

No need to compare Apples and Oranges: The Case Against Economic Calculation

Adam Buick, Sunday 27th September 2015, London

The Economic Calculation Argument is a classic argument against the possibility of socialism put by defenders of free-market, private-enterprise capitalism. It was set out in a particularly clear and concise form in an article in 1920 “Economic Calculation in the Socialist Commonwealth” by Ludwig Von Mises, an Austrian member of, appropriately enough, the Austrian School of Economics and translated into English in 1935. It was no accident that this issue was being discussed in 1920 as the First World War had been followed by a revolution in Germany that had brought the Social Democrats to power and one in Russia that had eventually brought to power the Bolsheviks (who were leftwing Social Democrats), both of whose theories committed them to introducing socialism in place of capitalism.

This article is not going to refute Von Mises's case for a free-market, private-enterprise economy – that has never existed and never will – but deals only with his arguments against socialism in his 1920 article.

But, first, what did he mean by “socialism”? Here's what he says:

“Under socialism all the means of production are the property of the community”.

And:

“Production-goods in a socialist commonwealth are exclusively communal; they are an inalienable property of the community, and thus res extra commercium.”

This is a phrase and concept from Roman law which translates as “things outside commerce”, meaning that they cannot be owned by anybody and so cannot be bought and sold.

Von Mises's definition is ok as far as it goes. But it misses out one essential feature (democratic control) and introduces another which is not essential. Immediately after that “under socialism all the means of production are the property of the community”, he writes:

“It goes without saying that the community will only be in a position to employ its powers of disposal through the setting up of a special body for the purpose.”

This suggests that in a socialist society the whole of production would have to be directed by a single body from a single centre – a central planning authority. To be fair to Von Mises, this was the view of those he was criticising, but it was assuming that “central planning” was the only way that a socialist society could organise production without markets and money.

So his criticism is largely a criticism of the “central planning”, “command economy” model of socialism. In fact, not only of this as Von Mises said it didn't matter whether the central planning authority was democratically controlled or not; it could also be controlled by an unaccountable minority. This meant that his criticism was also a criticism of societies where the means of production were “things outside commerce” but not democratically controlled. What has variously been called “bureaucratic collectivism”, “state capitalism”, “managerial society”, “oriental despotism”, etc. In fact it came to be applied essentially to what existed in the USSR. Even so, it was also a criticism of necessarily-democratic real socialism.

Von Mises's case is that a socialist society will not be able to calculate how to produce in the most economical way (in terms of the labour and resources available to society).

It's a simple case, even if a bit circular. He defines rational calculation as calculation in terms of exchange-value as objectively determined by the free play of the market and as measured by money and then says that, as there would be no market in socialism for means of production and intermediate products (“producer goods”), socialist society would not be able to calculate rationally because it couldn't calculate “economically”.

The short answer would be “OK, yes, socialism won't be able to calculate 'economically' in your sense but that doesn't mean that it can't calculate rationally at all.”

Actually, however, Von Mises himself conceded that there were certain rational decisions that socialist society would be able to make without having recourse to his “economic calculations”, i.e. without needing to have recourse to exchange value as established by the free play of market forces. These were:

- (a) What to produce, and
- (b) How to distribute the consumer goods and services that had been produced.

This because neither of these are “economic calculations” in his sense. Deciding what to produce is a value-judgement while deciding how to distribute consumer goods is a political-administrative one.

Saying socialist society will be able to decide rationally what to produce is a huge concession (later withdrawn by his followers), but let's deal first with the distribution of consumer goods.

Distribution of consumer goods

Von Mises says that socialist society could adopt any number of methods, e.g. so-called labour-time vouchers; direct rationing for particular products through coupons which can be exchanged just for them; even “money” (by which he in effect means all-purpose vouchers expressed in £s, \$s, francs, marks, etc. rather than labour-time but which would not really be money in the conventional sense, but what others have called “consumption money”).

The only criticism he makes is that, if labour-time vouchers were adopted, they would not be

entitling people to receive back from society what they had contributed in terms of labour, as has been claimed by its supporters, even if it took into account the skill, unpleasantness or difficulty of the work done. This was because an individual's contribution to production cannot be measured without the existence of a free labour market. (I'd say that, in view of the fact that production is now a collective effort it can't be measured at all, not even under capitalism).

I suggest that, should the need arise (because, say, of a temporary shortage of some goods), the best method would be direct rationing of the goods involved, with those not in short supply being distributed free or made available for people to freely use or take. But I'm not going to go into this further here as this article is not about distribution in a socialist society but about production.

Infrastructure projects

As stated, Von Mises conceded that deciding what to produce would not present socialist society with a problem of “economic calculation” since deciding this was a value-judgement, i.e., a decision on what was desirable. But his concession went further as applied not just to the choice of which consumer goods and services to provide. He said it also applied to whether to undertake and where to situate an infrastructure project.

The example he gives is of a “waterworks” by which he seems to mean a hydroelectricity plant involving the construction of a weir or a dam. He says that someone envisaging such a project would not be able to include “*in his [economic] calculation the beauty of the waterfall which the scheme might impair*”, even though this might well be the deciding factor as to whether or not to go ahead. He goes on:

“It is customary to term such elements “extra-economic.” This perhaps is appropriate; we are not concerned with disputes over terminology; yet the considerations themselves can scarcely be termed irrational. In any place where men regard as significant the beauty of a neighbourhood or of a building, the health, happiness and contentment of mankind, the honour of individuals or nations, they are just as much motive forces of rational conduct as are economic factors in the proper sense of the word, even where they are not substitutable against each other on the market and therefore do not enter into exchange relationships. That monetary calculation cannot embrace these factors lies in its very nature.”

This is an enormous concession on his part as such “extra economic”, i.e outside of economics, factors will be relevant in all land use decisions. But more, such factors (e.g. health and safety, ecological) could also be involved in decisions as to which production methods to employ . It's a concession which goes a long way to undermining his whole case. In fact such considerations already enter into decision-making under capitalism, e.g. HS2,

Third Heathrow Runway.

Calculation in kind

Basically, Von Mises sees only three possible ways of in theory calculating how to produce what has been decided should be produced:

(a) calculation in units of exchange-value as expressed in money, i.e monetary calculation.

(b) calculation “in natura”, which you don't have to be a Latin scholar to work out means calculation in terms of the natural forms of raw materials and products used in production, i.e., “calculation in kind”. In German, also known as a “natural economy”.

(c) calculation in units of labour-time.

His main target of criticism is calculation in kind. So let's understand in more detail what this means. It means calculation in terms of specific physical amounts of materials and labour to produce something. To build a house, for instance, you need so many bricks, so much kilos of cement, so much length of wiring, so many roofers, bricklayers, plumbers, electricians and labourers, etc. This is something that is done in all societies, including capitalism. So, those who have proposed calculation in kind are not advocating this as a replacement for monetary calculation but as a calculation sufficient on its own, not needing to be supplemented (or duplicated) by monetary calculation (Von Mises's “economic calculation”).

The person Von Mises singles out for criticism for advocating that only calculation in kind would be required in a socialist society was Otto Neurath. Neurath was a fellow Austrian, an economist with an interest even before the First World War in war economies and who during the war was employed in the government department administering the “war economy” in the Austro-Hungarian Empire and later in Germany. He wasn't a Marxist but he did join the German Social Democratic Party after the War. He was the person responsible for economic planning in the short-lived 1919 Munich Workers Council. He prepared a paper for them, entitled “The Character and Course of Socialization”, in which he argued for the transformation of the war-time “administrative economy” into an “economy in kind”. He later published this in a collection of his articles translated into English in 1973 under the title “Through War Economy to Economy in Kind” (though “From the War Economy to the Natural Economy” might be a better translation). Von Mises cites it in his article.

Neurath was not alone in being impressed by the “war economy”. Lenin too saw the German war economy as a model for the economic system he thought the Bolsheviks could introduce in Russia in 1918, though he called it “state capitalism” and saw it as a necessary step towards socialism.

Neurath clearly had in mind a centrally planned and administered “natural economy” where a single planning authority (which he called a “central office for measurement in kind”) would decide what should be produced and then mobilise enterprises to produce both it and the intermediate materials needed for this. He also envisaged workers being in effect paid in kind by being allocated, for free, decided amounts of particular consumer goods and

services. He actually wrote of “wages in kind”.

Labour-time accounting

Von Mises also had something to say about labour-time accounting, to which he raised two objections, one theoretical, the other practical. He conceded that, if the labour theory of value (which he interpreted as a labour theory of exchange-value) was valid, then calculation in labour-time would be a possible alternative to monetary calculation; but that as the LTV was wrong (exchange-value was not determined by labour content) this would not be calculation in units of exchange-value and so would not be “economic” (or “economical”) calculation.

Since the Marxian LTV does not argue that, under capitalism, goods exchange in accordance with the labour-time taken to produce them from start to finish, this objection is irrelevant. (Marx knew that, under capitalism, goods tended to exchange at what he called their “price of production”).

But Von Mises's second objection was more substantial and in my view fatal to labour-time accounting. He argued that the problem of reducing “complex”, or skilled, labour into units of simple labour, which would be needed to do calculations in labour-time, couldn't be solved in the absence of a free (or any) market for labour which of course wouldn't exist in socialism. He quotes Marx as saying right at the beginning of Volume I of *Capital*, that this reduction of skilled to simple labour is shown and known by “experience” but of course it's the experience of the labour market. Von Mises says that socialist society could decide this administratively but that this wouldn't result in an accurate unit of economic calculation.

I think Von Mises has a point here: skilled labour can only be reduced to units of simple labour through the market. I think Marx would have agreed, in view of his surprisingly large amount of his writings against “labour money” under capitalism in which he explained that it was not possible to establish the value of a commodity directly but only via the market. If it couldn't be done under capitalism it would be even less able to be done in a socialist society, where the market would no longer exist.

But even if labour-time accounting was practical, what would be the point? To calculate the supposed labour-time content of everything produced would necessitate a huge bureaucracy that would in itself be a waste of resources.

Having made a case against accounting in socialism in terms of a general labour-time unit, I must add straightaway that there will of course be calculation in labour-time in socialism but as part of the general calculation in kind of which labour measured by both particular skill, and man-hours will be one element. I can also add that I doubt that in socialism labour is going to be in short supply and so in need of being “economised”.

Relative abundance

This raises a more general point about the availability of resources in socialism. Most resources, I suggest, will be in relatively abundant supply, especially once the artificial waste

(not just arms but everything to do with money and finance) and organised scarcity (the profit barrier to producing any more than can be sold profitably) of capitalism have been removed. This would not be absolute abundance of course – that's just a concept pro-capitalist economists have introduced to try to show that they will always be “scarcity” – but enough, more than enough, to satisfy people's needs. This means that socialist society will not need to aim at imperatively minimising costs, producing as cheaply as possible, but will have considerable leeway to decide to employ methods that from a strictly economic point of view will not be the least costly.

Remember Von Mises has already conceded that value-judgements introducing “extra-economic” factors could play a part in deciding where to build infrastructure as well as what consumer goods to produce. Similar value judgements could also play a part in deciding *how* and *where* as well as what to produce.

Value-judgements are not necessarily arbitrary. In some cases they could be made democratically by a vote. In others, there could be a points system where certain benefits and drawbacks are given weightings.

“Central Planning”

Von Mises's objection to socialism is based mainly on the assumption (admittedly accepted by those he was criticising) that the only alternative to the market in a socialist society was “centrally planned, command economy” where the decisions as to what and how to produce would have to be taken by a single central body, if resources were to be used “economically” in his sense.

He claimed that, if tried, a centrally planned, command economy” would lead to “hopeless chaos” and eventually collapse. Russia wasn't socialist but they did have a go at such centrally planned. It failed in the end (though not for the reason von Mises gave). One by-product of this attempt was the development of the theory and mathematics of resource allocation for which one of those involved, Leonid Kantorovich, was awarded the Nobel Prize for Economics in 1975.

There seems no reason in principle why in a democratic, socialist society this couldn't work to supply consumer goods. But it would involve the central planners deciding what individuals needed and then distributing them to people for free. This was what Neurath had in mind. It was also what was envisaged by Khrushchev in the 1960s when the Russian rulers encouraged speculation about “communism”. It can be described as a system of “free distribution” as opposed to one of “free access”. Consumer goods would be distributed free, but what they were and the amounts would be decided by the central planners.

It might work, but doesn't seem the best way to deal with the production and distribution of consumer goods in a socialist society. It is possible to imagine a system where the initiative as to what consumer goods to produce comes from the consumers rather than any central planners: A much more decentralised model in which individual consumption would be based on “free access” rather than “free distribution”

Free access.

This would have something in common with the mythical “consumer is king” model of capitalism (theorised by another member of the Austrian School: Friedrich Von Hayek). Except that instead of individual consumers deciding what should be produced by what they chose to *buy* they would do so by what they chose to *take freely* from superstores and other distribution outlets. An efficient system of stock control (similar to what exists today) could ensure that the stores would always be filled with what people indicated they needed by what they took. Very crudely, a shortage on the shelves would be a sign to order more and perhaps produce more; things left on the shelves would send the opposite message.

As to collective services (libraries, schools, hospitals, etc) as well as infrastructure (road, rail and air transport, power stations, etc) Von Mises has already conceded that an element of value judgement enters into whether and where to undertake or situate them. This could be done democratically, locally or regionally, depending on those concerned or affected.

What I'm suggesting is that any central planning body would not need to try to calculate in advance the exact way in which in every good or service should be produced with a view to ensuring the “cheapest” or most “economical” way to employ to produce them.

Given the relative abundance of most resources the exact production methods could be left to those producing them (works councils) to decide. Of course there would need to be some general guidelines and a central planning body would still be required to estimate the resources available and what resources were likely to be needed over a given period and to identify where use of some resource needed to be minimised, e.g for ecological reasons, but not for one that would need to try to plan everything in advance. Central “indicative planning” rather than central command planning.

As to the methods particular industries or production units could apply, one rule to follow might be what is the best from a technical point of view. Von Mises dismissed this as self-evidently not being usable to calculate the best use of resources *for the whole economy*. Fair enough, but that's not what it would be applied to, just to the production of particular things (which Von Mises conceded could be done even though he didn't favour it).

Also, there have been advances in the theory and practice of non-market resource allocation since Kantorovich. The 2012 Nobel Prize for Economics was awarded to two people (Alvin Roth and Lloyd Shapley) for advances in theory of resource allocation (not that, strictly speaking and certainly not from a Misesian position, their field of study was “economics”). There's also Stafford Beer's experiment in Chile under Allende.

So, for calculation solely in kind in a socialist society, we're talking about:

- (a) a central planning body to gather and disseminate information on resources.
- (b) an efficient system of stock control for consumer goods;
- (c) democratic decision-making (value judging) for infrastructure and land use;
- (d) use of optimum technical production methods.
- (e) application of non-market resource allocation theories.