Participation in the Public Sector

by

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Summary

This paper discusses meaning and impact of participation in the public sector, both for the citizens and the state employees. The main difference between self-management in the economic system and self-management in public administration is shown to be the absence or secondary role of market coordination in the public sector. Hence, auxiliary mechanisms, such as voting procedures, direct participation in the political process, economic and non-economic incentive schemes, and collective actions, have to be used to control and to coordinate the decisions made in different institutions and at different levels.

In a similar way, even at the micro level problems arise that can be attributed - at least partly - to the failure of the market mechanism. Especially important are the problems of determining the limits of (public) organizations, of heterogenous membership and of separating value-oriented decisions from decisions based on expertise and competence. This leads to the idea of participation in the public sector as a system of gradated responsibilities. Universities and hospitals are used as illustrative examples for the general considerations, and some practical suggestions are developed.

Finally, it is argued that further progress will be achieved if the process of preference formation is explicitly taken into account. This leads to the idea of participation as a process of learning and communicating among all participants. A variety of regulation schemes in the political process, such a elections, control and direct participation, is shown to be necessary in order to ensure the coordination between different units whenever the market mechanism is not applicable.

1. Selfmanagement and the State

The role of the state in labor-managed market economies may be considered from different viewpoints. A first question could relate to the scope of state activity and interference into the decisions of the economic agents. Of course, by the very notion of a market economy, command planning of economic activities is excluded or at least confined to special cases (e.g. emergencies). But there is still a wide range of choices,[1] ranging from a purely liberal model of competitive worke-owned enterprise up to strongly socialist arrangements with direct government interference into merely halfway autonomous enterprises.[2]

We do not deal here with this and related problems but merely would like to indicate that to the extent the model of a labor-managed economy works in practice, the role of the state would tend to decrease, although it would not have to "wither away" completely as, for instances, Engels (1878) expected. A second problem which we will only touch occasionally might relate to the role of the state in the process of transition to and the implementation of workers' management. Our main interest is in a third question that is, of course, connected with the first two but should be analysed separately: What does selfmanagement

1) But there are still all forms of 'market socialism' excluded that lack internal participation of workers in their enterprises, such as the famous models of Lange (1938) and Lerner (1936), or the present Hungarian system of partial market regulation.

2) The first possibility has been favored by John Stuart Mill (see Book IV, Chapter VII, § 6 of his Principles (1848)), while the second model has been supported by the Czechoslovac reformers during the "Spring of Prague" in 1968. They tried to avoid the alleged over-decentralization of the Yugoslav economy by a mix of state and associanist socialism (see e.g. Kosta (1976)). An internediate position, probably more leaning towards the liberal model, has been developed mainly by Jaroslav Vanek (1970, Part IV) and Roger McCain (1975) who assign the state in a labor-managed market economy basically the tasks of a traditional welfare state (including indicative planning).

mean in the state sector, both for the citizens and for the state employees involved, and which forms of coordination between the different interests of the various 'participants' do exist?

Our question, dealing mainly with the internal organization of public administration, seems to be a little bit outside the scope of economics. But, as we shall demonstrate later, there is a strong connection between the specific social feedback mechanisms in the economic and the public sector and the characteristic forms of participation in both these realms. Since most of the state activities are not regulated by the market mechanism (and very often are not even evaluated according to market criteria), we try to trace back some particular problems of employee and citizen participation to the peculiarities of political feedback procedures, such as elections and voting. Even though we cannot dissolve the whole problem into this feature of the public sector but have to consider additional aspects (such as the different degrees of involvement), we can look at participation in the public sector as an economic question even according to traditional definitions of economics if we restate the question simply as follows: How does non-market allocation in the state sector influence internal participation, and vice versa, compared with market allocation and workers' management in industry and agriculture? But before that we have to introduce and to explain some definitions that we will use in the subsequent sections.

2. Industrial Democracy and Political Democracy: Some Conceptual Clarifications

In order to comprehend our basic question, we need some conceptual clarifications. Very often, and for good reasons, labor-management is both defined and justified as a (necessary) extension of democracy into the economic sphere. It is already difficult to determine the meaning of political democracy; but everybody has some commonsense understanding of it.[3] It is very unclear, however, and cannot be determined a priori what is meant by industrial or economic democracy. At least four different notions are attached to this term. But only one - admittedly broad - concept is consistent with the central idea of all proponents of labor-management, namely democratic decision-making within the firm by all employees. So, all forms of popular capitalism through consumers' sovereignty and more equal distribution of income and wealth will certainly not conform to this concept since they are not likely to change the basic authority and decision-making structure within the enterprise.[4] But it is similarly evident that a mere transfer of the mechanisms of political democracy into the industrial sphere would be impractical, to say the least. This mistaken idea of steering the economy through a system of committees at different levels (factory, branch, region, country) has been developed and supported by some representatives of the workers' councils movement after World War I, especially in Germany.[5] But how can joint boards of workers, consumers and

3) But even within the traditional 'political sphere' it is very difficult to give a clear meaning to the concept of democracy as has been shown convincingly by Robert Dahl in his After the Revolution (1970). There is no clear a priori evidence what should be labeled as 'democratic' and what not. In view of numerous important 'practical' problems of decision-making, Dahl chooses the term 'polyarchy' to denote 'empirical' democratic systems.

4) For a discussion of the internal structure of the traditional (capitalist) firm, see Nutzinger (1976a).

5) For this, see e.g. Huber (1966) and Sinzheimer (1976).

suppliers reach any reasonable decision on allocation and prices? And how could the committees at the branch and region levels effectively be prevented from forming trusts and cartels?[6] Very likely, even taut central planning would be superior to this 'democratic' bargaining system at different levels of the economy. But this third alternative, namely command planning even by a democratic state and elected bodies, is also in sharp contrast to our notion of economic democracy, although it would conform to the formal prerequisites of (political) democracy.[7] This system would, almost by definition, abolish workers' management within the enterprise in any meaningful sense and would replace it by a hierarchical system even at the firm level, topped by - democraticly elected or appointed - managers.[8] These would be in charge of executing the democratic central plans, and they would have the democratic power to direct the workers to perform the necessary activities.

Clearly, all these formal applications of political democracy would not fit into our idea of selfmanagement, and it is hardly conceivable whether anyone of them would be consistent with a reasonable concept of selfmanagement. Moreover, our examples suggest that market relationships both among the firms and between enterprises and consumers would be the only feasible way to give workers the decisive say in their firms. This, of course, is not to say that there might not be some direct participation by consumers and/or the government; but it would only supplement (not replace) the market mechanism if and where necessary, for instance because of externalities or the pecularities of public goods. But apart from those cases that we will analyse later on

6) This was, for instance, the experience with two remnants of the German workers' councils movements after World War I, namely the Reichskohlerat and the Reichskalirat who behaved, in fact, as syndicates for carbon and potash, respectively. - Recent plans for intensified cooperation between firms in Yugoslavia could lead to similar (mis-)developments if there is no effective counteracting economic policy.

7) This was the idea underlying Lenin's (1902) notion of 'democratic centralism'. Practice of this concept in the state socialist countries has confirmed our theoretical objections.

8) This system has been explicitly supported by Engels (1873).

in more detail it seems to us that the market mechanism is not merely the only feasible form of social coordination that is consistent with workers' management but it is also the only desirable form. A short comparison with the state sector will show this.[9)]

The main advantage of market coordination - at least under idealized perfect competition - is the close connection between the firm's decisions and their social evaluation. If, for example, workers would choose to extent their leisure time or to improve their working conditions then they will have to bear the social costs of their own improvement. The feedback mechanism that enhances this "payment to the society" without great political pressure or direct state intervention is the evaluation of these decisions on the market place: As long as the firm uses all its resources it will suffer a loss of output, and hence of income, which will necessarily result from extending leisure or improving the conditions of work. And even in cases where no such "punishment" or "payment" occurs, for instance because workers enjoy their work after more leisure or better technical equipment and increase productivity accordingly, also this lack of payment to the society is perfectly appropriate: in this case, the workers improved their conditions without demanding (net) resources from the society. As economists would like to say, they moved from the interior of their technology set to the boundary.

A similar situation arises in cases in which certain decisions (e.g. capital deepening) lead to additional costs in the short run, but to productivity increases in the long run. The working collective is then simply "borrowing" from the society, e.g. in terms of the direct monetary costs of improving the working conditions and in terms of reduced output at the beginning, due to some necessary adaptations to the changed conditions; and it is paying back later on in terms of increased and/or upgraded production.

9) Perhaps the Chinese attempt at a non-market decentralization within semi-autonomous and semi-autarchic units (rural communes, small enterprises) could be viewed as another possibility of solving the participation problem. Without investigating this question at length it is sufficient to note that in highly complex and developed (Western) economies no such opportunity for decentralization seems to be viable.

This, of course, is only a metaphorical way of describing the fact that the workers will first suffer income losses, but will earn additional income in the long run. Nevertheless, this view is helpful as it emphasizes the feedback character of a market system under idealized conditions. So, market coordination gives not only room for effective participatory decisions within the firm, but it also links them with their social effects. Another related advantage of the market mechanism in a labor-managed economy is the fact that it permits each working collective to determine its own combination of monetary and non-monetary rewards according to the specific preferences prevailing in each group as long as some minimal requirements, such as liquidity, are fulfilled.[10] The frequent objection that market systems rely only on pecuniary rewards or profits and hence destroy workers'management simply overlooks this important feature of a labor-managed market economy.

On the basis of this rather simple logic of choice, a rather coherent theory of selfmanagement in the industrial sector has been developed, above all by Jaroslav Vanek (1970). But it comes also as no surprise that no coherent theory of participation in the public sector has been developed so far. The main reason for this is clearly the failure of the market model in public administration. This fact has different important consequences. The famous classical separation of state power into three distinct parts - legislation, execution, and juridiction - as developed by Montesquieu can easily be related to this fact. One important advantage of this separation is the possibility to restrict democratic procedures to the process of legislation; on the other hand, the administration in this model is only controlled, but not structures and governed by the principles of democracy.

This restriction of democracy to the field of legislation and to voting procedures can be interpreted and evaluated in different ways. From a Marxist point of view one would be inclined to look at this restricted political democracy as a mere form of class rule: it is then considered as a means of maintaining bourgeois power through 'formal' democracy obscuring the capitalists' 'real'

10) For this, see Nutzinger (1976b), especially part II.

domination over the working class, both in the sphere of production and of state administration. Here again, our 'feedback view' provides new insights beyond the classical Marxist and non-Marxist evaluations. This will become apparent after we have discussed the traditional views.

In contrast to the Marxists, most traditional political scientists would prefer to justify this separation and the resulting restriction of democracy by general functional necessities. Similar to the Marxists, but clearly with different evaluation, they see (political) democracy as a pure means of political administration, not as an end in itself. In this respect, modern writers differ from the classical participatory theory as developed by J.J. Rousseau and J.St. Mill.[11] As is well known, this 'modern' view has been most clearly expressed by J.A. Schumpeter in his Capitalism, Socialism and Democracy (1943): "Democracy is a political method, that is to say, a certain type of institutional arrangement for arriving at political - legislative and administrative - decisions" (p. 242). For Schumpeter, the so-called 'classical theories' which were based on the participatory and decision-making role of the 'people'[12] rested on empirically invalid assumptions. His own view (which has been shared by most of the later writers) emphasized the intrumental character of political democracy.

We can easily understand Schumpeter's theory of competing élites in the frame of our feedback model. His notion of democracy as a competition among qualified politicians and experts for the people's votes takes elections and other forms of political influence for the people as a kind of surrogate market: the performance of politicians and political parties is evaluated through the number of votes, and the possible denial of re-election serves as an indirect control mechanism against misuse of power, similar to

11) For an excellent exposition of the classical theories, see Carole Pateman (1970), especially chapter II.

12) According to Pateman (1970, chapter I), Schumpeter and his followers misrepresented the classical theories by constructing the 'classical myth' as an easily damaged strawman.

the traditional model of competition as a means of preventing monopoly power. Schumpeter, in his own words, considered the democratic method as an "institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote" (p. 269; emphasis added).

It is interesting to note how close this concept of political democracy comes to the traditional model of an industrial enterprise. In the capitalist economy, we have also a struggle of entrepreneurs or their delegates to get "the votes" of consumers (by purchasing their products), and to get "the votes" of workers (by entering the firm). If an employer fails to run the enterprise according to the wishes of the working collective, he will possibly not be "reelected" by his workers because they are free to leave the entrepreneur and to look for more attractive jobs and firms. And we have the same indirect control mechanism as in Schumpeter's notion of democracy: each decision made by the entrepreneur may be restricted by his fear (and the objective possibility) that workers can quit the firm in response to a particular decision. But hardly anybody would be inclined to consider the firm as a non-hierarchic and democratic institution for this reason alone.[13] And it is highly doubtful if we can look at the firm simply as a specialized market for "monitoring" activities and at the employment relationship as an ordinary contractual arrangement, only because each worker can terminate his membership in the firm unilaterally, as a few economists seem to believe.[14] Much more convincing and in accordance with everyday experience appears to be a notion of the firm as a primarily hierarchical institution, primarily organized by command and supervision, and not mainly by free contract and democratic voting procedures.

Turning back to Schumpeter's notion of political democracy, it becomes evident that his definition implicitly considers democracy in the sense of participation as a danger to his instrumental view of the democratic process: the operation of the state is

13) See Nutzinger (1976a).

14) See, for instance, Alchian and Demsetz (1972)

endangered by direct interference of the people into the democraticly elected state bodies. This means that one aspect of democracy - namely the everyday operation of the democratic institutions - is given that much weight in the evaluation of its performance that participation can only hurt the smooth operation of public administration and hence should be avoided from the outset. As Carole Pateman puts it: "... a prominent feature of recent theories of democracy is the emphasis placed on the dangers inherent in wide popular participation in politics" (1970, p.1).

So we can in a first approximation contrast two conflicting views of democracy: the participatory model involving some direct control of state activities by the people, and the 'division of labor model where the people elects and pays experts to do political business for them. How do they relate to our basic topic? This will be investigated in the next section.

3. Social Feedback Mechanisms in the State Sector

Schumpeter has been correctly attacked for obscuring important issues in democratic theory and for constructing a romantic 'classical myth' of direct participation.[15] His important positive contribution, however, has been to emphasize the possible feedback mechanism which could be applied in the realm of state activity. We have already noted the remarkable analogy between Schumpeter's notion of public administration and the traditional industrial sector in the preceding section. Before we deal with the reasons put forth by Schumpeter for his peculiar type of social feedback, we want to discuss some othe possibilities of control in the state sector.

First, one would like to ask: Why should the state, instead of being a mere market analogy, not be constructed as a 'real' market? It is not self-evident that more or less market-related forms of organization, e.g. involving real prices, should be impracticable in public administration from the outset. Moreover,

15) See e.g. Pateman (1970), chapter I and II.

in almost all countries there are large fields and lots of activities in public administration which follow to some extent the market principle. Very often, a well-defined good or service is offered by the state and paid by the citizen as a 'consumer', especially in communal administration and in jurisdiction. The main differences are the more or less compulsory character of many state services, frequently based on the state monopoly in the production and/or distribution of those services, and the peculiar pricing under such monopolistic conditions. But very often these goods and services are not really public, but to a large degree individual in the following sense: they are consumed by well-defined individuals who can be charged accordingly provided there are no superior criteria which oppose such charging even if it is technically possible. A well-known and illuminating example for the latter case is public education where there are lots of good reasons (which we do not have to discuss here in detail) not to rely primarily on the market mechanism in the sense of a strict quid pro quo exchange. But there might be still a large scope for market-oriented regulation which would not only improve the efficient allocation of educational services but would also improve distributive efficiency in this field.[16] German experience, for instance, suggests that supply and quality of lectures will be positively influenced by a system of lecturing fees (or other incentive and reward systems [17]), and that it is negatively correlated with the by now prevailing system of fixed salaries and prescribed minimum amount of lectures. This has important consequences for the meaning of participation in the state sector which we will analyse in the next section.

Before drawing too far reaching conclusions concerning the applicability of market criteria in the public sector, however, one should emphasize the limits to an extension of market mecha-

16) In many countries, the social structure of students leads to a 'redistribution from the poor to the rich' if they are financed by non-repayable scholarships. Repayment of those scholarships, e.g. by a tax system (as proposed by von Weizsäcker (1971)), is very likely to improve both efficiency and equity of scholarships.

17) They do not need to be exclusively monetary as we will show in the subsequent section.

nisms which result in practice very often from completely insatisfactory competitive conditions. A drastic example for this is provided by the West German health system where the allocative function of prices has been distorted, if not abrogated, through the power of the big associations of physicians and of the pharmaceutic industry, combined with the powerlessness of patients, politicians and even assurances; here, direct state intervention is urged in order to take at least some tentative steps against the deficits in health care and especially the rapidly increasing costs in this realm. [18] Similarly instructive is also the Yugoslav practice in the last twenty years which is characterized by a strange fluctuation between central state controls on the one hand, and premature releases of central allocation mechanisms - e.g. of investment funds[19] -, before sufficient competitive conditions were established; as the Yugoslav theoritician Stojanović, a prominent member of the "Praxis Group", has suggested, a major reason before this has to be seen in the indispensability of the state bureaucracy and its power derived from the self-created need for the permanent change of affairs.[20]

In fact, the problem of investment planning and financing is very central for any participatory economy: there is a natural conflict between the justified interest of a participatory firm for effective decision-making competence and the not less understandable interest on the part of the creditors for clear liability, and on the part of society the execution of socially productive investment projects.[21] Although it is easy to show that

18) For this, see Haarmann (1978) who indeed see possibilities of restoring market coordination through a differentiated system of health insurance.

19) Up to now, no satisfactory solution of the allocation of investment funds in Yugoslavia has been found, and this applies above all with respect to the founding of new enterprises and to the financing of projects in regional and industrial policy. Vahčič (1976) estimates the growth losses resulting from the lack of functioning capital markets, as 3 percent (absolute) per year.

20) Oral statement concerning the experience of the Yugoslav model of workers' management on a seminar in Freudenberg (West Germany) in May 1978.

21) For this, see e.g. Nutzinger (1974, part III), and in a more critical perspective, von Weizsäcker/Schlicht (1977).

a system of direct investment controls will be inconsistent with industrial democracy,[22] up to now positive proposals to overcome this problem - apart from abstract requests for a "perfect capital market" or for "democratic planning according to needs" - have not been fully developed.[23] Apparently motivated by the unsatisfactory allocation of investment funds in Yugoslavia (where ineffective central bureaucratic assignment has been replaced in 1965 by "decentralized" allocation of investment funds through the highly monopolistic banking system), Jaroslav Vanek has proposed a "national labor management agency" (NLMA) which should be in charge of stimulating new entry, financing new investment of firms in order to make them keep up with the other competing enterprises, and to dissolve inefficient firms whenever necessary.[24] Certainly, this public monopoly institution should not be run according to the principle of per capita income maximization even though this principle - combined with free entry and exit - is fundamental for efficiency and stability of the self-managed economy in the market sector.[25] As this equilibrium is characterized, inter alia, by equalization of per capita incomes among enterprises and branches, free entry and exit is essential for arriving at this situation. This, in turn, illustrates the crucial role of entrepreneurship even in participatory firms (cf. FitzRoy (1975) and Nutzinger (1977, 1978a)). Therefore, the NLMA would have to be run as a traditional part of public administration in order to avoid profit oriented misuse of the public monopoly (such as a preferential treatment of the already better-off firms). Remaining incentives

22) See, for instance, Nutzinger (1978b).

23) For this, see Nutzinger (1975) with further references, especially to Vanek's contributions to this problem.

24) Cf. Vanek (1970, chapter 15.4). - In Yugoslavia, those liquidations of enterprises are rare exceptions which one tries to avoid through merger of weak with stable firms and through an expensive (and hence inflationary) monetary policy - not necessarily to the advantage of the Yugoslav economy.

25) Under perfect competition and the usual assumptions on technology and consumer behyvior, maximization of per capita incomes leads to a competitive equilibrium which is also Pareto-optimal (see the former proof by Drèze (1975) and the informal exposition in Vanek (1970) and Nutzinger (1974, 1976a).

for misuse of power - for instance, via personal and informal relationships - could be counteracted through democratic control in the political process, and hence, up to a certain degree, misuse could be prevented. But it will be much more difficult to stimulate effective and speedy use of the NLMA's competences by its employees.[26] Which conclusions are we able to draw from these investigations of the effects of different feedback mechanisms? Our analysis suggests that in all cases in which market regulation is either impossible (e.g. with public goods) or inappropriate (e.g. for distributive reasons), the social feedback has to be performed through the democratic mechanism. In this general sense, we do agree with Schumpeter's general view of the problem. But our considerations also reveal that his restricted instrumental notion of democracy is inadequate for solving his own problem. First, as already pointed out, the social control by elections is much too indirect as to work effectively; it may only rule out the worst cases. So, more direct democracy is likely to improve and to strengthen the social feedback. Second, in an economic system based on the principle of workers' participation, a 'division of labor' model of political democracy appears to be in clear contrast to the social structure and the basic values of the system. But one must be aware of the fact that both these reasons are somewhat tautological. Basically they seem to say that participation must be accomplished through participation. So, a close-up view of this question is necessary.

26) Scandinavian experience with the 'ombudsman' supports this suspicion: they have been established in order to protect the citizens against arbitrary actions of public administration. But in effect their main task turned out to be the struggle against administrative inaction.

4. Participation within Public Administration

When we are looking at the micro level of the state sector, namely at the different institutions and offices within public administration, again our special feedback approach gives some additional insight into the specific problems of 'democratic decision-making' in these organizations. We can in fact derive at least three basic types of problems that are closely related to the non-market character of state agencies and have been largely neglected in the traditional public administration literature. [27] Broadly speaking, we face in public administration three interconnected sets of problems which occur in all types of organizations,[28] but have a specific importance and character in the state sector:

(1) the boundaries of the organization,

(2) the heterogeneity of members, and

(3) the separation of value-oriented decisions from decisions according to competence and expertise.

We shall give a brief characterization of each topic.

(1) In the absence of market regulation, it is in general much more difficult to determine the boundaries of the organization to which an arbitrary participatory decision-making scheme should be applied. One dimension of this problem is well-known from large enterprises and relates to the determination of the basic decision-making unit within each firm. In Yugoslavia, this problem has been tackled by introducing a number of more or less autonomous 'work units' which are in contractual relations with each other, and only decisions at the enterprise level (such as investment and technical coordination between the work units) are dealt with by committees at higher levels. [29] Clearly, this attempt at a decentralization of decision-making within the firm amounts to

27) More on this will be said later on in this section.

28) For an overview on these general problems of organizations, see Arrow (1974) and Hirschman (1970).

29) Cf. Horvat (1973) and Hagemann (1974).

the application of market-oriented intra-firm relationships; similar developments with regard to profit-sharing and other incentive schemes occur in several corporations in Western countries. But such an attempt to introduce market-oriented decentralization within the firm and, at the same time, to maintain "the benefit of collective action in situations in which the price system fails" (Arrow, 1974, p. 33), is not open to large areas of public administration, simply because there exists no price mechanism at all. So the question of democratic decision-making within sufficiently small groups or parts of large state organizations poses some additional difficulties because one indirect means of coordination via contracts and internal shadow prices may not be applicable. We shall illustrate this in the next section.

Even more serious, however, is the second dimension of the problem: If we have market coordination between 'economic agents', such as firms and households, and hierarchical [30] or participatory decision-making within each single unit of the economic system, then the question of 'who belongs to the organization' can be answered in principle, even though in practice lots of classificatory difficulties may occur: The working collective of a firm, including the management, will be considered as its membership, because it is providing labor-services to the firm and because it is linked to the firm by employment contracts. We will, in general, not include the consumers of the firm's output, nor the supplier of material or money, since they are related to the firm by ordinary market contracting. Of course, there are lots of boundary cases in practice,[31] but we can give clear theoretical definitions of the firm and its members.[32] The same is not true for many public institutions,

30) Williamson (1973) identifies non-market and hierarchical decision-making which is quite appropriate for most empirical cases. But from a theoretical point of view it is better to confine the term 'hierarchical' to non-market coordination without democratic decision-making.

31) See Nutzinger (1976a), sections 2 and 3.

32) This is true even if one should like to apply another definition of the members of the firm (e.g. including the suppliers of capital).

precisely because there is no simple demarcation according to the principle of market versus non-market coordination. In the subsequent section, we will consider several instructive examples in order to illustrate the difficulties arising from the absence of the market criterion. Here, we will only ask whether we would like to consider the student as a member (perhaps even an equal member) of the university, or as a consumer of knowledge provided by that institution, or as a supplier of sufficient public legitimation for the professors' non-teaching activities? Similarly, one might ask if a draftee should be considered as an (equal?) member of a (professional) army, or as a (compulsory) customer consuming the basic virtues of soldiership, or as a (compulsory) supplier of drill material for the sergeants. In short, it is difficult to decide who should participate in decision-making as there are no general criteria for the membership in public institutions, but only practical considerations for each special case.

(2) Closely related to the first question is the problem of the heterogeneity of the members in state organizations. Again, this problem occurs in many industrial firms, and Yugoslav practice has shown that there are remarkable differences in the degree of participation among different groups of workers.[33] People with different claims, skills and expectations enter the firm,[34] and accordingly the personal involvement in the affairs of the enterprise will vary to a considerable extent. But again, even a less qualified or part-time worker can gain decisive decision-making power in a long process of 'learning by participation'. For part of public administration, such as police, finance and justice, this possibility is open too, at least in principle, even though the bureaucratic climate and hierarchical promotion principles, will not encourage active participation in decision-making; in contrast, many other institutions, such as the army, schools, universities or hospitals, are related to relatively short and transitory stages. This will not contribute to the expectation of long-term membership in those institutions, and hence not to the process of identification with the organization; a certain degree of identification is, however, necessary for active and responsible participation in the

33) Cf. Obradović (1972), Bertsch (1975) and the survey by Lemân (1976)

34) For the heterogeneity problem in business enterprises, see Nutzinger (1977a, 1978) with further references.

decision-making process of the institution to which one belongs.[35] Of course, some of our examples refer to the situation of apprenticeship which occurs frequently in industrial enterprises too. But the important difference is the distinct probability of becoming a permanent member of the organization after the time of apprenticeship: it is high in industrial and other economic organizations, and low (if not zero) in our examples from the public sector.

(3) As has been correctly observed by Branko Horvat (1973, p. 252), it is both possible and necessary to separate "the value, interest sphere from the sphere of expertise; ... political authority from professional authority; and policy decisions from administrative operation." But this theoretical separation between value-oriented decisions and decisions based on expertise and technical competence poses lots of difficulties even in industrial enterprises: as already mentioned, the degree of participation in the decision-making process of the firm is positively correlated with the degree of job qualification and the position of the members in the functional hierarchy of the firm. Hence, members with higher skill and job qualification have more authority and greater influence from two different sources: (1) their higher qualification and responsibility gives them per se a priviledge position in the daily working process, and (2) their influence in the formal institutions of decision-making is higher, both because of their overrepresentation in these institutions and because of their expertise. To a certain extent, they are even free to define what should be considered as a value-oriented 'democratic' decision, and what constitutes a matter of expertises and technical competence. Also in the realm of undoubtedly value-oriented decisions, the higher qualified members of the organization will gain greater influence on the selection and presentation of alternatives which are subject to democratic voting procedures.

Again we argue that these problems are more difficult in many public institutions. The obvious examples are schools and universities.

35) As an index for this one can look at the low degree of union membership and participation in the German co-determination institutions among female, foreign and part-time workers.

The rather disappointing experience from the German reform of the university system reveals the importance of this question. This reform movement became somewhat discredited because some of its proponents neglected this necessary separation that has special importance in educational institutions, although the German university reformers at the beginning of the process stated very clearly that "decisions requiring expert knowledge should not be subjected to dysfunctional decision-making processes" (Denninger et al., 1968, p. 9).

Obviously the specific importance of the separation problem is intimately linked with the two preceding topics (boundaries of the organization and heterogeneity of members), but it is useful to demarcate the question of expertise from the more general problem of defining the organization. In a large part of public institutions, direct citizen participation is hindered by the dominance of expert knowledge, and even the more specialized representatives in the legislative bodies are seriously handicapped since they cannot command the same degree of specialized knowledge as usually professionals in public administration do. Again, the absence of competitive mechanisms strengthens the power derived from expert knowledge: very often, this knowledge can only be acquired without these public institutions and within the respective positions. And there is very often no competition (in the usual sense) for these expert positions, but they are bureaucratically allocated, preferably to members of the organization who share the values and attitudes of this organization. [36)]

Before illustrating these three basic problems of democracy in public administration in the last section, we would like to give a brief comment to the political science deiscussion of participation in the state sector. [37)] First, it is interesting to note that

36) For this, see especially Smith (1975). - If the allotment of positions is carried out by elections as is partly the case in the U.S.A. and Switzerland, then the voting mechanism performs the role of a quasi-market, precisely in the sense of Schumpeter (1943).

37) This survey is by no means exhausting and concentrates on the problem of social feedback mechanisms. - For the German discussion see Vilmar (1974, 1975), Adam (1974), Zöller (1975) with further references.

the evaluation of participation in the public sector varies considerably, even among those scholars who generally favor democratic decision-making procedures. Robert Dahl (1970), in his excellent After the Revolution, supported self-management in the private sector but not in the public, mainly because of the large number of people involved in public organizations. On the other hand, W.N. Dunn (1975, p. 1-2) argues "that changes now under way in public organizations constitute the leading edge in an unfolding societal transformation which will culminate in various forms of self-management". An approximately intermediate position is taken by G.David Garson (1975) who acknowledges "the rise of expertise, of centralized budgeting and programming, of computerized managerial information systems, ... the sheer growth of bureaucracy in size"; on the other hand he states that "it is equally possible to find evidence for new, more democratic relations of work which portend, in the title of George Berkley's new book, an Administrative Revolution" (p. 2).

Similarly diverging opinions and beliefs occur within the German discussion that, in addition, does not clearly distinguish between participation in the economic and in the public sector. Against Vilmar's (1974, 1975) admittedly broad and unstructured conception of 'general democratization' or of 'economic democracy', Michael Zöller (1975, p. 35) argues that the determination of 'social welfare' or of 'social interest' "cannot by any means take place at a level (such as the enterprise level) where only specific group interests are organized". But the central idea of a labor-managed market economy is the coordination of the specific interests of each single firm's workers through a system of effectively operating markets. The problem enters mainly because this model is not complete, due to externalities, public goods and similar 'practical' difficulties, but this reasonable objection is not even seen by Zöller. Interestingly enough, his examples for the organization of selfish group interests to the disadvantage of the society at large are taken precisely from outside the economic sector, namely from public institutions such as hospitals, universities and political parties. in order to substantiate his assertion for organizations within the economic sector.

The mainstream of discussion among political scientists, both in Germany and the United States, centers on those questions such as

the number of people involved (large number problem), the difficulties of organizing interests (e.g. interests of consumers, or old people) or the forming of preferences and attitudes within small groups. Important as these problems are, the logically antecedent step is to ask: How are these particular group interests and activities coordinated? It seems to us fair to conclude that the neglect of the different forms of social feedback in the various cases that can be observed in the traditional discussion has heavyly contributed to the variety of diverging beliefs and opinions in this field. The more or less phenomenological approach to special cases must necessarily lead to different conclusions that all suffer from the same defect: they cannot be generalized. Of course, our own considerations lead only to basically negative, but at least general conclusions. In order to develop some practical hints how a workable model of participation in the public sector could be derived, we look finally at a few empirical cases.

5. Some Empirical Cases

In order to illustrate our general considerations on the nature of participation in public institutions, we take the case of universities and hospitals. Both institutions are characterized by the mix or the coexistence of market and non-market relations, by elements of free contracting and of state coercion, and by properties of public and private goods; in both cases, externalities are not negligible. Hence, no simple view of those institutions - emphasizing one aspect and neglecting the other one - seems to be appropriate. A purely market-oriented description of university reforms "as institutional changes which attempt to influence the attitude and position of the demanders (students) of university products and their suppliers (professors) and which at the same time subject the property rights of the collective owners (i.e. the taxpayers) to severe limitations" (Watrin, 1976, p. 6; italics added) will not give a sufficient picture of the problem at hand; but, on the other hand, also the mere adoption of the principles of political democracy to universities fails to consider the complexity of this social organization. In Germany, as a practical compromise between the two extreme positions, the institution of a group university has evolved which can be conceived as a gradated

system of responsibilities for the different groups involved (professors, assistants, students, non-academic staff) whereby the ultimate decision-making power belongs to the group of professors. [38)]

This ordering of groups according to the alledged acedemic qualifications, however, is very incomplete. For instance, if we link the degree of participation with the participants' expectations or their future membership, there is more homogeneity among groups I and IV (professors and non-academic staff) with more or less long-term expectations, and between groups II and III (assistants and students) which usually consider their university status as a transitory stage. A further differentiation can be made according to the criterion of expected future membership in another group (e.g. students becoming assistants) in this or another university.

Without exhausting the complexity of the problem, it is obvious that no simple social feedback mechanism will lead to an adequate coordination between the interests of each group and the aims of the whole organization, and especially not to an adequate coordination between the interests of the university and the claims and expectations of the society. Therefore we would like to suggest an eclectic approach combining different, if not heterogenous elements. We cannot provide an elaborate solution of the complex problem of participation in universities, but we would like to give some hints for the structure of a possible resolution.

First, even though we strictly oppose to the naive view of universities as markets for science, we would like to emphasize that the (re-)introduction of economic incentives into the university system is likely to improve its efficiency. One example already mentioned are scholarships which are repayable via taxation of the future increased income. Another important example are tuition fees for single lectures and seminars that could give an incentive to professors to supply more and better lectures (and not only the legal minimum), and to students to select more carefully among alternative courses. Problems of imperfect knowledge, of compulsory participation

38) At least, if this group acts unanimously. - For an analysis of the costs of decision-making for different groups, see Faber (1976).

in many courses, and of income inequalities among students, however, pose severe, but not always unsurmontable limits to this incentive and reward approach.

This observation, however, leads to the more important idea of non-monetary incentive schemes. Even if there is compulsory participation in some courses, and hence no price rationing is applicable, it is still possible to give the students the opportunity to evaluate the didactic performance of the teacher, e.g. through standardized questionnaires; this happens at several universities in the United States. If this evaluation becomes part of the professor's academic performance (and hence influences both his future income and his job opportunities at other universities), then we can expect a reallocation of his working time in favor of teaching. The existing German system does not give any incentive - both in monetary and non-monetary terms - to "invest" in teaching activities, except in those which are joint products for publications. [39] The introduction of non-monetary feedback mechanisms, such as public evaluation, will in many cases improve the performance of the organization for the society. [40]

A third element that has been largely neglected (especially in the German discussion) concerns the role of professional management. Very often, even economics departments maintain a large apparatus of committees and delegates, lots of them qualified scholars, in order to deal with daily routine decisions that could be easily delegated to professional non-academic staff: without any regard to the gains from the division of labor that they teach in their elementary courses, even professors of economics spend much of their

39) Mueller (1975, section IIIB) analyses the importance of publications for the reported performance of professors in the frame of a Knightian uncertainty model. Unfortunately, the published version (Mueller, 1976) does not contain this interesting section.

40) This idea of non-monetary feedbacks is, of course, easily generalized for other cases, e.g. public evaluations of the activities of state employees by the citizens involved. It is interesting to note that the negative part of this feedback already exists: the chances of promotion in public administration are significantly reduced, if there are lots of official complaints ('Dienstaufsichtsbeschwerden') against single state employees. This system could be extended. Similarly, advisory bodies in schools and jail houses try to introduce some elements of non-monetary evaluation and feedback between the citizens and the state employees.

worktime for administrative activities that could be both better and cheaper performed by trained personel. Of course, there remain important problems of control and responsibility; but even there, some specialization will be possible by delegating those tasks to a very limited number of scholars (including assistants and students) for a limited space of time. This would make room for the few basic decisions which have to be made jointly and directly by all members of an academic institution. [41] The present preoccupation with routine affairs leads, in effect, to a stronger position for outside institutions (such as the state department of education) and to weaker decision-making rights for the direct participants.

This example again illustrates the problem of coordination between various levels: participatory decision-making at one stage is easily countervailed by relations of subordination between the different levels of state administration. Since each level may have its own democratic legitimation, no simple solution of the coordination problem is available. In a democratic society, however, there are lots of auxiliary mechanisms against the misuse of power, such as public discussion, the mass media, political parties, or the possibilities of collective action. And it seems at least plausible to expect that in an environment characterized by participatory work relations there are good chances for an effective political process. They will be at least much better than in Schumpeter's (1943) world where the political process comes close to the capitalist organization of production: There we have two competing élites, the politicians and the entrepreneurs, and democracy is restricted to the choice among the members of these élites.

An investigation of hospitals leads to similar conclusions. The main difference is here the more passive and (hopefully) more transitory role of the patient. With some justification, he could be considered as a consumer of this institution and hence not as its member. But even here, the idea of a gradated system of participation and responsibilities could apply. Some physicians have convincingly argued that medical treatment will be more effective if the patient

41) For an organizational scheme of university participation see Durasoff (1976).

is not taken as a mere object, but as a participant in the process of recuperation (cf. Lüth, 1974). Without fleeing into romantic ideals, it seems to us that beyond the sphere of expertise and professionalism there is room and need for participation even in these extreme cases. [42] Further empirical and theoretical investigation is necessary in order to elaborate this generalized dynamic concept of participation as a process of learning and communicating. First steps into this direction have been made by Jaroslav Vanek (1976)

6. Concluding Remarks

Our analysis of participation in the public sector was somewhat biased in favor of self-management in industry and agriculture as we related the particular problems of public administration to the absence of market coordination. Clearly, there are other social feedback mechanisms in the state sector (including market-oriented incentive schemes), but it seems to us that only a combination of different non-market feedbacks, such as voting, direct participation, economic and non-economic incentive and reward schemes etc., will produce a similarly satisfactory coordination between the different units as the idealized market will do without much additional assistance.

One could argue that the notion of an idealized market is in itself misleading, and that market coordination is not an appropriate point of reference since the economic system cannot operate without a developed system of public institutions and activities. We would not deny the idea that market coordination is not possible without large fields of non-market coordination in the state sector. Nor would we oppose to the assertion that the economic regulation based on extrinsic, mainly monetary rewards and incentives may even endanger participation because important elements of economic democracy,

42) Practical experience in the 'joint hospital' (Gemeinschaftskrankenhaus) in Herdecke (Sauerland, West Germany) after five years of 'trial and error' is quite encouraging and stimulating (see e.g. the report in Spiegel 18/78, May 1, 1978).

such as solidarity, altruism and communication between larger units, are hardly favored in a system which seems to rest on group selfishness.

But these arguments are not specific to our line of reasoning. Myopic and selfish attitudes can develop at least as well in state and planning bureaucracies, as practice in the state socialist countries clearly reveals. The main aim of this paper was to show that we have no elaborate theory of the 'political system', but that we can obtain interesting insights into the nature of participation in the state sector if we compare it with workers' management in the 'economic system'. This approach is by no means exhausting, as important elements, such as socialization, education and non-economic value systems, are not taken into account. But it is an important first step that helps us to understand why the traditional discussion has not produced many interesting results: it simply missed the point, or at least one central point.

The second result of our considerations was the 'eclectic' idea that participation in the public sector must be based on a variety of feedback mechanisms and will take place in a variety of organizational forms. Not all of them will fit into an ideal notion of 'democratic decision-making among equal members'. But in our view participation is not an abstract ideal but a practical process of learning and communication. Undoubtedly these preliminary considerations are correctly characterized by adopting the final self-evaluation of an interesting paper on university self-management:

> "This ... paper has primarily raised questions, which is its purpose. Even the 'answers' suggested here are sketchy, also raising additional questions. In the belief that self-management is a promising idea, whatever the obstacles and inherent difficulties, it is hoped that these questions will provide an intiative for further considerations" (Durasoff, 1976, p. 7).

References

Adam, U.D. (1974): "Systemveränderung als Ideologie oder Vilmars Demokratisierungsstrategie", aus politik und zeitgeschichte, B 51-52/74, 17-30

Alchian, A.A. and Demsetz, H. (1972): "Production, Information Costs and Economic Organization", American Economic Review 52, 777-795

Arrow, K.J. (1974): The Limits of Organization. New York: Norton

Berkley, G. (1971): The Administrative Revolution. Englewood Cliffs, N.J.: Prentice Hall

Bertsch, G. (1976): Patterns of Influence in Participation. Paper presented at the Seminar on Participation, Workers' Control and Selfmanagement, Dubrovnik, January 12 - February 6, 1976

Dahl, R.A. (1970): After the Revolution: Authority in a Good Society. London: Yale University Press

Denninger, E.; v.Friedeburg, L.; Habermas, J. and Wiethöller, R. (1968): "Reform der Universität von innen", Frankfurter Allgemeine Zeitung, No. 168 (July 23), p. 9

Drèze, J. (1975): "The Pure Theory of Labour-Managed and Participatory Economies", CORE Discussion Paper No. 7122, Louvain (Belgium)

Dunn, W.N. (1975): Self-Management and the Crisis of Public Organizations in Advanced Industrial Society. Paper presented at the Second International Conference on Self-Management, Ithaca, N.Y., June 6-9, 1975

Durasoff, D. (1976): Some Notes on the Concept of University Self-Management. Paper presented at the Third International Conference on Self-Management, Ithaca, N.Y., June 10-13, 1976

Engels, F. (1873): Von der Autorität. In: Marx-Engels Werke, Vol. 18, Berlin: Dietz, 305-316

Engels, F. (1878): Herrn Eugen Dührings Umwälzung der Wissenschaft. In: Marx-Engels Werke, Vol. 20, Berlin: Dietz, 1-303

Faber, M. (1976): "Die Bedeutung der Entscheidungskosten in Universitätsgremien: Eine Anwendung des Konzeptes der gesellschaftlichen Interdependenzkosten". Paper presented at the Workshop on Game-Theoric Models within the New Political Economy, Institute of Mathematical Economics, University of Bielefeld, March 25-27, 1976

FitzRoy, F.R. (1975): "A General Equilibrium Theory of Entrepreneurial Activity and Profit". Unpublished manuscript, Heidelberg

Furubotn, L. and Pejovich, S. (1972): "Property Rights and Economic Analysis: A Survey of Recent Literature", Journal of Economic Literature 10, 1137-1162

Furubotn, E. and Pejovich, S. (eds.)(1974): Economics of Property Rights. Cambridge, Mass.: Ballinger

Garson, G.D. (1975): Self-Management and the Public Sector. Paper presented at the Second International Conference on Self-Management, Ithaca, N.Y., June 6-9, 1975

Haarmann, M. (1978): Steuerungsprobleme in der medizinischen Versorgung. Meisenheim am Glan: Hain (PhD thesis, Heidelberg 1977)

Hagemann, M. (1974): "Die jugoslawische Unternehmensverfassung und die Interessen der Beschäftigten", in: H. Hamel (ed.): Arbeiterselbstverwaltung in Jugoslawien. München: Beck, 41-62

Hirschman, A.O. (1974): Exit, Voice, and Loyalty. Responses to Decline in Firms, Organization, and States. Cambridge, Mass.: Harvard University Press

Horvat, B. (1973): "Arbeiterselbstverwaltung im Betrieb", in: P. Hennicke (ed.): Probleme des Sozialismus und der Übergangsgesellschaften. Frankfurt/M.: Suhrkamp, 243-257

Huber, E.R. (ed.) (1966): Dokumente der Novemberrevolution und der Weimarer Republik. (Dokumente zur deutschen Verfassungsgeschichte, Vol. 3). Stuttgart etc.: Kohlhammer, 2nd ed.

Kosta, J. (1976): Werktätigenräte im Prager Frühling 1968. Paper presented at the Workshop on Participation, Center for Interdisciplinary Studies, Bielefeld, May 6-9, 1976

Lange, O. and Taylor, F. (1938): On the Economic Theory of Socialism. Minneapolis: University of Minnesota Press

Lemân, G. (1976): Das jugoslawische Modell. Wege zur Demokratisierung. Köln-Frankfurt/M.: Europäische Verlagsanstalt

Lenin, V.I. (1902): Čto delat'. Stuttgart. German translation: Was tun?. In: Lenin Werke, Vol. 5, Berlin: Dietz, 355-551

Lerner, A.P. (1936): "A Note on Socialist Economies", Review of Economic Studies 3

Lüth, P. (1974): Sprechende und stumme Medizin. Über das Patienten-Arzt-Verhältnis. Frankfurt/M.-New York: Campus

McCain, R. (1975): Self-Management and Economic Planning. Research Paper, New York: City College of the City University of New York

Mill, J.St. (1848): Principles of Political Economy, reprinted Harmondsworth: Penguin, 1970

Mill, J.St. (1910): Representative Government. New York: Everyman Library

Mueller, D. (1975): A Theory of Profit and Control. Unpublished manuscript, International Institute of Management, Berlin

Mueller, D. (1976): "Information, Mobility and Profit", Kyklos 29, 419-448

Nutzinger, H.G. (1974): Die Stellung des Betriebes in der sozialistischen Wirtschaft. Frankfurt/M.-New York: Herder & Herder

Nutzinger, H.G. (1975): "Investment and Financing in a Labor-Managed Firm and its Social Implications", Economic Analysis and Workers' Management 9, No. 3-4, 181-201

Nutzinger, H.G. (1976a): "The Firm as a Social Institution: The Failure of the Contractarian Viewpoint", Economic Analysis and Workers' Management 10, No. 3-4, 217-237

Nutzinger, H.G. (1976b): "Ökonomische Aspekte der Willensbildung im selbstverwalteten Betrieb", in: H. Albach and D. Sadowski (eds.): Die Bedeutung gesellschaftlicher Veränderungen für die Willensbildung im Unternehmen. (Schriften des Vereins für Socialpolitik, N.S. 88). Berlin: Duncker & Humblot, 563-606

Nutzinger, H.G. (1977): "Unsicherheit, Hierarchie und vertikale Integration". In: E. Helmstädter (ed.): Neuere Entwicklungen in den Wirtschaftswissenschaften. Berlin: Duncker & Humblot, 1978, 519-542

Nutzinger, H.G. (1978a): "Uncertainty, Hierarchy and Vertical Integration", Discussion Papers of the International Institute of Management, Berlin, dp/78-81

Nutzinger, H.G. (1978b): "Investitionslenkung als Mittel der Wirtschaftspolitik? Zur Problematik einer systemverändernden Konzeption", Jahrbuch für Sozialwissenschaft 29, 275-287

Obradović, J. (1972): "Distribution of Participation in the Process of Decision-Making on Problems Related to the Economic Activity of the Company", in: Participation and Self-Management, Proceeding of the First International Sociological Conference, December 1972 in Dubrovnik, Vol. I, Zagreb, 137-169

Pateman, Carole (1970): Participation and Democratic Theory, Harmondsworth: Penguin

Rousseau, J.J. (1968): The Social Contract. Harmondsworth: Penguin. (French original: Contrat Social)

Schumpeter, J.A. (1943): Capitalism, Socialism and Democracy. London: George Allen & Unwin

Sinzheimer, H. (1976): Das Rätesystem. (Rede vor dem Parteikongress der SPD 1919). Reprinted in: id.: Arbeitsrecht und Rechtssoziologie. Gesammelte Aufsätze und Reden. Vol. 1. Frankfurt/M.-Köln: Europäische Verlagsanstalt, 325-350

Smith, M.P. (1975): Barriers to Organizational Democracy in Public Administration. Paper presented at the Second International Conference on Self-Management, Ithaca, N.Y., June 6-9, 1975

Vahčič, A. (1976): An Econometric Analysis of Post War Performance of Yugoslav Economy. Doctoral Dissertation, Cornell University 1976

Vanek, J. (1970): The General Theory of Labor-Managed Market Economies. Ithaca, N.Y.-London: Cornell University Press

Vanek, J. (1976): "The Process of Decision-Making within a Firm with Worker Self-Determination". In: H. Albach and D. Sadowski (eds.): Die Bedeutung gesellschaftlicher Veränderungen für die Willensbildung im Unternehmen. (Schriften des Vereins für Socialpolitik, N.S. 88). Berlin: Duncker & Humblot, 551-562

Vilmar, F. (1974): "Systemtheorie als Ideologie contra Systemveränderung", aus politik und zeitgeschichte B 51-52/74, 31-39

Vilmar, F. (1975): "Wirtschaftsdemokratie. Theoretische und praktische Ansätze, entwickelt auf der Basis des DGB-Grundsatzprogramms", aus politik und zeitgeschichte B 16/75, 3-33

Watrin, Chr. (1976): "Students, Professors and Taxpayers". Paper presented at the Third Interlaken Seminar on Analysis and Ideology, June 7-12, 1976

Weizsäcker, C.C. von (1971): "Lenkungsprobleme der Hochschulpolitik". In: H. Arndt and D. Swatek (eds.): Grundfragen der Infrastrukturplanung für wachsende Wirtschaften. (Schriften des Vereins für Socialpolitik, N.S. 58). Berlin: Duncker & Humblot, 535-553

Weizsäcker, C.C. von and Schlicht, E. (1977): "Risk-Financing in Labor-Managed Economies: The Commitment Problem", in: Zeitschrift für die gesamte Staatswissenschaft, 53-66

Williamson, O.E. (1973): "Markets and Hierarchies: Some Elementary Considerations", American Economic Review 63, 316-325

Zöller, M. (1975): "Erwiderung auf Fritz Vilmars Demokratisierungskonzept", aus politik und zeitgeschichte B 39/75, 27-38