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**Bridel Pascal, "The Socialist Calculation Debate After the Upheavals in Eastern Europe" in *Revue européenne des sciences sociales*, Tome XXXI, N.96, 1993, pp. 5-12.**

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In September 1991, Vaclav Klaus toured Switzerland to encourage bankers and business people to invest in what was then Czechoslovakia. After his Lausanne presentation, he asked several hard nosed bankers where the monuments and/or statues erected in honour of Walras and Pareto could be seen. Slightly embarrassed (did they really know who Walras and Pareto were?), the bankers turned to the Dean of the Faculty of Economics who finally put the Walras-Pareto Centre in touch with Klaus. Clearly, Klaus was moderately interested in our opinion about his decentralisation and voucher schemes. He rapidly made clear that his country needed little advice in this field and that his ministry could not afford the opportunity costs of listening to so-called Western experts. To our amazement, we soon realised that Klaus was trying to find some type of theoretical or intellectual blessings for his decentralisation/privatisation plan. As most economists would do, to quote Mark Blaug, he wanted «to rummage the attic of past ideas to establish an appropriate pedigree for his new departure» (1990, p. 35). This approach was all the more surprising since Klaus's damning indictment of economists was still fresh in our mind:

People in my country could not afford once more to put their fates into the hands of irresponsible intellectuals (Financial Times, 4 October 1990).

During a lengthy argument about the analytical framework transition economics would require, I unexpectedly touched a raw nerve when I used the terms «decentralised economy» instead of «market economy». What amounted to me as a mere slip of the tongue set a chain reaction that led back to the Socialist Calculation Debate. Having displayed a surprising knowledge of the literature from Barone down to Lange, Lerner and Hayek, Klaus remarked - tongue-in-cheek - that, after all, in Czechoslovakia, he presided, as the last «minister of production», over the dismantling of the old command system and its pseudo-argument in terms of price-system. Fascinated by the little I could tell him about the link between Walras, Pareto, Barone and the theorists involved in the Calculation Debate, he suggested the Walras-Pareto Centre should organise a Conference to revisit this debate after the momentous changes in Eastern Europe.

A conference on the connection between history of thought, some of the most difficult questions in modern economic theory (notably the stability of general equilibrium) and the influence of economic theory on policy matters was an opportunity too exciting to be missed. Klaus's eventual absence at the conference, though fully understandable in view of the then current political situation in the former Czechoslovakia, was of course very disappointing to all participants.

At the risk of belabouring what was probably obvious to all participants, this four-part introduction offers a brief summary of the logic followed in putting together the various contributions presented on 11-12 December 1992 and published in the present book.

## I.

The ostensible subject of the Socialist Calculation Debate was whether it was possible for a real economy to operate efficiently without free markets and without private ownership of capital and land. From the outset - i.e. from Pareto's and Barone's contributions- the theoretical benchmark was to be a Walrasian general equilibrium model in which the central planning board played the part of the auctioneer.

The way this standard account of the Calculation Debate is usually presented can be illustrated with a quote from a recent survey article entitled «The Millions of Equations Debate: Seventy Years after Barone». In their survey, the authors try «to establish continuity from Barone to contemporary mainstream economics» (Dore, M.H.I. and Kaser, M.C.,1984, p. 30), Austrian economists being of course included. Most post-War research on market socialism is also shown to be part of exactly the same neo-classical tradition.

At the risk of hurting some Austrian feelings, and despite strenuous efforts by Mises, Hayek and Robbins in the 'forties and despite the current revival of the Austrian challenge, the majority of the profession remains today practically unanimous in favour of such an interpretation of the Calculation Debate. Like it or not, the Austrian's calculation argument never managed to win the decisive battle against both market socialists and mainstream economists. Re-reading the contributions to the Calculation Debate in the light of modern economic theory, one realises however that neoclassical economists side-stepped most of the issues raised by the Austrians. Yet, it does not mean that the Austrians convincingly argued for the superiority of unrestrained markets.

Briefly, the Calculation Debate was seen by Market Socialists as well as by mainstream neo-classical economists as a contest within the same theoretical paradigm; the Austrian tradition considers this debate as a contest of mutually excluding theoretical models.

By the end of the 'thirties, the broad outline of the neo-classical theory of market socialism was complete. Consumer goods were priced in genuine markets, state owned resource prices were determined by a central planning board through a trial and error process and managers of both firms and industries were told to produce where the marginal cost of output equals the price of the product produced and the price of any resource employed equals the marginal contribution of that resource to output.

It is worth emphasising that the most articulate of the Socialist economists, Oskar Lange, believed that this trial and error process could replicate the actual market process by which prices are formed in real markets; with the central planning board playing the part of the auctioneer. While Barone (as well Pareto) had clearly denied the possibility of applying Walras's equations to provide an efficient solution to a problem of central economic planning, Lange adopted what Ingrao and Israel call the «normative» viewpoint of Walras's tâtonnement process. Paradoxically, at the same time Hicks and above all Samuelson were starting the so-called «axiomatic» approach with the first stability theorem.

In other words, Lange and the Socialists won the argument at the end of the 'thirties by using a version of Walras's general equilibrium already rejected by the leading proponents of this theory. This is all the more surprising when one keeps in mind the crucial part played by the Cowles Commission (including of course Lange) in founding mathematical economics and an internally coherent general equilibrium without losing one's way in the maze of problems concerning the relationship between theory and empirical reality of the markets. At the beginning of the century, Walras himself had already come to a similar conclusion: his analysis of tâtonnement could not really provide insights about real-world adjustments.

The first four papers each revisit a particular aspect of the Socialist Calculation Debate. Joseph Persky examines the various definitions of consumer sovereignty used by Lange, Hutt and the Austrians during the 'thirties. Jérôme Maucourant deals with Polany's position on money in the Calculation Debate. Franco Donzelli offers a stimulating discussion of Hayek's dramatic change of mind about the notion of equilibrium and the nature of general equilibrium during the same period. Raimondo Cubeddu and Alberto Vannucci contribute a comparative survey of the Austrian philosophical and economic critique of socialism.

## II.

The next set of contributions ventures into perilous waters indeed. Their authors try to argue whether modern neo-classical economics, and its central general equilibrium plank, can provide an analytical framework for a theory of economic transition in today's Eastern Europe. In fact, they ask questions similar to those addressed to neo-classical economists during the Calculation Debate.

One of the most striking features of the post-war development in economic theory is the extraordinary blossoming of the Walrasian general economic research programme. The modest success of alternative lines of research having adopted a more realistic methodology is always puzzling. Consider the new Austrian approach built on the stepping-stones laid down during the Calculation Debate. Hayek's path breaking 1948 papers on information were delving deep into the understanding of market mechanisms. In fact, many of Hayek's insights were several orders more profound and realistic than those of his neo-classical critics. Were economic theory aimed at writing one definitive paper on the nature of market-mechanisms, Hayek would certainly win the contest not only over Walras but also over Arrow, Debreu, Hahn et al. Yet, if the game is about promoting a research programme, mainstream economics is clearly the winner. After nearly half a century, the neo-Austrian research programme has hardly progressed against Hayek's contribution. In sharp contrast, the neo-Walrasian programme, by focusing on existence theorems and by carefully side-stepping price-formation - i.e. by favouring internal tractability over realism - has buttressed extraordinary conceptual progress.

Modesty is however the price to be paid for adopting such a programme. Neo-Walrasian economists and above all, general equilibrium economists, should admit and have admitted that, as far as the understanding of market-process is concerned, not much, if anything, is to be expected from their research programme. We are all familiar with the idea that the fictitious economy this type of theory is scrutinising cannot, and should not be seen as a reduction of real-world market economies. Existence, uniqueness and stability make up today the same invariant core of the theory as they used to a century ago and as they did during the Socialist Calculation Debate. Regarding the existence of equilibrium, the situation is quite satisfactory. The question of uniqueness is less clearly settled while a much firmer agreement has been reached on the implication of the results concerning global stability: these results are unquestionably negative. Among the most lucid general equilibrium theorists, Hahn is ready to face up to the worst consequences of this lack of results on price adjustment processes: «It may be that in some intrinsic sense such a theory is impossible» (Hahn, 1982, p. 747).

Where then do we go from here? What should we do with a research programme the theoretical conclusions of which cannot be transposed into policy recommendations? Even worse, what should we do with a research programme the dynamic market process components of which have been found seriously wanting if not totally lacking?

During the Socialist controversy, Lange considered that his trial-and-error process was an operational version of the neo-classical stability analysis of the tatonnement type. It was precisely because the market-socialists took over this part of Walras's theory that most neo-classical economists were convinced that the main conclusions of market economies could be reproduced in a centrally directed economy. In even simpler words, by apparently giving a solid theoretical answer to what the Austrians

considered as the insurmountable practical difficulties involved in calculating equilibrium prices, Lange et al. won the day against Mises, Hayek and Robbins.

Fifty years later, in the midst of a decentralisation process on a massive scale, we know now that this is no longer possible. If, again, the theory of such a market adjustment process is «intrinsicly impossible», how do we expect to explain the superiority of market economies in order, if not to ease, at least to understand the issues which arose from the transition period experienced in Eastern European countries? Indeed, according to an old methodological motto, what is not explained is not understood. To quote again from Hahn:

The failure of command economies and the comparative success of many market economies have evident lessons. But they will not be understood unless the bounded possibilities of market economies are understood... the failure of command economies is not evidence for unblemished market economies. We must learn to think of these issues with a cool head, a sober eye, and no faith (1992, p. 18).

Three papers examine various aspects of the relevance-irrelevance of mainstream economics to transition economics in Eastern Europe. Alec Nove discusses the pertinence of some basic economic principles but the total irrelevance of the Walrasian paradigm. Peter Wiles argues that in that context a Pareto-optimal isn't optimal and Paul Dembinsky tries to outline the limits of the mainstream approach to transition economics in the light of System Analysis.

### III.

If a ritual invocation to modern versions of the invisible hand is clearly not enough to explain the reasons why the real-world markets find so much better solutions to economic problems than would real-world planners, how are we going to underpin economic reforms in Eastern Europe? Recent developments surely tell us that there is room for a more discriminating approach than calls for the simple free market paradigm.

Clearly, the superiority of market economies cannot be properly explained without calling to help other parts of the complex reality of the markets - in particular the difficult question of the institutions (and maybe the agent's ethical behaviour) necessary for a market economy 'to deliver the goods'. Eastern European governments are beginning to realise that 'simply' creating markets on the ruins of planning is not enough for a successful reform. In some of these countries, an utopian vision of the 'markets' has unfortunately replaced the utopia of central planning.

The remaining papers help dash some of the hopes pinned on an indiscriminate use of standard neo-classical economic theory. They also warn us against using in our own countries the simplistic model started by Walras and Pareto; and worst of all to use its results as a normative basis to convince starry-eyed Eastern Europeans that textbooks have all the answers on transition economics.

Three papers seriously tackle the idea that there is no room left in Eastern Europe for Government intervention; that <<full privatisation>> is the only answer to every question. Cockshott and Cottrell argue that the Socialist Calculation Debate is not over and that there exists alternative planning methods. John Roemer compares the welfare consequences of straight privatisation with a more «limited privatisation» model in which traders are not allowed to exchange coupons for money. Thomas Weisskopf also questions the view that a market socialist «third way» is no longer available to Eastern European countries.

Finally, two papers examine particular aspects of the current transition process. Enrico Colombatto discusses the link between the exchange-rate regime and repressed inflation when structural changes occur and Alberto Chilosi examines alternative privatisation schemes from the vantage point of the relationship between property structure, financial markets and economic performance.

### IV.

Even if this introduction has displayed more than a dash of scepticism about existing formal economic theory, I would like to make clear that I am definitely not anti-theory. Quite the opposite. I think we suffer from too little, not too much theory. The general equilibrium theory initiated just over a century ago in this university is undoubtedly a major intellectual achievement. The central question rests of course with the use we are making of its conclusions, particularly in Eastern Europe. At that juncture, I can do no better than referring to Pareto - very often considered as the patron saint of mainstream neo-classical economists. Three quotations of his should easily dispel such an interpretation. In particular, these excerpts reveal a pure theorist whose insights on the connections between theory and realities were several orders more profound than those of most of his contemporary epigones.

In 1909, in a highly original discussion in which he laid the main stepping-stones used later on by Barone, Pareto is clear about the so-called «millions of equations» argument in both market and centralised economies:

We should also remark that this determination [of equilibrium prices] is in no way meant to consider the unbelievable large number of equations needed for a population of forty millions and a few thousands goods; ... mathematics would no longer come to the rescue of economic theory; clearly, economic theory would have to come to the rescue of mathematics... (1909, p. 234).

So much for this age-old «millions-of-equations» argument. Pareto is clearly more Hayekian than Paretian. In his 1897 Cours, Pareto offers some scathing remarks on economists (already!) considering the «real world» to be permanently homothetic with a situation of a maximum of ophelimity, i.e. with a Pareto optimum:

... the optimism... (which) considers that concrete phenomena are always and every where identical with the situations defined by a maximum of utility... ends up by looking like Dr Pangloss's (1897, 11, p. 42).

Eventually, anticipating in 1909 one of the main weaknesses of modern economic analysis, Pareto, while defending mathematical economic theory, warns his fellow-economists against any normative use of its simplistic conclusions:

The economist... who supports an economic law by taking into consideration its economic consequences only is certainly not too much of a theorist; he is not enough of a theorist because he does not take into account other theories that should be connected with his to be able to pass a judgement on [a] practical case... It would not be very reasonable to pretend to solve economic problems by the sole use of pure economics (1909, pp. 20 and 248).

Pareto ends up by calling in a quasi-Smithian fashion for a tight co-ordination between the various social machines, between the homo oeconomicus, the homo religiosus, the homo ethicus, etc. Very modern indeed.

The current search for transition economics is probably today one of the best opportunities to follow Pareto's advice. To be efficient, market forces must be embedded in supportive (and constraining) social, organisational, institutional and ethical frameworks. Indeed, and to quote Sen, «it is precisely the narrowing of the broad Smithian view of human beings, in modern economies, that can be seen as one of the major deficiencies of contemporary economic theory» (1987, p. 28).

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