A list of Working Papers on the last pages

No. 143, 1985

The Stability of Economic Organizational Forms and the Importance of Human Capital

by

Gunnar Eliasson

June, 1985

THE STABILITY OF ECONOMIC ORGANIZATIONAL FORMS AND THE IMPORTANCE OF HUMAN CAPITAL - A proposition about the endogenous, market induced disintegration of the non-market sector

by Gunnar Eliasson

> "The causal and political relation between the parts and the whole in modern societies" . . ."brings forth a problem of summation, which also in a more general way may be termed the micro-macro-relation. This is not merely the problem of aggregation which does not include the primary question: who acts?"
>
> "Classical and neo-classical economics, which in fact are to be regarded as a generalized theory of business enterprise, have evaded the issue by an axiomatically atomistic premise; macro economic plans are treated as a simple integration of micro-economic plans".
>
> Johan Åkerman (1960, p. 12-13)

Institutions - one of the four fundamentals of central economic theory

A retrospective look into the history of nations tells at least one straightforward story. During their formative phases the advanced industrial nations of today have been through a privately organized and rather brutal capitalistic growth experience. There seems to be few or no exceptions to this and it is intriguing to ask - in view of the accumulated knowledge of economics - whether there are alternative organizational forms through which an equally advanced technological and economic level of production can be achieved, and maintained.

It is rather pathetic that economics - after centuries of theorizing and mathematical abstraction - has not been capable of developing a theory of a market economy (Pelikan 1985, Axell 1985, Eliasson 1983). A theory pretending to explain a market economy is necessarily dynamic and most probably does not exhibit standard equilibrium features. "Central economic theory" - to quote the Swedish economist Åkerman (1950) "has to incorporate the four fundamental ideas of interdependency, value, process and institutions", and to do it simultaneously, not one aspect at a time. It is interesting to note that the deficiency of our theory in capturing the dynamic market process had not been properly realized until the disorderly 70s. Before this past decade we never thought that the dynamics of supply were any problem. Business firms took care of that, or we could simply assume that they did. In the Soviet Union the supply process has always been a real problem because of a deficient (compared to the market system) organization of production. As a consequence economists in that country have always exhibited a keen interest in the economics of supply, and have assumed that Western economists had something fundamental to tell them.

A market process can never be understood without explicit recognition of the participants of that process - the institutions, or to quote Åkerman (1960) those "who act". In this note which follows up on the discussion around Dahmén's, Parker's and von Weizsäcker's papers (in this volume) we hypothesize that (1) institutional change is also the major vehicle for productivity change; (2) that institutional change is forced by technical change through competition for resources in the financial system, and (3) that together Åkerman's four fundamentals make up the vehicle for market resource allocation to cover these three items we have to say something on the so-called non-market sector of the, notably the public sector.

We propose that a discussion on the dynamics of market allocation in the macroeconomic growth process has to recognize at least six things:

(1) that dynamic market processes are characterized by monopolistic competition and that some monopolies are good for macroeconomic performance, but that others are bad. The nature of monopolistic competition is determined by the institutional organization of markets

(2) that the production process of an advanced economy consists primarily of the gathering, transacting and use of information, and only partly of factory production

(3) that competition in a market is composed of the goal oriented interaction of all institutions in the market

(4) that the characteristics and delimitations of institutions are determined by what is rational for the fulfilment of institutional objectives and what is technologically most efficient. Hence, institutions change in size and content as a consequence of technical development and of competitive market forces

(5) that the reorganization of institutional structures of an economy is the fundamental vehicle for technological advance at the macro level.

(6) that all this together makes the concepts of well defined equilibria, full information, explicit optimization behavior, and static economic analysis meaningless notions in economics, except in an extremely abstract non-empirical setting.

A consequence of this appears to be that to understand the nature of the capitalist market process one has to treat endogenous institutional reorganization as an integral part of the market process. This is the same as to say that the episodic events that the early Schumpeter thought of (1) as exogenous and (2) as the prime movers of the growth process have to be made endogenous. This also means that the large and growing non-market sectors of the mixed western economies, in which endogenous institutional reorganization moved by the profit motive, is restricted also affect the dynamic efficiency of the market sector.

We find - for instance - that Joseph Schumpeter's (1943) fears about the threat to democracy posed by a growing concentration

at private business moved by economies of scale in production is more appropriate - on the same logical grounds - for the growing political, non-market sector.

Institutions have been dealt with in a variety of ways in economic theory. Veblen is sometimes called the pathbreaker of evolutionary economics. In his (1904) theory of the business cycle "innovators" and the "time-using machine process" pushed expansion along, while the conserving forces of existing institutions held it back. The disequilibrium between the rate of return of investments and the loan rate was the core variable behind structural change, not only behind the inflationary process, as with Wicksell (1898). The similiarities with Schumpeter's thinking are obvious.

Institutional economics later regressed back onto the simplistic foundations of classical theory and Walrasian general equilibium theory (Åkerman 1950). Institutions lost their content and became abstract actors in the game of monopolistic competition (as in Chamberlain 1933 and others). Shubik (1959, 1985) used game theory to generalize monopolistic competition, introducing a given set of actors or traders, as intermediaries in or carriers of the market process.

Schumpeter saw entrepreneurs as actors that disturbed a "Walrasian equilibrium", while Kirzner (1973) rather thought of entrepreneurs as actors that brought a disturbed economy back to equilibrium. Their verbal presentation was abstract enough not to require a formal specification of how the new formation of institutions, specialized for that purpose took place. Innovative entry as a competitive factor has, however, been a standard notion in economics for a long time, Clark (1961) being a good representative of that view. Day (article in this volume) has a somewhat different approach. In his economy, disequilibrium is the normal state, but "institutions" in various forms and shapes are there to permit the economy to work, when out of equilibrium. Institutions are necessary, Day argues, because - if they do not exist - equilibria are locally unstable. Again, Clower-Friedman (in this volume) in-

troduce a given set of traders to replace the auctioneer. They argue that this is a feature of the type of "customer markets" (see Okun 1981) that are typical of advanced industrial societies, and they prove that these traders move the economy toward a (static) equilibrium.

What is a market?

When you have a fixed set of players (institutions) in the market you can say that this subset consists of "producers" (factories). The remainder are traders and make up "the market". Trading draws transactions costs. The simplifying assumption of a given set of players that can be partitioned into a given set of producers and a given set of traders makes formal analysis possible. If the market process generates institutional change and modification and a constant flux with no clear demarkation lines between the actors and the market analytical difficulties arise. The natural approach to modeling a dynamic economic process should not allow the assumption of a fixed set of rigid actors because the main vehicle for productivity changes appears to be various forms of institutional change. The notion of a fixed institutional organization may give rise to severe misconceptions about the economic system.

The growing importance of customer markets is a reflection of the gradual changing of the industrial technological base for industries. Smokestack industries were competing with process cost efficiency while the moden manufacturing firm is based on a product technology with a large shared total resources spent on product development, marketing, and distribution. The emerging technologies move the economic system toward an industrial structure where the dominant production activity consists of various forms of information gathering, processing and use (see Eliasson 1985).

When the bulk of cost applications in an economy is transaction costs (information, search, trial and error), then equilibrium has to be defined in terms of these transaction costs. One will then find - I propose - that the standard notion of equilibrium is flushed out as soon as it is acknowledged that a significant part of transaction costs (called marketing) is devoted to modifying the preferences of customers.

In this economy, market intermediaries with no hardware capital at all figure significantly within and around the manufacturing sector. Production theory has to be explicit about these intermediaries to be relevant. More difficult to handle in theory is that technology changes the nature of intermediary action. Hence institutional forms and limitations also change endogenously.

How does a business organization respond to new competitive challenges in the market? The normal response is to reorganize itself and change its institutional format to achieve improved economic performance.

To model endogenous institutional change is extremely difficult since change takes place over long time spans and since in this field we lack good instruments for observation and measurement. Even to systematically discuss the nature of such organic institutional reorganization is far from simple, but it is possible. This is the reason why good formalized models and relevant theory in the social sciences have to be wrapped in more fundamental reasoning, to preserve contact with the world that theory is supposed to explain or predict. Let me give a few examples of this.

The growth engine

This conference has paid extra attention to the Schumpeterian notion of the growth engine of the capitalist market economy. Let us stop for a moment and ponder what we should mean by the growth engine of an economy. Most macro forecasting models

make manufacturing the growth engine of the economy, a notion that has persisted for a very long time. The young Schumpeter associated the growth engine with the entrepreneur and the innovator. The old Schumpeter was inclined to believe that routinized innovation and R&D investment and the exploitation of economies of scale could very well serve as the capitalistic growth engine. Modern macroeconomics makes the entire manufacturing sector the engine. In its most bizarre manifestations the engine is an exogenously prescribed macro capacity trend that powers the entire economy; (along with possible demand-determined fluctuations of activity around it). Many Keynesian forecasting models operate in this way. Now, why can't private service production or - for that matter - the public sector fulfill the same parallel growth "function"?

The public sector is certainly involved in many important activities. Why should it be looked upon as a parasitic outgrowth on the economy that we can afford only if the manufacturing growth engine stays in good commercial shape. Education and health services are examples of production activities that raise both labor productivity and wellbeing. Why couldn't the public education of engineers be an important contributor to economic growth?

The answer can probably best be understood if we reverse the question. If we disregard the distributional aspects, most of what we call public consumption can be produced and allocated by the market. The rest can be produced by the market - even though for political reasons we may think that we need a collective control of distribution. Defense was frequently a subcontracted activity in the past, as was (and sometimes is) police protection, etc. There is no technical reason why law enforcement in all dimensions could not be privately run according to a well defined contract. Why have these, and a lot more activities been collected for production within a non-market administrative framework? To begin with - very much as business firms (teams) were created in response to competitive demands - the administrative

non-market production organization may have been found to be efficient in performing certain tasks. Collective organizations developed and charged a flat fee - a tax - for their services. If the collective, political contract regards equal distribution as more important than efficient resource use, and as long as the contract can be enforced, a public sector growth mechanism has been instituted. However, the enforcement of the political contract is also a production task that has to be efficiently organized to protect an increasingly inefficient public sector. If it cannot, resources will leave (taxes cannot be collected) and public activities will break down.

Tax evasion and the unobserved economy are illustrative phenomena that are there largely because of the enormous pecuniary incentives offered by an inefficient collective organization.

What is it that distinguishes a non-market solution from the market solution? In principle two things. First, there is no effective performance control. Dissatisfied customers in the market or factor owners can withdraw their resources if performance is bad and eventually force exit (you vote with your feet). Within the non-market system you don't compete at decentralized levels. Instead you argue, vote, and negotiate for a comprehensive solution (the voice function). Controls apply to rule adherence and enforcement. Rule enforcement is difficult if the rule system changes all the time. Hence controlled non-market systems tend to be conservative in order to achieve efficient control. Second, and as a consequence of the first proposition, the non-market solution usually prohibits competition through prohibiting free entry, thus conserving organizational forms. For example, in a market system, deteriorating school performance and dissatisfied parents would create incentives for competitive entry (of schools) and the bad schools would lose their best students. The non-market solution opposes that because it becomes more difficult to monitor and control school performance. Yet new entry and exit guided by invisible market hands appear to be what generates produc-

tivity growth at all levels. As long as free entry and forced exit is not automatically generated in the public sector, rapid productivity change, at least as we measure it, will not occur.

It is interesting to note - again - that any firm in the market is - by definition - a monopoly institution, the existence of which is constantly threatened by competitive entry and forced exit, or part by part when its interior activities are outperformed by other actors in the markets. A natural instinct "of a firm" is to continually reinforce the protective shield that defines its monopoly position, either by being commercially efficient (competitive) or by erecting artificial barriers for instance to competitive entry. Intense competition from many players in the market is, therefore, the best protection from excessive growth of monopolized firms, or any non-market activity, like the public sector, unions, etc. This is a phenomenon we can clearly observe in an ongoing IUI study of interior organizational change in Swedish business corporations. It is, however, even more interesting to see how competitive entry in the unobserved economy and exits of functions that are not being paid their marginal product, are threatening the existence of the large public sector in mature welfare economies.

This conference exhibits these problems of institutional transformation. We have mentioned, or touched upon, the difficulties, but we have kept modeling the well known.

A market process needs "traders"

In economic model building, economic structures of micro units are invariably rigid and fixed and oldfashioned, as for example in my own paper and in Winter's paper (both in this volume). In the papers of both Clower-Friedman and of Day (also in this volume), however, the importance of institutions, agents or traders for the market arbitrage process is emphasized. Without such institutions

prices cannot be set and you have to invent God (the auctioneer) as the maker of the market. There is, however, not yet place in theory for the micro configurations of traders to change as a consequence of the market process. With endogenous institutional creation there would then be no way to prove the existence of any equilibrium position toward which the arbitrage of traders takes the economy, since institutional reorganization would change the determinants of equilibrium, and the fundamentals of any normative welfare conclusion, or "value determination" (Åkerman 1932, 1950) would be gone. Indeed, the organization of institutions in the market determines how fast and in what direction prices and quantities move, or the efficiency of the market arbitrage process. If market mobility is not sufficient to cope with, for instance, technical change, the natural remedy would be to reorganize the institutions of the market. Antitrust policy is based on such reasoning. The current discussion among the industrial nations of wage rigging of unions, being responsible for youth unemployment, or unemployment in general, is another case in point. It is, in fact, exactly to the point by Åkerman (1932), in an article on institutions and culture, to argue that "if labor, goods and capital can move freely and without obstructions potential welfare will increase to unexpected levels . . ."

In this note I simply want to remove the simplistic assumptions about the world around us that by design or inadvertently imposed equilibrium properties enter our theoretical structures. I will do this by introducing four complications.

(1) "Traders" - to use Clower's and Friedman's term - deal with information; they guide products to the right (those who can and want to pay) customers, they develop products to suit the right customers, they organize arbitrage in markets, they coordinate production etc. Some of this information handling takes place within economic agents, as administrative behavior, some of it between agents, as market behavior. The relative configuration of non-market (administrative) and market behavior depends on relative costs of information handling. Relative costs are changing all the time because of productivity change.

Information handling appears to constitute the bulk of resource use within modern society. Hence,

(a) institutional structures are very sensitive to changing costs of information handling
(b) economic theory has to be explicit about the use of information in economic behavior.

The currently prevailing relative cost structures are dependent on existing institutional and organizational structures, but also on changes in the same structures. As long as information processing consists of well defined tasks that are performed by a given set of traders, equilibrium can sometimes be demonstrated to exist as by Clower-Friedman (in this volume). However, this is not possible if the economic process breaks down and forces a recombination of existing institutional structures as in the case below.

(2) Once information processing is recognized as the dominant economic activity, the methods by which information is gathered and the rules by which it is interpreted and used become the focus of theoretical concern. One has to recognize that costs for information (transactions costs) may become very large or prohibitive, but then equilibrium has to be redefined to account also for information costs. The equilibrium properties of the economy depend on how traders collect and interprete information. To introduce tacit knowledge or bounded rationality would not remove equilibrium, since such features can be seen as parameters of the information (production) process cost function. (However, if the institutions - or traders - that use information depend as to number, size and content on the market process the - perhaps dominant - information cost account becomes highly variable. If institutional structures are endogenously unstable and equilibrium cannot be established on ground (1) above, then the data generated by the economic system do not include information, such that if you obtain enough data from the ongoing economic process you will eventually be able to infer a stable institutional structure,

such that you could calculate and predict an equilibrium. A theory that disregards this, I believe, is grossly misleading, except in a small number of very particular applications.

Take rational expectations as an illustration. This theoretical construct implies that people are rational. People learn and do not keep repeating the same mistakes for ever. But they keep making mistakes if what is wrong keeps changing.

(3) The gradual transformation toward a product-based industrial technology forces both institutional fragmentation and mergers. Competition in markets no longer takes the form of simple price competition, through cost efficient production of homogeneous products.

The information-based society makes physically identical products heterogeneous to end users, and differently priced by adding more or less service (information) to the product. (See Eliasson-Bergholm-Horwitz-Jagrén 1985, Eliasson 1985, and Lindberg-Pousette 1985.) We have observed - in several IUI studies - a steady tilting of technical change from the upgrading of cost efficiency in the processing end of production - typical of the old basic industries (standard steel, etc.) - toward a product-based industrial technology, where competition is through value added increases in the form of product quality improvements. This development has not been well captured either by statistical observation instruments, or by modern economic theory.

What we can observe is that economies of scale have been developing in (international) marketing, making it profitable to integrate "traders" in finished goods markets into the administrative network of the firm. At the same time economies of scale are diminishing in goods processing for technical reasons. This is due partly to the increased complexity of skill inputs and also to the diminished importance of long series of identical, simple products. Even large firms can no longer afford to keep all necessary skills

within its organization. Hence, institutional fragmentation occurs in both processing and in product development due to relative cost developments forced by technical change and by competition from low wage producers.

(Many manufacturing firms in advanced industrial societies like Sweden and the U.S. devote more than half of their resources to inventing and designing their prducts to specialized needs of customers whom they approach through an elaborate marketing network. They buy specialized technical services. Sometimes most of the product is based on standard components that can be bought in the market and the only production activities needed are design, assembly and marketing. With a variety of technical services and components offered in markets the exact allocation of activities within the firm, between purchases and internal production may vary significantly from time to time, making organizational forms of the firm very unstable.)

One could add that this institutional fragmentation and reformation are enhanced in high tax welfare economies. Large scale factory production is organized like a team in the sense of Alchian-Demsetz (1972). As a rule, it is difficult to identify work effort with work remuneration in a large, integrated production system. In such a system incomes can be allocated relatively independently of productivity, and shirkers can have it their way up to a limit. If technical change makes modularization of work and decentralization through markets possible, however, incentives will be high for high productivity workers to establish their own businesses to cash in their whole marginal product themselves. It is not a coincidence that manufacturing today, and electronics industries in particular are surrounded by growing clusters of small software firms. This takes me to the fourth complication.

We observed (1) that economic reasoning as a rule took institutional forms for given, and (2) that change in institutional forms appears to be the vehicle for macro productivity change. Free competitive entry and exit in turn appeared to be (3) the moving

force behind institutional change and notably (4) absent, controlled or prohibited in the public sector. This was the reason - we argued - why the public sector has difficulties in serving as a growth engine of an economy. In discussing the economic consequences of technical change ("robotization, automation"), which are special cases of competitive entry there are two opposing ideological views; there is the position of the classical economist who argues that rigid prices, rigged by the market regime is the culprit. Unemployment would go away fast if unions and other political obstacles to price flexibility were removed.

The opposing view, not surprisingly, is taken by politicians and unions. They argue that the institutional regime is a political choice and should be taken as an inflexible set of rules or a datum. If exogenous innovative entry in the form of technical change causes disruptions in that "given economic regime", innovative entrants are at fault and something should be done about them - not about the system. This view gives rise to an entirely different policy prescription, namely regulation of competitive entry, that is so typical of public sectors of mixed economies, a policy prescription that is also commonly, strongly advocated by public employees.

What does a business organization, on the other hand, do in response to competitive entry? It responds by changing its organizational forms to cope with competition. It expands market activities abroad, and R&D departments for product development at home. It subcontracts parts production, concentrating assembly work to a few places and reorganizes internal transports to cope with its new production flow structure. It engineers a number of changes in quantity relationships that are typically assumed fixed in micro theory. If it doesn't, it is forced to exit - <u>if not</u> protected from competitive entry and competitive withdrawal of funds by a benign public authority. The latter is typically the case for the public sector and there is a grey zone of intermediate cases in all mixed economies. Any general economic theory of markets and production covering the entire economy would have to recognize this varying institutional float in response to market pressures and make it a central part of theory.

The excessive growth of the non-market sector

Joseph Schumpeter (1943) argued that economies of scale in production would eventually generate extreme concentration in business, a linking up with political institutions and a threat to democracy. This has not happened, and the reason is the openness of the industrial sector in most Western nations, free competitive entry of innovators and entrepreneurs (the strong theme of the early Schumpeter, and Veblen) checking concentration tendencies (see further my paper in this volume). The Schumpeterian argument of concentration is in fact more appropriate for the public sector. Let me propose four stages in the historical development of the public sector, beginning with;

phase (I): the night watch state, providing the services of defense, police protection and enforcement of certain fundamental contracts. We have already concluded that this did not require collective production, only collective financing, and not even that.

Phase (II): Infrastructure. The state is now becoming an entrepreneur in collective goods and services, establishing a long-term perspective in the economy. The rationale for this behavior is that the pay-off is collective for the whole and cannot be appropriated easily by individuals or groups of individuals. One could also argue that the state, through the political, cultural and educational systems imposes a particular "morale" on the inhabitants of the country that fosters regard for third person rights, family responsibility or long term concerns (a "low discount rate"). Again, the private solution is close. Kings in the past happily mixed their private economies with those of the state because of their comprehensive interests. And I am not convinced that the politicians of the modern welfare state have a beneficial advantage over the greedy old time capitalists-industrialists in imposing a long-term view in economic decision making. Whatever the reason, one finds that the state, and notably local governments were the important infrastructure investors that provided a good foundation for the industrial revolution through financing transport fa-

cilities and - during later stages - supplying educated and healthy workers (see Eliasson, 1980, p 23 ff. on the Swedish policy model). In fact, this appears to have been the major public activity - besides warfare - until recently.

Phase (III): Group interests and income redistribution became a more significant public concern in the post-war period leading to the development of modern welfare economies. The central and local governments are no longer producing only infrastructure goods and services available to all, but also group specific goods and services, to be distributed on grounds of "needs" after a political arbitrage process. Egalitarian ambitions are moving the economies towards more and more tax financed redistribution. Growing transfers and selective policy interactions with the production system characterizes this phase, moving earlier market activities into the non-market sphere. (The public sector becomes involved in most economic matters of the individual to a growing extent, even those he handles most efficiently alone. It is the provider of everything to all. Rather than doing something about his situation himself, the individual turns to the public sector for help. Very soon the public responsibility becomes overwhelming.)

The growing complexity of the whole public redistributional and finance system in combination with "bounded rationality" on the part of decision makers, make it more and more difficult to distinguish between what the people want (through markets and needs, through all political decisions) on the one hand and what different interest group manage to negotiate in their favor. The earlier two phases involved collective, competitive market entry to pick up opportunities the market had not observed. In this phase public institutions are beginning to - typically - block competitive entrants in their spheres of interest because it undermines the priviledged position of public employees through the tax monopoly. The public sector is gradually becoming a "drag" on the economy, the opposite of the "engine".

At this stage the public sector is beginning to interact negatively with welfare.

Phase (IV): Monopoly public power based on the power to tax. Bounded rationality on the part of customers (the voters) and a complex systems of "selective bribes" through the transfer system have now established a broad-based, non-market sector in the midst of a market economy. Inefficiencies, inequities and growing inequalities are becoming noticable to the voters. The problem is that at this stage such a large proportion of voters are locked into the "bribe" system" as employees of the public sector that a smooth reversal is not possible. The non-market distribution system is immensely complex. Nobody can calculate the distributional consequences for himself of a reversal. Each one looks after his or her personal interests. This locks up the existing market-non-market structure and may even continue to push further in the non-market direction. The more sloppy performance requirements of public employees compared to employees in the market sector tend to lead to overrepresentation of public employees in voting bodies (Isakson 1978). The Swedish general elections of 1985 will probably be the first with public employees and clients as beneficiaries (like retired people) of the welfare state forming a majority of the electorate (Zetterberg, 1985). At this stage political democracy is threatened and the economic-political system becomes potentially unstable.

Only economic factors that exercise their effects gradually can prevent a systems collapse. Deliberate policy action to reverse the non-market trend through privatization can work in principle, but is blocked at the polls. The greying of economic activities take over. One should note that the new establishments of new grey or illegal activities that break apart the non-market sector are now welfare-enhancing activities that should be promoted, on the same grounds as we want to promote competition in the private market economy. And the savior in this development that may make the reversal process reasonably smooth is technological change towards a human capital-based society.

Human capital is what matters for capital productivity

The increasing service or information content of manufacturing production and the continued institutional fragmentation of the production system that we have observed is partly a reflection of the rapidly accumulating knowledge base upon which modern industry thrives. This knowledge is vested with individuals or groups of individuals. It is to a large extent a result of on the job career experience. But it can be moved around with the individual or the group and be recombined with a new system (a firm) and new installations of hardware. And it is the human capital that often dictates the productivity of other factors of production, like machine capacity installed, not the other way around as it has been currently understood in economics. In particular, human-based knowledge can take on much looser institutional combinations (consulting firms) than hardware installations. Its application partly floats into the economics of the family. Its accumulation is partly an on the job experience process, but it very much depends on the economic-technical environment where the individual operates. Part of the accumulation process takes place in the public sector (schools) and at home. While Tiebout (1956) type exits on one's feet have been effectively blocked politically, individuals can now more easily go private and exploit their own human productivity potential privately. It is not difficult to envision how information society will rip open traditional statistical taxonomies used in economics and introduce a conceptual float that we can only handle with new theory where institutional float is explicitly modeled. In fact, very much of this has already taken place in reality. We simply have not noticed because we watch reality through the specially tainted glasses of the well educated economist.

Bibliography

Alchian, A.A. - Demsetz, H., 1972, "Production, Information Costs and Economic Oragnization", AER, pp. 777-795.

Axell B., 1985 "Kan inflation förbjudas?" (Can Inflation be Prohibited?), IUI, Stockholm.

Chamberlain, E.H., 1933, The Theory of Monopolitic Competition, Cambridge, Mass.

Clark, J.M., 1961, Competition as a Dynamic Force, The Brookings Institution, Washington, D.C.

Eliasson, G., 1980, The Firms in the Market Economy - 40 Year of Research at IUI, in The Firms in the Market Economy, IUI 40 years, 1939-1979 (yearbook), Stockholm.

Eliasson, G., 1983, Microeconometrics and the Dynamics of Resource Allocation, in Microeconometrics, IUI Yearbook 1982-83, Stockholm.

Eliasson G., 1985, Information Technology, Capital Structure and the Nature of Technical Change, IUI Working Paper No. 138.

Eliasson, G. - Bergholm, F. - Horwitz, E.C. - Jagrén, L., 1985, De svenska storföretagen - en studie av internationaliseringens konsekvenser för den svenska ekonomin (The large Swedish companies - a study on the consequences of business internationization in the Swedish economy), Stockholm.

Isakson, A., 1978, Välfärdsstatens nya politiker ("The New Politicians of the Welfare State"), Tiden, No. 9/10.

Kirzner, J.M., 1973, Competition and Entrepreneurship, Chicago & London.

Lindberg, T. - Pousette, T., 1985, Tjänster i produktionen och produktionen av tjänster i industriföretag ("Services in the production and the production of services in manufacturing companies"), forthcoming IUI, Stockholm.

Okun,, A.M., 1981, Prices and Quantities: a Macroeconomic Analysis, (the Brookings Institution), Washington, D.C.

Pelikan, P., 1985, Private Enterprise vs. Government Control: An Organizationally Dynamic Comparison, IUI Working Paper No. 137, Stockholm.

Shubik, M., 1959, "Strategy and Market Structure. - Competition, Oligopoly and the Theory of Games", John Wiley & Sons, New York and London.

Schubik, M., 1985, The Many Approaches so the Study of Monopolistic Competition, European Economic Review 27 (97-114).

Schumpeter, J., 1943, Capitalism, Socialism and Democracy.

Tiebout, C.M., 1956, "A Pure Theory of Local Expendituresl". Journal of Political Economy, No. 64.

Veblen, T., 1904, The Theory of the Business Enterprise, New York.

Wicksell, K., 1898, Geldzins und Güterpreise, Jena.

Zetterberg, H., 1985, "Första valen med offentligförsörjda i majoritet", Svenska Dagbladet, June 23.

Åkerman, J., 1932, Industrialism och kultur ("Industrialism and Culture"), Stockholm.

Åkerman, J, 1946, Ekonomiskt skeende och politiska förändrigar ("Econmic Development and Political Change"), Lund.

Åkerman, J., 1950, Institutionalism, Ekonomisk Tidskrift.

Åkerman, J., 1960, Theory of Industrialism, Lund