

# A Socialist Price System, Answering the Austrians

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## Abstract

The Austrian economists - Mises, Hayek and Lavoie - fail to show that a system based on social ownership of the means of production and operated by "socialist angels" could not effectively deploy a decentralized price system. Hence, their economic calculation case against socialism falls down; and so the debate over socialism resides exclusively in the domain of motivation and behavior. There is no separate calculation problem.

## Introduction

Economists of the Austrian School believe they have shown that an economic system based on social ownership of the means of production would inevitably have an insurmountable problem with economic calculation, and this would leave it groping in the dark and unable to direct scarce resources to their most valuable use.

According to one of the School's leading contemporary members:

... it must rank among the fundamental contributions to economic science in the twentieth century (Boettke, 2000, 13).

The School contends that this problem exists even if people were motivated to do their best. The emergence of the new person for the new society would not suffice.

This argument is particularly convenient because it allows you to dismiss social ownership without having to get into interminable and inconclusive arguments about whether it is against human nature. Furthermore, excuses for the "failure of communism" such as capitalist encirclement, the backwardness of the countries concerned, major political errors or the victory of capitalist roaders become irrelevant. It could never have succeeded. The political malaise was ultimately due to this underlying economic impossibility problem.

The calculation debate began in 1920 when Ludwig von Mises, the most prominent figure in the Austrian pantheon, challenged claims by proponents of social ownership that market prices could be superseded by calculation in kind or in labor units.(Mises, 1920) This was followed by another debate on whether a system based on social ownership could instead have its own

decentralized price system. The first debate is still slowly smouldering away, however, it will not be touched on here. (See Cockshott and Cottrell, 1993a and 1993b) and Horwitz, 1996).) In this paper I will confine myself to challenging the Austrian position in the second contest.

Throughout the paper I will be referring to “socialist angels”. This may be annoying but it will remind the reader that the calculation problem, if it exists, is impervious to the best of human endeavors; and if something is a problem only in the absence of socialist angels then we have moved beyond the calculation debate into the realm of motivation and behavior.

I use the words “socialism” and “socialist” here interchangeably with social ownership even though they are now more often than not used to refer to government ownership and intervention in a capitalist society. Members of the Austrian School will be referred to as Austrian economists or just Austrians in keeping with their usage.

Mises and his most famous student the future Nobel laureate Frederick Hayek had become aware of proposals for what they referred to variously as “artificial markets” (Mises 1981 (1922), 137), “quasi-markets” (Mises 1998 (1949), 701) and “pseudo competition” (Hayek, 1935, 237). Hayek had this to say about them:

Although it is not yet possible to refer to published work on these lines, what one has learnt about them in conversations and discussions is probably sufficient to make worth while some examination of their content.

In many respects these plans are very interesting. The common fundamental idea is that there should be markets and competition between independent entrepreneurs or managers of individual firms, and that in consequence there should be money prices, as in the present society, for all goods, intermediate or finished, but that these entrepreneurs should not be owners of the means of production used by them but salaried officials of the State, acting under State instructions and producing, not for profit, but so as to be able to sell at prices which will just cover costs (Hayek, 1935, 218).

The Austrian contention is that the price mechanism cannot do without two things that are necessarily absent from social ownership, namely, markets for means of production and capitalists. After addressing these two claims I will turn to the critique by Hayek of the “neoclassical socialists”. This is a strawman that invariably pops up when Austrian economists discuss the debate. Finally, I speculate on how socialist angels could create a better price system than the one under capitalism.

## Do we need markets for means of production?

By the very nature of social ownership, a socialist economy could not have market exchanges between firms, if by market exchange we mean the transfer of ownership. Instead a decentralized price system in such an economy would have to entail the exchange of custody over what would always remain socially owned.

Intermediate inputs would start out in the custody of firms that produce them. Then for production to proceed their custody would be transferred to user firms and the transaction would

occur through a decentralized purchasing process where these firms would spend either revenue from past transactions, lines of credit or funds provided for investment.

In his first piece on the calculation theme, Mises denies the very notion that exchanges between firms could be ones of custody rather than of ownership but provides no reason for holding this view. Here he wrote:

We might conceive of a situation, in which exchange between particular branches of business is permitted, so as to obtain the mechanism of exchange relations (prices) and thus create a basis for economic calculation even in the socialist commonwealth. Within the framework of a uniform economy knowing not private ownership of the means of production, individual labour groups are constituted independent and authoritative disposers, which have indeed to behave in accordance with the directions of the supreme economic council, but which nevertheless assign each other material goods and services only against a payment, which would have to be made in the general medium of exchange. It is roughly in this way that we conceive of the organization of the socialist running of business when we nowadays talk of complete socialization and the like. But we have still not come to the crucial point. Exchange relations between production-goods can only be established on the basis of private ownership of the means of production. When the "coal syndicate " provides the "iron syndicate " with coal, no price can be formed, except when both syndicates are the owners of the means of production employed in their business. This would not be socialization but workers' capitalism and syndicalism (Mises 1920, 111-112).

When he comes to what he refers to as "artificial market" proposals, he presumes that the proponents are intending to retain markets but have forgotten that markets are impossible without private owners seeking gain.

Unfortunately the supporters of such proposals do not see (or perhaps will not see) that it is not possible to divorce the market and its functions in regard to the formation of prices from the working of a society which is based on private property in the means of production and in which, subject to the rules of such a society, the landlords, capitalists and entrepreneurs can dispose of their property as they think fit. For the motive force of the whole process which gives rise to market prices for the factors of production is the ceaseless search on the part of the capitalists and the entrepreneurs to maximize their profits by serving the consumers' wishes. Without the striving of the entrepreneurs (including the shareholders) for profit, of the landlords for rent, of the capitalists for interest and the labourers for wages, the successful functioning of the whole mechanism is not to be thought of. It is only the prospect of profit which directs production into those channels in which the demands of the consumer are best satisfied at least cost. If the prospect of profit disappears the mechanism of the market loses its mainspring, for it is only this prospect which sets it in motion and maintains it in operation. The market is thus the focal point of the capitalist order of society; it is the essence of Capitalism. Only under Capitalism, therefore, is it possible; it cannot be 'artificially' imitated under Socialism (Mises, 1951 (1936), 137-138).

All this simply muddies the waters. What matters is whether a price system based on the exchange of custody could match (or even surpass) one based on exchange of ownership. This is a question explicitly addressed by the Austrian economist Don Lavoie many years later. According to Lavoie:

[I]t is only through the rivalrous bidding of independent owners of the means of production that prices tend to have the coordinative "meaning" necessary for their function in economic calculation (Lavoie, 1985, 181).

And elsewhere in a similar vein:

It is precisely through rivalrous contention by separate and independent owners that market participants are able to impart information to the prices of factors of production, prices that in turn allow them to intelligently appraise alternative avenues of production. Producers' good prices are not "derived" logically from consumers' goods prices, they are "imputed" through a historical process of competition (Lavoie, 1986, 8).

Lavoie insists that this is a calculation problem rather than a motivation one.

This does not, however, reduce to the mere question of "incentives" in the narrow sense of psychological motivation. The "incentives" of the profit and loss system do not merely motivate action; they inform it (Lavoie, 1985, 177).

And some years later he says:

Profit in this view is not so much an inducement to effort as a signal about where opportunities lie. The role of profits is not primarily to motivate people to do the right thing but to find out, through the process of interplay itself, what the right thing to do might be (Lavoie, 1990, 78).

The contention is that socialist angels would not be able to deploy a decentralized price system to equal effect. However, this is not at all obvious. There is no difficulty in imagining numerous firms in each sector, all trying their own way of doing things and bidding for resources, with consumer demand ultimately driving it all. I can see tensions between rivalry and cooperation that could cause challenges for socialist angels but not disastrous consequences.

Socialist angels who by their nature cooperate fully with others would have to resist the temptation to hold back in their dealings with rivals even when it might cause some personal disadvantage. I am thinking here of where their assistance leads to a rival coming up with something better and cheaper, and as a result their own efforts come to nothing. This would be a rather disagreeable experience. By the way, we should keep in mind that we are in a world where material gain does not motivate people's actions, so it is not there to provide an incentive to be underhanded.

Cooperation could also be undermined if there is too much reliance on the bottom line. For example, if a firm came up with a way of reducing costs, a product improvement or a selling opportunity, cooperation would require it to tell other firms about it, while maximizing profits would require it to keep it under wraps. However, this would only be a serious problem if there were some great difficulty in ensuring that firms were not disadvantaged or marked down for

being cooperative. Good reports from other firms that benefited from their cooperative behavior should count for something.

## Do We Need Capitalists?

Mises and Hayek contend that the "competitive" solution could not handle the important business decisions and as a result these would have to stay with some central authority. It is all very well to have enterprises trading with each other in order to provide consumers with what they want. However, the immediate provision to consumers is only part of the story and the least important from a calculation point of view. You also have to consider adjustment for change and growth, in other words production for investment.

In *Socialism*, we read

"The problem of economic calculation is a problem which arises in an economy which is perpetually subject to change, an economy which every day is confronted with new problems which have to be solved. Now in order to solve such problems it is above all necessary that capital should be withdrawn from particular lines of production, from particular undertakings and concerns and should be applied in other lines of production, in other undertakings and concerns. This is not a matter for the managers of joint stock companies, it is essentially a matter for the capitalists — the capitalists who buy and sell stocks and shares, who make loans and recover them, who make deposits in the banks and draw them out of the banks again, who speculate in all kinds of commodities (Mises, 1951 (1936), 139).

And in *Human Action* he makes a similar point:

The market of the capitalist society also performs all those operations which allocate the capital goods to the various branches of industry. The entrepreneurs and capitalists establish corporations and other firms, enlarge or reduce their size, dissolve them or merge them with other enterprises; they buy and sell the shares and bonds of already existing and of new corporations; they grant, withdraw, and recover credits; in short they perform all those acts the totality of which is called the capital and money market. It is these financial transactions of promoters and speculators that direct production into those channels in which it satisfies the most urgent wants of the consumers in the best possible way. These transactions constitute the market as such. If one eliminates them, one does not preserve any part of the market. What remains is a fragment that cannot exist alone and cannot function as a market (Mises 1998 (1949), 704).

When they get to specifics they share two concerns. The first, and I think the most important of these, relates to risk and the fact that people would not have "skin in the game". The second is the view that the big business decisions are beyond the purview of the basic economic units of which such a system would comprise. I will now look at the risk and purview questions in turn.

## No Skin in the Game

Mises and Hayek argue that the “director” at the center would have to keep hold of the reins because people could not be trusted with investment funds. So, the central authority could not simply act as a banker providing funds to units that promise the best returns because unlike capitalists they are not putting up money of their own.

According to Mises:

All those who can bid for these funds have, as is self evident in a socialist order of society, no property of their own. In bidding they are not restrained by any financial dangers they themselves run in promising too high a rate of interest for the funds borrowed (Mises 1998 (1949), 705).

And then according to Hayek:

It is not possible to conceive of this central authority simply as a kind of super-bank which lends the available funds to the highest bidder. It would lend to persons who have no property of their own (Hayek, 1935, 232-234).

Mises and Hayek, however, have different views of the problem.

According to Mises in *Socialism*:

... [S]uch a state of affairs would simply mean that those managers who were less cautious and more optimistic would receive capital to enlarge their undertakings while more cautious and more sceptical managers would go away empty-handed (Mises, 1951 (1936), 140).

And in *Human Action* we read:

If the director were without hesitation to allocate the funds available to those who bid most, he would simply put a premium upon audacity, carelessness, and unreasonable optimism. He would abdicate in favor of the least scrupulous visionaries or scoundrels (Mises, 1998 (1949), 705).

You could certainly imagine some socialist angels being more discerning and astute than others. However, we would need a reason to believe that this would have a disastrous impact, indeed so disastrous that it would be necessary for the "director" to retain control.

In *Human Action*, we can safely say that Mises has moved well outside of the calculation debate into the realm of motivation and behavior. We are no longer dealing with the differing foibles and aptitude of socialist angels but the behavior of unscrupulous scoundrels.

Hayek sees the problem in a different way:



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. .... 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? ....

[E]ven the best entrepreneur will occasionally make losses and sometimes even very heavy losses. Is he to be blamed if his capital has become obsolete because of an invention or a change in demand ? How is it to be decided whether he was entitled to take a certain risk? Is the man who never makes losses because he never takes a risk necessarily the man who acts most in the interest of the community? There will certainly be a tendency to prefer the safe to the risky enterprise.

But risky and even the purely speculative undertakings will be no less important here as under capitalism. ... How long is a formerly successful entrepreneur to be suffered to go on making losses? If the penalty for loss is the surrender of the position of "entrepreneur" will it not be almost inevitable that the possible chance of making a loss will operate as so strong a deterrent that it will outbalance the chance of the greatest profit? Under capitalism, too, loss of capital may mean loss of status as capitalist. But against this deterrent is always the attraction of the possible gain. Under socialism this cannot exist. (Hayek, 1935, 234-5).

What Hayek is saying is that capitalists take risks knowing that there is the prospect of a considerable profit and as long as they do not put all their eggs in one basket they can survive losses until the next big win. The market is the judge. They do not have bureaucrats looking over their shoulder who they have to second guess.

Hayek's reasoning seems more compelling than that of Mises, given that we are looking at ongoing behavior rather than a one-off event. And I can imagine there would be a limit to the extent that even socialist angels would be prepared to endure being blamed for blunders that were not their fault and as a result would play it safe. If this were a problem, it would indeed mean reduced performance but would it really be an economy operating in the dark and doomed to stagnation? Would it be enough of a problem to make central direction of investment necessary?

I think the problems that Mises and Hayek raise would be greatly limited in the presence of a few weak assumptions.

Firstly, those dispensing the funds would have acquired some ability to assess proposals and then also to determine the causes of failure. There is no reason to think that the funding system would not have extensive knowledge and expertise. You would have people who know a lot about particular industries and even the particular firms. In this way they would be better equipped to reject cavalier proposals. At the same time they would have the expertise to keep an eye on approved projects and reach informed views on why a project is over budget or failing to make a good return once completed. They would then be in a position to better assess whether those who put up the proposal should have anticipated these problems.

Secondly, investment matters would be very much in open view and visible to a whole range of parties. This would be of benefit to the funding agencies but also to everyone else who has an interest in good investment choices and outcomes. This would include others working in the firm or in the industry. So the chance of whimsical proposals slipping through would be reduced. Likewise, many people would be around to assist the process of determining why things went wrong.

Thirdly, proposals would come from groups rather than individuals and so place them under greater scrutiny. Mises contends that decision by committee would stifle initiative (Mises, 1920, 121). If that is a problem would it be worse than under capitalism where important decisions frequently require agreement among a number of parties? And let us not forget that quite a number of major firms have had co-founders. Microsoft, Apple and Hewlett-Packard immediately come to mind.

I am not equipped to determine whether the attitude of socialist angels to risk would be better or worse than that of capitalists and their highly paid subordinates. However, I think it is safe to say that the former would seriously assess the prospects of a proposal and where they felt the risk was high to only propose or approve it where the upside appeared particularly good. Hence, any problems in this area would be a rather thin basis on which to rest a calculation case against social ownership.

## Narrow Purview of the Firm

As well as seeing a problem of unreliability in the face of risk and uncertainty, Mises and Hayek also contend that the more dynamic business decisions are not in the purview of the firm and therefore would have to be assigned to the center.

Mises questions the competence of those who would be running firms to deal with the bigger entrepreneurial questions. He contends that if they are like managers of capitalist firms they would be narrowly focused on their own operations. In *Socialism* he says:

Under Capitalism, the capitalist decides to whom he will entrust his own capital. The beliefs of the managers of joint stock companies regarding the future prospects of their undertakings and the hopes of project-makers regarding the profitability of their plans are not in any way decisive. The mechanism of the money market and the capital market decides. This indeed is its main task: to serve the economic system as a whole, to judge the profitability of alternative openings and not blindly to follow what the managers of particular concerns, limited by the narrow horizon of their own undertakings, are tempted to propose (Mises, 1951 (1936), 140).

And then in *Human Action* we read:

Our problem does not refer to the managerial activities; it concerns the allocation of capital to the various branches of industry. The question is: In which branches should production be increased or restricted, in which branches should the objective of



production be altered, what new branches should be inaugurated? With regard to these issues it is vain to cite the honest corporation manager and his well-trying efficiency. Those who confuse entrepreneurship and management close their eyes to the economic problem (Mises, 1998 (1949), 704).

I believe Mises is greatly understating the role of the people who run capitalist firms. I think you will find that they tend to focus on the more strategic issues while having others concentrate on day-to-day production matters. They decide to expand and contract activities, and negotiate mergers. They also found and run startups. I see no reason why socialist angels could not do the same. They may of course, just as firms do now, call in outside advisers to assist with anything about a new project that is not sufficiently familiar to people on staff.

Certainly, as is presently the case, they would depend on people outside agreeing to fund their proposals. The latter would need to be convinced that they had sufficiently good prospects of high returns; and in the course of their assessment they may well draw on a broader perspective than that of the applicant.

But even here are we necessarily dealing with some central Leviathan? Certainly, you would expect that a central authority would be ultimately responsible for funding all investment. As the one and only "stockholder", you could imagine it receiving all net revenue from the units and then redistributing it to projects offering the highest return. This could be very hands-on but there is nothing about social ownership that rules out a very hands-off approach. For example, there may be a central policy on what share different sectors are to receive but then again there may well not be.

The system could also be quite decentralized by introducing numerous funding agencies. This would deal with Lavoie's concern about diversity of approaches as applicants could knock on a number of doors. The center would need a process of determining how funds are distributed among the agencies. For example, financial success of the existing portfolio would be a simple rule and very hands-off; or more hands-on approach would devote some effort to looking beneath the raw numbers.

Hayek contends that units could not be left to make investment decisions because they affect the structure of the industry.

The decision about the amount of capital to be given to an individual entrepreneur and the decision thereby involved concerning the size of the individual firm under a single control are in effect decisions about the most appropriate combination of resources. It will rest with the central authority to decide whether one plant located at one place should expand rather than another plant situated elsewhere. All this involves planning on the part of the central authority on much the same scale as if it were actually running the enterprise. (Hayek, 1935, 236-7)

This is an odd view. If capitalist firms can manage to invest autonomously why couldn't economic units under social ownership? He also cites a book on industry structure he believes bolsters his case.

For a more detailed discussion of how the size of the individual firm is determined under competition and of the way in which this affects the appropriateness of different methods of production and the costs of the product, cf. [(Robinson, 1931)] (Hayek, 1935, 236).

Unfortunately with libraries closed for the pandemic I cannot obtain a copy, however, one review of the book makes clear that it examines what determines the optimum size for firms and operations, in other words the size that will deliver the least cost per unit of output (Florence, 1932). In particular, Robinson discusses the effect on firm size and structure of economies of scale in technology, management, finance, marketing and coping with risk .

I can see no obstacle to socialist firms getting together whenever necessary with other firms in their own and related industries to redraw boundaries. Firms would look at the extent that they should vertically integrate operations or hive some off. This would involve taking on bits from other firms and also giving away bits.

Hayek also contends that "pseudo competition" would have a problem deciding whether a going concern is making the best use of resources and whether they should be transferred elsewhere. As he points out, resources constantly shift between firms under capitalism and this would be equally advantageous in a socialist state. He asks:

What is to be the decision if another entrepreneur promises to get a higher return out of the plant (or even an individual machine) than that on which the present user bases his valuation? Is the plant or machine to be taken from him and to be given to the other man in his mere promise (Hayek, 1935, 235)?

Hayek reminds us that under capitalism the firms that are more profitable pull resources away from the less profitable and this is made possible by their right to retain and deploy these profits. In this way resources automatically shift to those who would make best use of them. He asks whether socialist firms would be allowed to retain profits and use them for this purpose.

In a capitalist firm owned by individuals, they can choose to plough back profits, invest them elsewhere or consume them. In a joint stock company, some profit may be retained with the rest going to stockholders. How much is retained is a financial balancing act. It needs to avoid deterring investors by offering the advantages of more equity and higher dividends in the future.

If there is to be scope for profit retention where the socialist state is the only stockholder, there would have to be some other arrangement. What that could be is not something I am in a position to determine. However, I can think of two things that would reduce its importance: firstly, quick and simple approval processes for funding of small scale increases in capacity; and secondly, widespread use of leasing for premises and moveable equipment where the regular payments would be covered by the increased revenue. As for the firms in present possession of

the assets, one could readily imagine them selling equipment or terminating leases if this improved their bottom line.

## Hayek's Retreat?

It is interesting that Hayek acknowledges that the calculation problem is not immediately obvious:

At first sight it is not evident why such a socialist system with competition within industries as well as between them should not work as well or as badly as competitive capitalism. All the difficulties one might expect to arise seem likely to be only of that psychological or moral character about which so little definite can be said (Hayek, 1935, 232).

Furthermore, his conclusion is not the crisp and clear claim that economic calculation is logically impossible. Rather, he sees a serious but uncertain level of impracticality and underperformance.

It must again be pointed out here that general considerations of the kind which can be advanced in a short essay can lead to no decisive conclusions. Only by intensive application of analysis on these lines to the phenomena of the real world is it possible to arrive at approximate estimates of the quantitative importance of the phenomena which have been discussed here (Hayek, 1935, 240).

Logical impossibility does not require empirical investigation and can indeed lead to decisive conclusions. This is clearly a retreat by Hayek from what is supposed to be the great Austrian contribution to comparative economics.

## The Neoclassical Socialists

In any discussion of the calculation debate much is made of the economic models or proposals presented by the neoclassical socialists, particularly Lange (1937) and Dickinson (1939), and then the subsequent rebuttal in Hayek (1940).

The former endeavor to show that their models are comparable to the static equilibrium model of neoclassical economics where prices are determined by the trial and error process of Walras' auctioneer and are given to producers as "parameters" rather than things for them to determine. However, instead of the auctioneer they have a pricing body that looks at inventories. Prices are raised if inventories are low and brought down if high. Hayek was quick to point out that such a model is not applicable to the real world and does not have a proper price system.

In a decentralized price system, prices are not simply parameters given to firms. Instead, they bid inputs away from other less valued uses and offer their output at prices that undercut more costly alternatives. Waiting for central inventory-guided adjustment in the case of excess demand would mean a mad scramble with first in best dressed and no ability of producers to

increase supply by bidding inputs away from other uses. In the case of a new low cost producer, there would be no ability to take business away from a high cost producer by undercutting them. Presumably, they would first have to create a glut that is noticed by the adjustment agency.

Apart from this fundamental limitation of parametric pricing, there are also practical problems to consider. Firstly, some goods and services are one-offs:

Wherever we have a market for a fairly standardized commodity, it is at least conceivable that all prices should be decreed in advance from above for a certain period. The situation is, however, very different with respect to commodities which cannot be standardized, and particularly for those which today are produced on individual orders, perhaps after invitation for tenders. A large part of the product of the "heavy industries," which, of course, would be the first to be socialized, belongs to this category. Much machinery, most buildings and ships, and many parts of other products are hardly ever produced for a market, but only on special contract (Hayek, 1940, 188-89).

Also, most goods can be broken down into 100s or 1000s of varieties often with different costs and there is a constant flow of new goods or varieties of existing ones. Even identical goods differ in terms of required time of delivery and this can affect the cost. If pricing were not left to those closely involved, there would be excessive lumping together of items and untimely price adjustment.

Because of the prevailing neoclassical mental straight jacket, economists as a whole considered that Lange had answered Mises and won the debate (Boettke, 2000, 15). The Austrians understandably felt aggrieved by this. However, being correct in showing that these models do not have a proper decentralized price system does nothing to further the argument that socialism could not have such a system.

Nevertheless, this has not stopped contemporary Austrian economists from turning it into a strawman. The neoclassical models are deemed to be *the* case for a socialist price system. It is true that that was all that was offered, and that in the neoclassical milieu no one felt the need to do better. And since then the 'socialist' side of the conversation has settled into even more problematic solutions such as market socialism and syndicalism. These confront us with the murky question of whether they are still social ownership and the problems of financial incentives under such arrangements. That is a different discussion for another time.

## Prospects of a better price system

If there are no obstacles to socialist angels developing a quite satisfactory price system, it is no longer out of court to look at ways in which they could do a better job than capitalism. Once again I will remind the reader that we are assuming there are no motivation/behavior problems sabotaging socialism. If we go there we are moving outside the calculation debate. Here I examine some of the more important cases where we could expect to see improvement.

The first that comes to mind is the treatment of the external costs and benefits that are not included in the profit and cost calculations of capitalists. For example, firms could come together to decide on how to deal with the environmental costs of their operations. They would do a better job than those presently performed by outside bureaucrats. Another case would be when firms in a sector put in a joint request for funding of research and development of common interest, they would provide an honest assessment and not exaggerate its value.

Then there is the tax system. I would suggest that socialist angels would have no difficulty devising a less distorting and expensive tax system. You could imagine little pressure for a progressive income taxes because wage rate inequality would be within narrow bounds and would be recognized as there for good reasons, and ought not be undone through the tax system. Even with income not acting as a motivator of performance, there can still be reasons for having some income differences. Simply relying on people's desire to work may lead to less than the desired output if they also have far too much attachment to non-work activities. To get around this, those who work more would be paid more. Also extra pay may be required to attract people away from more preferred to less preferred but more highly valued work. Here, the only tax distortion would be the so-called income effect where people work longer to make up for their reduced income after tax.

Another tax they could more readily use is a poll tax. Under capitalism it is likely to cause riots because it would hit the poor and vulnerable quite hard. This tax would also encourage work because you have to work to pay for it.

I cannot imagine any reason for taxing profits because they already belong to the state. However, if they were taxed, socialist angels could be relied upon not to engage in tax avoidance or evasion. Tax collection, compliance and avoidance costs would be a tiny fraction of what they are now.

Another problem that socialist angels would not have is the price distorting effects of vested interests. The Public Choice literature has done a good job of showing how capitalist governments are thoroughly corrupt and cater to vested interests. These are people who want the government to enhance the value of their assets, their private property, by measures such as subsidies or protection from competition.

Then there is the beneficial effect on prices of greater transparency. As mentioned above firms would share information about reducing costs and temporary shortages. This would lead to more rapid costs reductions and price adjustments than under capitalism where this information only slowly leaks out and in the meantime the firm with the information limits supply and maximizes profits.

Another way that the price system under socialism could be superior is if it is able to avoid crises and business cycles. Hayek says that the "competitive solution" would be expected to have crises just like capitalism and so would lose one of the claimed advantages of socialism.

But there is no reason why a competitive socialist system should be in a better position to avoid Crises and unemployment than competitive capitalism. Perhaps an intelligent monetary policy may reduce their severity for both, but there are no possibilities in this respect under competitive socialism which would not equally exist under capitalism. (Hayek 1935, 240).

While I am in no position to pronounce on the causes and cures of economic crises, I can observe that the system being discussed lacks some of the features you normally associate with them.

Firstly, aggregate demand is assured. The government can always spend the net revenue they receive from firms and the taxation they receive from individuals. There could be a problem if the savings of the latter are not matched by consumer borrowing and deposit drawdowns. However, if people stubbornly refuse to increase their consumption, despite low interest rates, the government could either borrow some of these funds or increase taxation.

I cannot see any avenues for serious financial instability. A government's debt would be limited to temporary balance of payments deficits with other countries and any aforementioned borrowing from individuals' savings. It owns the net revenue from firms and would not have to borrow from itself. Investment funds provided to firms could be grants, and if they were loans they could be easily forgiven or rescheduled because the funding agencies are not financial intermediaries with debts of their own.

Finally, I do not see how the Austrian theory of the business cycle would apply here. It is a credit theory of crisis that blames fractional reserve banking made worse by loose government monetary policy (Bateman, 1994). A boom is set off by the resulting low interest rates that encourage more longer term investments unmatched by the necessary freeing up resources by reduced consumption (and so increased savings). This comes home to roost as a crisis when not all the investment plans can be profitably completed. Under the system we are discussing, the government would do all the saving and investing and could ensure they match. It would receive net revenue and then reinvest it.

## Conclusion

Austrian School economists are on shaky ground when they claim that they have a calculation case that rules out the use of a decentralized price system in a socialist economy. One can point to problems but there would certainly be no groping in the dark. The case is even weaker once you consider the ways that such a price system could actually be superior to what we find under capitalism.

Hayek's characterization of the problem as being one of practicality is a clear retreat from the claim that it is a matter of logical impossibility.

The debate over social ownership resides exclusively in the domain of motivation and behavior. There is no separate calculation problem.



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