements.(18) The point is it would be beyond the ability of human beings to reconcile the achievements of capitalism in terms of the price mechanism with the contrasting principles and aims of socialism, or the reconciliation of individual welfare with social requirements. This would mean that the role of the price mechanism would be part of the process of calculation under socialism, but its character would also be influenced by the claims of public welfare. The task is to reconcile these contradictory aspects into an integral whole.

It could be argued that the claims of individual preference would be at odds with the requirements of social welfare. But this possibility would only occur if the resources necessary for pubic goods were deliberately undermined in order to produce consumer goods. However the fact that society should be based on the ethic of solidarity would mean that this possibility would be unlikely. Indeed it could also be argued that the very character of consumer goods would start to change, and they would express the importance of role of social welfare. Indeed, it could be argued that to some extent this development has already begun under capitalism. The concept of the selfish consumer is effectively a myth that only applies to the very rich. Instead it would be more efficient to connect the role of the price mechanism to the development of the rationality of the socialist system. This process could only be conducive to the generation of capitalism if there was a deliberate attempt to promote the private ownership of the means of production and to facilitate the domination of capital over labour. But under the conditions of social ownership and industrial democracy, the price mechanism could be an indispensable aspect in the process of the allocation of scarce resources.

The development of an economy without money does not enhance the realisation of equality. This is because the needs of the various individuals are varied and changing, and so the distribution of goods in this type of society would be arbitrary and therefore unfair. The issue of what would constitute just distribution could not be established, and instead the dictates of the state would represent an inadequate method by which goods would be given to the individual. It could be argued that distribution would be based on the importance of contribution to society. The problem is how this would be measured and evaluated. In other words the contentious question in this regard concerns what specific activity of labour would be more productive or worthwhile than another. In contrast to this arbitrary expression of the process of distribution it could be argued that the role of the price mechanism is more impartial and fair. It would be possible for people under socialism to have similar incomes, which would mean that they could acquire a similar amount of goods via the act of buying. In contrast within a moneyless economy the principle of distribution could degenerate into a situation in which: “Distribution according to contribution judged by the individual's subjective interpretation of his sacrifice.”(19) The application of this principle would soon result in bitter disputes, and the increasing inability to develop distribution in a manner that had the general approval of all of society. The problem with the moneyless society is that there is no common denominator for the various goods and services: “It is assumed that prices do not exist. There is no common standard by which to weigh the aggregate sacrifice against the aggregate output, which has been established as necessary. From this can be concluded that economic calculation cannot be undertaken in a socialist society with a moneyless economy.”(20)

Karl Kautsky argues that a moneyless economy could only work if the whole of society was treated as a single factory which handled the issue of distribution in an extremely centralised manner. (21) Hence the possibility of individual freedom would be replaced by the instructions and dictates of the state apparatus. In contrast the advantages of the price mechanism are that distribution would occur in terms of the significance of the role of the individual, and their variety of tastes and preferences would be acknowledged. This advantage would compensate for any inequality caused by different levels of income. This situation would also mean that society would be based on the production of consumer goods, and it would be possible to avoid the limitations of rationing and the disadvantages of an economy without money. It would also mean that the question of what is meant by distribution according to needs could be realised without any measure of extra-economic compulsion. Furthermore, groups of people, such as small traders would not be stigmatised, and instead their contribution would represent a valuable part of the economy. It is also necessary to argue that the limitations of trying to evaluate the value of labour according to work means that this approach is not superior to that of the price mechanism: “Another serious consequence of adopting the principle that working hours are the only determinate factor for value is that the central authority will have no indication of what and how much of the various goods is to be produced, and without that it may produce things which are of little or no interest to the members of the community.”(22)

The only conclusion that can be made from the understanding that the role of labour is a flawed method for economic calculation is to suggest that the only alternative is represented by the price mechanism. It is also necessary to make the point that even if we consider that labour is an important aspect of the value of a good, it provides no practical basis for understanding the process of exchange. What does the number of hours of labour incorporated into commodity A mean in terms of the exchangeability with commodity B? Instead of accepting this flawed situation we know that commodities effectively exchange with each other in terms of the role of the price mechanism. We know that Commodity A is worth £2 and so can be exchanged for four other commodities that are worth 50p each. This recognition of the relationship of price to calculation does not mean that it is also necessary to reject the role of value in terms of understanding the worth of a commodity. Instead the process of surplus value is inherent to the formation of the exchange value of a good, and without this relationship price would have no objective economic basis. But surplus value is inherent within the commodity and is not reflected in the distinct and individual act of purchase of the good by the consumer. What we have under consideration is on the one hand the act of production, and on the other hand the act of consumption. Marxist political economy has outlined the basis of production in the most explanatory manner, whist bourgeois political economy has understood the act of consumption. In order to develop a conception of calculation we have to avoid justifying dogmas about the importance of the value of labour, and instead recognise the significance of the price mechanism.

It has been argued by orthodox Marxists that an emphasis on the price mechanism represents a concession to bourgeois political economy. This criticism would only be true if we rejected our socialist objectives in order to accept the importance of the price mechanism. But it is possible to reconcile the aims of Marxism with recognition of the importance of the role of prices. Indeed it could be argued that the price mechanism is a progressive gain of capitalism that we would want to incorporate into the socialist economy. The alternative would seem to be the situation of an economy without money, markets and prices. But this situation could only be sustained by a barter economy. Such a development would not be acceptable to people who have had a long experience of the ability to obtain goods in an effective manner via the role of the market and the price mechanism. Most people are used to being consumers; they would not want to regress to an inferior position in the name of ideology. Instead they would want to become more effective consumers, and be able to purchase more goods. Indeed, surely the attraction of socialism would be that it could realise needs in a better and more effective manner. This aim would not be accomplished if the act of consumption was officially abolished. Hence the actual task is to promote improvement in the operation of the market in terms of increasing the availability of goods at a lower level of price. It would also be necessary to increase the range of goods available, and to develop them in such a manner that they would be able to overcome the problem of alienation. Thus commodities would no longer be an expression of alienation, and instead would enhance human potential in more meaningful ways.

However this argument in favour of the role of prices and money under socialism has still not solved the issue of calculation. It has been argued by defenders of capitalism that only this system can express a rational form of calculation. Thus it is implied that the extension of social ownership, and workers control, cannot represent the ability to realise economic calculation. It is necessary to take this criticism seriously and provide an answer that is able to establish a valid form of calculation within socialism. We have already recognised that this attempt to uphold calculation is not established by the conception of equilibrium prices. Instead this is an imaginary and formal resolution of a problem, and still approach implies that the role of a state planning agency has omnipotent wisdom. Thus it is necessary to try and develop a different methodology if we are to address the criticisms made by the bourgeois political economists.

The starting point for considering economic calculation is related to who is making the economic decisions within the socialist society. This means that either a state planning agency or the consumer decides what is to be produced for the purposes of consumption. The disadvantage of the latter approach seems to be that the economy would have an impetus towards the development of de-centralised production, which implies the generation of private ownership, in order to realise the many diverse needs of the consumer. Hence the only alternative is that the state organises the process of production, and so has a very important influence over the character of consumption. The problem with the latter approach is that the process of production is very inflexible, and so means that the ability to realise the needs of the consumer is limited. The only way in which these problems can be overcome is to establish a de-centralised economy in which diverse workplaces attempt to create the goods that met the needs of the consumer. The basis to ensure that this situation will not result in the domination of capital over labour is by the development of industrial democracy. If this possibility is lacking the situation of de-centralisation could provide an impetus for the restoration of capitalism. However it is the very fact that the role of workers control has been established which means that an important incentive has been created in order to overcome any tendency towards the restoration of capitalism. In this situation the de-centralised structure of the many different workplaces means that it is possible to produce a variety of goods that met the needs of the community.

But the issue of calculation remains. This situation can be tackled by the value of a particular good representing the combination of its cost and the demand of the consumer. In this sense the price will be defined by the relationship of supply and demand, but in order to make a profit it will express common sense if the price does not fall below its value. Hence there are limits to the operation of the market in that prices are not expected to fall below cost, but they are still generally responsive to the role of the market via the importance of the relationship of supply and demand. It may also be necessary to distort the market in that the most basic necessities will have a very low price such as bread, housing and fuel bills. What would correspond to the dynamics of the role of the market will be the many goods that generally are not expensive and yet their prices fluctuate in accordance with the changing character of the level of demand: “The extent to which a surplus or shortage of goods will serve as data for consumer preferences will depend on many factors....on the stability of the value of money, on the greater or smaller selection of goods, on whether the prices are variable or fixed, and in the latter case on whether the central authority's valuation coincides with that of the consumers.”(23)

This comment indicates that even in a greatly de-centralised socialist economy there will be be some form of centralised agency in order to establish priorities and aims. But, as the comment indicates this does not mean that such an agency will be able to collect and assess the data of the economy. Instead it will only in a general manner be able to provide some information concerning the economic activity of the public utilities, but the major expression of the performance of the economy will be the level of satisfaction of the consumers. This aspect will also relate to the ability of the workers to utilise their creativity to develop the highest quality in relation to the character of goods. In other words far from the consumer sector being something that is mistrusted by the state instead it will be celebrated as expressing the ingenuity of working people in a socialist economy. Thus it will be possible to indicate how the market can work efficiently in a socialist economy. Furthermore the demand of the consumer will enable the producers to calculate what is wanted and desired, and in what amounts. In addition, the issue of profits, which will enable investment to occur in the future production of a good, will largely depend on consumer preferences. If the consumer does not want a particular good, or in lesser amounts, this would be a reliable indication that the level of production should be reduced. This criterion does not apply to the public utilities which represent valued services which should be provided regardless of the levels of profit.

It could be argued that this type of economy cannot provide reliable criteria for calculation. This is because the dynamism of the role of consumer demand is always being modified and interfered with by the role of the state planning agency. This point is true, but it could also be made about a capitalist society, which often has high levels of state intervention. The point is that the important role of the consumer within the socialist economy means that price is important. It is the price, and its changes in accordance with demand, which enables the level of production to fluctuate. Hence the character of production is not based on bureaucratic planning that imposes arbitrarily defined prices which have little to do with satisfying the aspirations of the consumer. Instead the role of planning will be much reduced and replaced by more flexible targets that will be created by the level of consumer demand. These targets can be rapidly changed if consumer demand fluctuates.

It could be argued that the above outline does not tackle the major problem outlined by Von Mises which is that a socialist economy cannot calculate properly because it does not have a process of dynamic competition in relation to the means of production. This is a serious problem because the assumption is that the role of competition will not have an important role in relation to an area of production that is likely to be dominated by the activity of the state. However, a possible resolution of this problem is provided by the fact that the various workplaces, which produce particular goods, will compete with each other in order to buy the means of production. It will be the de-centralised character of the economy which means that economic calculation is upheld in a rational manner. This situation will not represent the competition of capitalism because it will be less drastic, and will not result in the closure of workplaces, but there will be genuine bidding process in order to obtain the means of production at the lowest possible price. The value of the means of production will then enter into the cost of production and influence the resulting price. If there was not a de-centralised economy based on different workplaces that enter into forms of competition, such as about the purchase of the means of production, it would not be possible to establish a systematic and rational conception of calculation. Hence if the state planning agency had overwhelming dominance it would not be possible to establish a valid understanding of calculation.

Thus we have established important aspects of calculation under socialism in that, firstly, the individual workplaces (companies?) will have the freedom to try and competitively bid for the means of production at the lowest level of price. Secondly, the various retail shops will have the freedom to alter the prices of goods in accordance with the dynamics of supply and demand. This will also mean that there will be some limited competition between the different shops. However, in the last analysis, the state planning agency should have the ability to ensure that goods do not become too expensive and so inaccessible to the public. But the very ethics of socialism will have an influence, and so the tendency will be for goods to be sold at lower rather than expensive prices. This situation will not distort the calculation process because the character of a consumer good is still defined by its price. The point is that the important role of price provides an objective and subjective basis of the significance of calculation.

The role of competition would have expressed an important aspect in the process. Firstly, in the situation of the buying of means of production by the various workplaces; secondly, in the creation of goods that people will want to buy. It could be argued that the process of competition will result in the generation of economic pressures that generates production for profit and the creation of the exploitative role of the capitalist. But this prospect will not occur because the significance of competition is secondary when compared to the economic requirements of the producers and the primary aim to realise the needs of the consumers. Competition under capitalism often results in the production of low quality goods that have limited demand. Instead the emphasis under socialism on the ingenuity and creativity of the producers will mean that goods are created that realise high levels of demand. Hence the economy will represent the ability to create a diverse collection of goods that is able to realise the aspirations of the consumer. In this manner destructive competition that results in unemployment will not occur because there will be minimal duplication and instead each workplace will be interested in creating distinctive products. Ultimately, the price mechanism will indicate the level of demand for goods. If the demand for the goods of a given workplace is very low, it will have the possibility to switch production to another good without redundancies. Instead its technicians will creatively discover the potential of new markets for a new product.

Hoff makes the important point that it is necessary to clarify what is meant by competition under socialism: “The shape competition is to take is of decisive importance in determining the solution and hence of evaluating it. For example, were they to go as far as to propose the introduction of competition between individuals (or groups of individuals) owing means of production, this would mean they had given up the attempt to solve the problem within the socialist framework. On the other hand if it is proved to have planned direction and competition at the same time this would show that the problem had not been sufficiently thought out. If production is to be in accordance with the plan of the central authority it cannot be related to price variations and the changing needs of the public.”(24) But the issues are not as polarised as Hoff contends. It is possible to have competition without undermining the character of the socialist economy. This means competition is not based on the pre-eminence of the private ownership of the means of production, and instead it represents the competition based on the striving to create goods of the highest levels of quality.

In contrast, Hoff suggests that without the competition of independent enterprises the only possibility is that the state planning agency defines the relationship between enterprises. This implies that competition is unlikely. He contends that if competition did occur in a serious manner within socialism it would imply the reduction of the quality of public services and a regression in the ability to create goods in order to realise needs. (25) But this stark choice is not necessary. Instead it is possible to reconcile the role of competition with the aims of socialism. This is because whilst competition is not allowed in relation to the activity of the public services, it is possible in terms of the creation of consumer goods. Hence the dynamics are generated that enable the ability to realise the production of use values that are able to express the highest levels of consumer aspiration becomes possible. The choice is not between state planning and its limitations, or the exploitative character of capitalism. Instead industrial democracy with its inherently de-centralised aspects means that socialism and competition can be reconciled.

Hoff actually outlines the opposition of the importance to the criteria of economic calculation when he comments: “In a society with an authoritarian central authority that can make decisions without taking the wishes of the individual into consideration, all data necessary for calculation is obtained by the authority's arbitrary fixation of prices. The prices of means of production can be the historical previous prices, those at which they are taken over, or arbitrary prices, fixed once and for all, or periodically, by the central authority. The prices of intermediate and final products can be fixed beforehand or calculated at the various stages of production and have added to them the costs incurred (the magnitude of which is determined by the central authority). The costs can – or not – include all costs, including profit, depreciation, obsolescence, rent and interest, actually paid out...... The position really is that since the state authority in such a society......fixes all prices, it can - irrespective of how it calculates and what use it makes of things – logically claim that its calculation is economic.”(26) This description is a useful summary of the lack of calculation in a society administered by a central planning agency. But Hoff cannot make the right conclusion from his own analysis. He is capable of making some perceptive criticisms of this economy without the principle of calculation. So far, so good, but what is the alternative to this form of economy? In this respect no answers are forthcoming. Instead it is suggested in a vague manner that what is necessary is to reconcile the role of the state planning agency with the importance of calculation. The problem is that he has also outlined serious reasons why this relationship is difficult, if not impossible. Instead we have to have a different conception of socialism which would make the possibility of calculation more feasible. This understanding can only be realised in terms of elaborating a de-centralised version of socialism. This may reject the importance of a central planning agency, but there is no alternative if the issue of calculation is to be resolved.

In conclusion we can accept that the attempt to establish calculation by the role of a state planning agency is not likely to succeed. This is because the immense amount of data at its disposal cannot establish the premises and basis of calculation. Instead the decisions taken by the state planning agency will express an arbitrary character, or the imposition of its preferences without any rational and objective basis. The possibility to promote calculation within socialism will only be possible if the economy combines industrial democracy, de-centralisation, and the freedom of the consumer via the role of the price mechanism. This situation will mean that the producers have the freedom to create goods in response to the role of the market, and be able to promote the selling of their goods in a competitive environment. It will be argued that this situation represents a type of capitalism via the role of workers co-operatives. But the point is that the imperatives of capital are not dominant over labour within this situation. Meszaros makes the point that the primary character of the capitalist system is the ability of capital to establish its alienated power over labour within the relations of production. He makes the additional point that: “For, obviously, it is quite impossible to gain control over the alienating, dehumanizing and destructive determinations of capital, which proved to be uncontrollable throughout history, without understanding its nature.”(27)

The understanding of socialism has been obscured because it has been defined in terms of the extension of state ownership, which actually is of secondary significance, and the issue of the influence of capital has been underestimated. There is only one way in which this hegemony of capital can be overcome, which is to establish the primary significance of labour within the relations of production. But there is an additional problem. A socialist economy is not practical and workable unless it resolves the issue of calculation. Hence industrial democracy has to be developed in such a manner that it is compatible with the requirements of calculation. This cannot be achieved without the establishment of the connection of workers control of production with the limited role of the market and the importance of the price mechanism. The very genuine character of industrial democracy will ensure that these aspects of economic activity do not combine in order to promote the re-emergence of the domination of capital. In this manner the irrationality of the standpoint of Hayek is his attempt to imply that the role of labour is dependent on capital, in contrast to the obvious fact that only labour can create capital. However, Hayek has raised a genuine problem of how the dispersed knowledge within the economy can become translated into an objective basis for rational calculation. Meszaros is right to suggest that Hayek performs an ideological role which means that: “The 'competitive' norms of 'free market' economics are meant to constrain and keep permanently in their position of structural subordination those who find themselves at the receiving end of the 'extended economic order', i.e., the overwhelming majority of mankind.”(28) But this reactionary ideological aspect of Hayek's work does not mean he is not capable of asking serious questions about the validity of socialism. Indeed, his service for capital would logically mean that he asks these types of questions.

It would be idealist to expect that socialism could arise without any serious questions being asked about its validity and capacity to be economically viable. The most important of these questions is the issue of calculation. This has been ignored because many Marxist theorists continue to insist that communism means a society without money. Hence the issue of calculation is defined as being irrelevant. But the problem is that this type of society would be one of chaos unless strict state coercion was implemented. The attempt to develop a society without markets would be at the expense of political freedom. Hence the issue of the role of calculation under socialism is compatible with the intention to maintain democracy within a socialist society. Only on the basis of calculation will it be possible to allocate and consume resources in the most rational manner. Without the application of this principle socialism will be a society of arbitrary planning, waste and an absence of quality control. Furthermore, in intellectual terms if the issue of calculation is resolved in theoretical and practical terms, the view that socialism is too complex to construct will be definitively answered.

Meszaros is generally right when he suggest the answer to the issue of complexity within socialism is to maintain: “Naturally it is inconceivable to remove all complexity from an all-embracing mode of social metabolic control. However there is no reason at all why that should be done if the social agency that must carry on the vital functions of societal reproduction can positively control the productive and distributive processes on which the development of the society in question, and the self-realisation of its individuals, depends.”(29) In other words the response to the problem of complexity is to maintain that the creativity of labour can be the basis to resolve outstanding economic issues, and expresses the possibility to develop socialism. But this approach will also become one-sided if we try to ignore, or dismiss outstanding intellectual issues like the calculation problem. In a primary sense, Meszaros is right to imply that all theoretical questions are capable of being resolved if labour is able to effectively establish its control of the social-metabolic economic order. But this very aim will also be advanced if we attempt to resolve significant issues that appear to represent an intellectual obstacle in relation to the achievement of the success of socialism.

The issue that has been raised by the defenders of capital in order to question the feasibility of socialism is that of calculation. They suggest that this issue has been resolved by capitalism, and this is why it is a superior, if not eternal system. Hence it is an important task for defenders of socialism to outline arguments that attempt to refute the views of the supporters of capital. It is true that these views will not be definitive, because only the actual practice of socialism will indicate whether it can resolve the problem of calculation. But by attempting to solve this question at the level of theory will indicate that Marxists are not dogmatic, and instead are ready to tackle complex matters and therefore contributes to the future success of socialism. Unfortunately, non-market Marxists place the requirements of dogma as being more important than resolving complex theoretical questions like the calculation problem. Thus one non-market socialist contends: “People will be free to take whatever they choose from the consumption outlets (shops without cash registers) in the new society without making any payment, since money will not exist....Non-market socialists are confident that society could run smoothly on this basis, without people becoming insatiably greedy or indulging in recklessly extravagant consumption. Our confidence derives from a number of considerations. First the production of useful articles will be much greater in the new society than in capitalism, not only because production would be freed from the constraints of the market, but also because all these presently engaged in activities which are specific to a commercial society......could redirect their efforts towards production. Second, since greed and conspicuous consumption are reactions to scarcity we can expect we can expect these forms of behaviour to disappear in a society which raises production to the level where it guarantees everyone an abundant supply of all that is required for a comfortable and satisfying life. Third, in a society which is based on co-operation rather than competition, not only would the individual sense of solidarity induce him or her to exercise self-control on occasions when this was necessary, but social disapproval would be a powerful restraint on any who were disposed to reckless extravagance.”(30)

It is interesting that the emphasis of this definition of non-market socialism concerns the role of ethically defined behaviour. The issue of the relationship of production and distribution is solved by the morality of solidarity and moderate consumption patterns. Indeed the perspective of solidarity basically resolves all issues. This simplistic and unreal conception of socialism fails to provide any answer to the issue of calculation. Indeed, the assumption is that this is not a question to be resolved. The conception of this understanding of socialist economy is based on good intentions and not by a study of practical realities. Non-market socialism represents a good idea that is not based on addressing serious objections to its viewpoint. Primarily, it cannot provide a valid alternative to the continuation in a new form of the market and the price mechanism. In other words non-market socialism implies that human nature will be transformed until people are able to act at impossibly high levels of altruism and co-operation. The role of the individual is not explained, but primarily this approach provides no guidance as to how the domination of capital is to be overcome and replaced by the significance of labour. This utopian standpoint cannot represent a substitute to the continued attempt to elaborate realistic conceptions of socialism.

FOOTNOTES:

(1)Don Lavoie: Rivalry and Central Planning, Cambridge University Press 1985 p22

(2) ibid p38

(3) ibid p46

(4) ibid p54

(5) ibid p59

(6) ibid p89

(7) ibid p91

(8) ibid p110

(9) ibid p121

(10) ibid p127

(11) ibid p127

(12) ibid p144

(13) ibid p173-174

(14)TJB Hoff Economic Calculation in the Socialist Society, William Hodge London 1949 p11-13

(15) ibid p13

(16) ibid p15

(17) ibid p31

(18) ibid p199

(19) ibid p44

(20) ibid p45

(21) ibid p50

(22) ibid p59

(23) ibid p81

(24) ibid p158

(25) ibid p164-165

(26) ibid p176-177

(27)Istvan Meszaros: Beyond Capital, Merlin Press London 1995 p112

(28) ibid p121

(29) ibid p799

(30)John Crump: Non-market Socialism in the Twentieth Century, in Non-Market Socialism in the nineteenth and twentieth centuries edited by Maximilien Rubel and John Crump p43-44