Chapter 3. Economics and Politics

I. GET and Economic Liberalism

II. Economics and social transformation: the plasticity of theoretical results

Recalling the introduction:

Economic liberalism can be understood in several ways.

(i) Promoting free trade. This is the sense studied in Part I.

(ii) Ethical liberalism: society must be such that each of its members is free to define and pursue their own self-interest. Their actions do not rest on any prior conception of the good life.

(iii) Social order and prices: the free variation of prices is sufficient to bring about a social order, understood in economic terms as an optimal equilibrium.

In this part, we study senses *(ii)* and *(iii)*.

Ethical liberalism can provide the foundation for utility maximisation. Economic analysis regards behaviour driven by the pursuit of self-interest as legitimate. Profit maximisation has a somewhat different status. It applies within a capitalist, market-based organisation of the economy. Utility maximisation for each individual, and Pareto optimality collectively, are objectives. Profit maximisation is only a means.

First welfare theorem: maximisation (of utility and profit) is not incompatible with collective welfare, provided it takes place under competitive conditions and subject to the assumptions stated by the first theorem. How should these conditions be interpreted?

1. What is perfect competition?

i) A behavioural assumption

To the question whether decisions guided by prices make it possible to reach an optimal situation, the existence and optimality theorems of competitive equilibrium give only an incomplete answer. They state (under the stated assumptions) that if prices are competitive equilibrium prices, then the decisions taken are consistent and optimal. But neither theorem explains how these prices are reached. It is assumed that competitive equilibrium prices are attained. Yet competition, in the existence and optimality theorems, characterizes only the behavior of agents: agents are price-takers.

The price-taking assumption is adopted by Arrow and Debreu without demonstrated justification. Agents are assumed to behave as price-takers. This means that each agent (consumer or producer) takes decisions (supplies and demands) on the assumption, first, that these have no effect on prices (that is: that reducing one's supply of a good does not raise its

price), and second, that their supplies and demands will be satisfied. The price-taking assumption is often justified by the idea of atomicity: agents are infinitely numerous (each one tiny, like an atom in the universe, like a drop of water in the ocean), so that it is highly reasonable for each to consider that their decisions have no effect on prices, since prices depend only on aggregate supplies and demands. If each individual supply or demand is assumed to be negligible relative to the aggregate supplies and demands on which prices depend, then it would be reasonable for each agent to assume that their individual supplies and demands have no effect on prices.

This intuitive justification of price-taking, which is not found in Arrow-Debreu, raises many problems (microeconomics, semester 4). Disagreements persist as to which conditions rationally justify price-taking.

ii) The representation of a process

But in general equilibrium theory (as in other economic theories) competition also denotes another idea: it represents a process by which equilibrium prices are reached. This is the idea that appeared in Chapter 1: competition sums up the conditions under which prices, when they are not equilibrium prices, vary according to the so-called law of supply and demand. Economists' intuition (not only within general equilibrium theory) is that this law of price variation does indeed lead to equilibrium.

The question is whether this intuition is logically well founded. This is the question of the stability of equilibrium. The term stability is not to be understood in its ordinary sense: in ordinary usage, a situation is stable if one remains in it. Now, at equilibrium, aggregate supply equals aggregate demand on every market. Prices that vary according to the law of supply and demand do not vary. So if one is at equilibrium, one stays there. The term stability must be understood as follows: if one is not at equilibrium, does the variation of prices according to the law of supply and demand lead to equilibrium?

The question of stability is best understood by analogy with physics. There are three types of equilibrium: a ball at the bottom of a bowl; a ball at the summit of a mountain; a ball at a mountain pass (the pass is the highest point relative to two valleys, but the lowest relative to two summits). Each equilibrium is stable in the ordinary sense: if one is there, one stays there. But not all are stable in the scientific sense: if the ball is displaced from the bottom of the bowl, it returns, so the bottom of the bowl is a stable equilibrium; if the ball is displaced from the mountain summit, it never returns, so the summit is an unstable equilibrium; if the ball is displaced from the pass, it returns if it has been placed at a higher point (moving towards a summit), and moves away if it has been placed at a lower point (moving towards a valley) — the equilibrium is stable or unstable depending on the deviations considered.

The question of stability in economics is the following: if one is away from equilibrium, does the variation of prices according to the law of supply and demand bring the economy back to equilibrium? If the answer is yes, the equilibrium is stable.

This question has been the subject of difficult work, and the theoretical answer is negative. It is not possible to establish conditions that would guarantee that equilibrium is stable. More precisely: we are unable to establish assumptions similar to those of the existence and welfare theorems (assumptions bearing on the characteristics of agents and the organisation of markets) that would guarantee the stability of equilibrium. To guarantee stability, assumptions must be made not about agents (consumers and producers) but about supply and demand functions — even though these functions are derived from agents' choices.

This negative result is one of the reasons why economists have gradually abandoned general equilibrium theory as a field of research. One of the difficulties of this shift is that equilibrium is generally assumed (even in work that departs from general equilibrium theory) to be attained, without our knowing how it is attained. Where an equilibrium exists, it is held, without proof, to be legitimate to assume that it is realised. This is by no means guaranteed.

All the more so since several equilibria may exist. If equilibrium is not unique, which one is realised?

If there is a change in the data (consumers' resources and preferences, production techniques), a new equilibrium can be determined, but there is no certainty that price-adjustment mechanisms will in fact lead to this new equilibrium. Doubt arises as to the economy's capacity to reach an optimal equilibrium after a shock.

iii) The auctioneer

If all agents are price-takers, a fictitious agent must have the role of setting prices. How is the assumption of the auctioneer to be interpreted?

- Auction markets:

Singular and rare markets whose functioning is not always similar to tâtonnement.

- A logical gap (Arrow 1959, Hahn 1987)

For Arrow, this fictitious agent answers the need to fill a gap

> "There exists a logical gap in the usual formulations of the theory of the perfectly competitive economy, namely, that there is no place for a rational decision with respect to prices as there is with respect to quantities" [Arrow, 1959, p. 41].

For Arrow, this logical gap is the sign of a shortcoming in the model: the law of supply and demand is not at the same logical level as the assumptions underlying the equations expressing supplies and demands as functions of prices. The theory is incapable of saying from whom the decision to modify prices according to the so-called law of supply and demand emanates:

> "Each individual participant in the economy is supposed to take prices as given and determine his choices as to purchases and sales accordingly; there is no one left over whose job is to make decision on price" [Arrow, 1959, p. 43].

This criticism by Arrow is taken up by Hahn:

> The fictitious auctioneer is also a consequence of theoretical lacunae and indeed of a certain logical difficulty. If prices are to be changed by the economic agents of the theory, that is either by households or firms or both then it is not easy to see how those same agents are also to treat prices as given exogenously as is required by the postulate of perfect competition. This difficulty was first noted by Arrow (1959) who argued that out of equilibrium price changes not brought about by an auctioneer require a departure from the perfect competition assumption if they are to be understood [Hahn, 2008].

Decisions about prices result from no individual or collective rationality.

- Market mechanism or planning

The movement of prices is explained by no will. Either through competition, or through "market socialism".

2. Market socialism

Indeed, economists of the early twentieth century argued that the Walrasian model described a capitalist, competitive and decentralised economy just as well as it could describe a socialist economy that was nonetheless competitive and decentralised. They argued in favour of a planned and centralised economy, one that would function without capitalist economic categories.

This points to a universality of general equilibrium theory, against the idea that economy is necessarily a capitalist market economy

i) Ludwig von Mises, 1920: "Economic Calculation in the Socialist Commonwealth":

> "Socialism is the abolition of rational economy", p.23

The socialism he opposes presupposes a twofold abolition: of the right of private property in the means of production (replaced by public ownership) and of the market (replaced by planning).

Without private property rights over the means of production, there can be no market for the means of production, hence no prices for them, hence no rational assessment of their use:

> "… as soon as one gives up the conception of a freely established monetary price for goods of a higher order, rational production becomes completely impossible. Every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics", p.17

> Without economic calculation there can be no economy. Hence, in a socialist state wherein the pursuit of economic calculation is impossible, there can be—in our sense of the term—no economy whatsoever", p.18

It is therefore impossible to allocate resources rationally in a socialist economy.

ii) Lange

In 1938, Oskar Lange proposed, against Mises, a model of decentralized socialism = a competitive market without private ownership of the means of production, in On the Economic Theory of Socialism. In this model, markets exist:

- For labor (there is freedom in the choice of work). Market wages are determined here.
- For consumption goods (freedom in consumption choices). Their market prices are determined here.
- By contrast, there is no market for capital goods, which are publicly owned and controlled by the State. Firms' profits are socialized and redistributed to agents in the form of public goods (collective consumption), public investment in the capital stock (capital accumulation), and a social dividend distributed to households.

The functioning of this economy rests on a procedure of economic decision-making that is separate from the political apparatus of the State. Firms are run by civil servants subject to democratically organized control.

In place of the capital market, there is a pseudo-market simulated by a planning board. This planner determines the prices of capital goods and allocates them to the various production units (firms). The allocation of capital goods and the determination of their prices is carried out by a trial-and-error method identical to tâtonnement:

> This method of trial and error is based on the parametric function of prices. Let the Central Planning Board start with a given set of prices chosen at random. All decision of the managers of production and of the productive resources in public ownership and also all decisions of individuals as consumers and as suppliers of labour are made on the basis of these prices. As a result of these decisions the quantity demanded and supplied of each commodity is determined. If the quantity demanded of a commodity is not equal to the quantity supplied the price of that commodity has to be changed. It has to be raised if demand exceeds supply and lowered if the reverse is the case. Thus the Central Planning Board fixes a new set of prices which serves as a basis for new decisions, and which results in a new set of quantities demanded and supplied. Through this process of trial and error equilibrium prices are finally determined. Actually the process of trial and error would, of course, proceed on the basis of the prices historically given. (Lange, 1964 [1938], p. 66).

> Thus the accounting prices in a socialist economy can be determined by the same process of trial and error by which prices on a competitive market are determined

It is a socialism because there is public ownership of the means of production, and planning of their use and production. Firm managers do not maximize profit, they follow accounting rules. Income from capital is distributed on an egalitarian basis.

This socialism is decentralized: under centralized socialism, firm managers receive instructions about input combinations and output production. Here, they determine inputs and outputs by following a pricing rule: they supply up to the point where price equals marginal cost (or the minimum of average cost where there are fixed costs). These rules replace profit maximisation, but Lange shows that they lead to the same result. The equilibrium is identical to the competitive equilibrium.

Actual capitalism is not competitive but monopolistic. Competition is better achieved through planning:

> "There is not the slightest reason why a trial and error procedure, similar to that in a competitive market, could not work in a socialist economy to determine the accounting prices of capital goods and of the productive resources in public ownership. Indeed, it seems that it would, or at least could, work much better in a socialist economy than it does in a competitive market", p.67

Competition and the determination of competitive prices do not presuppose the market. They are better achieved through planning.

3. Arrow, "A Cautious Case for Socialism"

"A Cautious Case for Socialism", 1978, Dissent: https://www.dissentmagazine.org/article/a-cautious-case-for-socialism

i) Political and social context

Born in 1921, Arrow was eight years old in 1929. He saw the queues of unemployed workers at soup kitchens, the waves of bank failures, the personal tragedies of depositors, the link between unemployment and the rise of Nazism — all of which amounted to "convincing evidence that the current economic system was a disaster". It was not only a human and political disaster; it was also a waste of resources (a Pareto sub-optimality):

> The idea, sometimes bruited about then, that unemployment was the fault of the unemployed—that they were lazy or incompetent or whatnot—struck me as laughable. I was impressed not only by the personal tragedies of unemployment but also the clearly anomalous coexistence of desperate needs with keeping idle the resources, men, and machines, which could meet those needs.

ii) A theoretical and real alternative: socialism

An alternative offering a rational, centrally coordinated organization of the economic system, experienced in the Soviet Union. It would:

- Avoid the instability of the capitalist economy and the human and material cost of unemployment, and thus ensure the efficient use of all resources.
- Avoid wars and political corruption driven by the pursuit of profit.
- Allow freedom for everyone, through equality of income and power.
- Encourage cooperation rather than competition.

iii) General equilibrium theory

- General equilibrium theory in defense of the market economy

> The inner coherence of the economy, the way markets and the pursuit of self-interest could in principle achieve a major degree of coordination without any explicit exchange of information—in short, the valid elements in Adam Smith's doctrine of the invisible hand—became important possibilities that qualified a simple view of the inefficiency of markets.

- General equilibrium theory as an ideal economy

> My immediate reaction was to interpret neoclassical economic theory and particularly the then new and rapidly developing discipline of welfare economics as pointing to an ideal efficient economy rather than the actual one, marked both by massive unemployment and by monopolistic distortion. Socialism was the way in which the ideal market was to be achieved.

iv) Critique of actually existing socialism

A non-democratic regime

> The Moscow trials of 1935–36 were a dramatic, even traumatic turning point. (…) the facts (…) were not compatible with the idea that the Soviet Union was a democracy or was even moving in that direction. Differences of opinion, even among socialists, were not being tolerated.

Control over economic decisions is not democratic but authoritarian. The exercise of power, which operates through private ownership of the means of production and the pursuit of profit, is not abolished when ownership becomes public. Power then operates through the State apparatus, and the concentration of control over the economy in the State facilitates authoritarianism.

v) Keynesianism as a reasonable solution

> Finally, the development of Keynesian economics and, after the war, its gradually increasing application changed the nature of the efficiency discussion. (…) capitalist instability and the socialist counterattack seemed to be synthesized: it seemed possible

> to have an economy that retained much of capitalist drive and initiative and yet gave room for the government to intervene to avoid at least the worst inefficiencies of unemployment and the idling of other resources.
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> I accepted provisionally what seemed to be a widespread consensus in the euphoria of postwar economic growth. The state had an active role to play in maintaining effective demand and in dealing with the many imperfections of the market system revealed by theoretical welfare economics (…) The higher taxes meant that the government was automatically engaged in redistributing, and some of us felt that it should go much further.
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> I have spoken of a provisional acceptance. I still felt it important to explore more deeply the possibility that socialism was a superior possibility.

Arrow's use of the lessons of general equilibrium theory reveals the interpretative plasticity of the model and its results, but also the distance between an ideal economy and the varied forms taken by real economies.

A later interview was published in 1995, after the collapse of the Soviet system: https://www.minneapolisfed.org/article/1995/interview-with-kenneth-arrow