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**ECONOMIC MAN AND FAIRNESS:
TOWARDS NEW FRONTIERS IN INSTITUTIONAL ECONOMICS**

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SUMMARY

Modern Institutional Analysis is based on the economic model of human behaviour and emphasizes a comparative perspective. While the positive analysis has been generally accepted by now, the policy consequences have been neglected. The constitutional approach concentrates on the individuals' choice of rules which then determines the outcome. The existing economic model of man is deficient in various respects and must be further developed. Behavioural anomalies and fairness under various institutional conditions are discussed and the relevance for institutional analysis is shown.

I. THE PRESENT STATE

Institutional Economics distinguishes neatly between a positive (explanatory) and normative analysis. The main characteristics of the politico-economic approach with respect to positive and normative aspects of institutions are discussed in turn.

III is concerned with the model of man used as the basis of that analysis. In section IV empirical analyses of human behaviour are critically analyzed from the point of view of modern institutional economics. Concluding remarks are offered in section V.

II. INSTITUTIONAL AS CONSTITUTIONAL CHOICE

Outcomes cannot be the subject of choice. Outcomes emerge as the result of the social interaction of individuals acting within institutional environments. This is the essence of constitutional economics (see, e.g., Buchanan 1977, Mueller 1995). Accordingly, outcomes can be influenced only by the choice of institutions. Institutions in the sense used here are *rules* according to which the current politico-economic process takes place. It is thus crucial to distinguish the level at which the institutions are chosen and set from the current politico-economic process in which one acts within given rules. As no rules exist at the pre-constitutional stage and as there is no possibility of forcing individuals, the choice of institutional rules has to be made unanimously, which means that everyone must expect to benefit from the rules. Consensus on rules can be reached because at the constitutional level the individuals act behind the veil of ignorance, i.e. no one knows in which position he or she will be at the post-constitutional stage (see Frey 1983).

The basic consensus in constitutional choice should be looked at as a logical, and not as a historical, characterization. It is immediately applicable to institutions chosen at the international level (Frey 1984). Such rules can only be arrived at by consensus as there is no world government which could force the individual nations to accept rules.

The constitutional approach is incompatible with those institutional analyses in which *end states* or *outcomes* are the object of choice. This applies in particular to the studies in which the 'efficiency' (usually simply cost comparisons) of alternative production arrangements are compared. Much effort has been devoted to the question whether private firms produce more efficiently or at a lower cost than public or cooperative firms. The constitutional approach suggests that such studies overlook the crucial questions: What *process* and what institutional *rules* have led to the choice of either the private, public or cooperative production arrangement? This focuses the attention away from a purely technical comparison of outputs and/or costs to the study of how well individual preferences have been represented when the decision about the mode of production was taken.

Consider, for instance, waste disposal. Assume that in a particular town the public administration has decided out of its own accord that this service will be undertaken by one of its divisions and that no competition by private suppliers is permitted. In that case the mode of production has been decided according to the preferences of the public administrators (among whom the public employees' union has a large say) while the

preferences of the consumers and the taxpayers have not been represented (at least not directly) and therefore tend to be disregarded. Not surprisingly then, the waste disposal service will not be produced X-efficiently or at low cost. According to the preferences of the members of the public administration, however, the service may well be produced in the 'right' way, namely so as to yield them the highest possible net benefit. Following this view, it cannot be surprising that an economist's advice that private production would be more 'efficient' and less costly than the existing public production will be rejected or ignored by the decision makers in charge. The decision makers will point out that the economist considers only the relevant output or counts elements as cost which according to the decision makers should be counted as benefits. This is, for example, the case for wages going to the members of the public firms. Provided the decision makers have not made a mistake, the production *is* efficient if their valuation is used. Even if they accepted the economist's arguments the decision makers in charge would not switch to a private or cooperative mode of production because they would lose thereby.

The constitutional approach looks at whether the whole decision process was one-sided. Taking a normative perspective, public choice economists would suggest a change in the rules under which the decisions are taken. Above all, they would suggest that the consumers and the taxpayers have a (more direct) say in the decision process, e.g. by using direct referenda. If this is the case, their preferences would be taken into account with the result that better outcomes will emerge¹.

The constitutional approach to institutional choice has so far been little appreciated and used. It is still a minority view in economics probably because it departs completely from established ways of thinking and requires a new view of economy and society.

III. ECONOMIC MAN AS A BASIS OF ANALYSIS

The homo oeconomicus sketched is subject to *several limits* which so far have not received much attention in institutional economics. There are (at least) four major shortcomings (see more extensively Frey 1992):

(1) Everyday experience, as well as carefully designed experiments, show that people's willingness to contribute to the financing of a public good is higher than predicted by orthodox economic theory (for extensive surveys see Ledyard 1993, Sally 1995). Indeed, individuals in many situations do not act as *free riders*. One important

¹ This has been empirically supported by Pommerehne (see, e.g., 1990) and Steunenberg (1992, 1995).

IV. FAIRNESS IN THE ECONOMY

A. Survey Results

Empirical notions of fairness of individuals acting in the economic sphere have been analyzed in joint work by psychologists and economists (Kahneman, Knetsch and Thaler 1986).

In a representative telephone survey in two Canadian cities, the following scenario was read to the participants:

'A hardware store has been selling snow shovels for \$15. The morning after a large snowstorm, the store raises the price to \$20.'

82% of the participants (N=107), rated this action as 'unfair', and only 18% considered it to be 'acceptable' to take advantage of the short-run increase in demand due to a blizzard. The same question (translated into German) was put in to a representative sample of 400 persons living in Zurich and Berlin in a written survey (Frey and Pommerehne 1993). It turned out that 83% of all respondents (N=155) considered the rise in price to be unfair. Thus, virtually the same evaluation was found despite the difference of continent and time.

Several other scenarios also suggest that to raise prices when demand increases is considered unfair. On the other hand, it is found acceptable to raise prices when cost increases. This result conflicts with orthodox economic theory which treats opportunity cost exactly the same as any other cost.

From the point of view of the political economy of institutional choice these fairness experiments can be criticised in two respects:

(1) The scenarios do not use a *comparative perspective*. In the example given here, the participants had to state whether they find the use of the price system fair or not. They did not have the possibility to express whether they find the use of prices to ration demand more or less fair than, e.g., an allocation by a traditional method such as 'first come, first served', an allocation by the public administration, or the use of a random mechanism.

In the written survey undertaken for Zurich and Berlin, the fairness of the price system was analyzed when the respondents were explicitly confronted with other

allocation mechanisms. The excess demand situation was characterized in the following way²:

On a popular sightseeing spot which can only be reached on foot there is a water source. The water is filled into bottles and sold to thirsty hikers for the price of SFr. 1.-- (DM 1.--) per bottle. The daily production and thus the inventory per day amounts to 100 bottles. On an especially hot day 200 hikers would like to buy a bottle.

Please indicate *how fair* you consider the following methods for allocating the bottles to the hikers:

- A price increase to SFr. 2.-- (DM 2.--) per bottle?
- Selling the bottle for SFr. 1.-- (DM 1.--) according to the principle 'first come, first served'?
- Selling the bottle for SFr. 1.-- (DM 1.--) according to a random mechanism (e.g., to all persons whose surnames start with A to P)?
- The commune buys all the water for the price of SFr. 1.-- (DM 1.--) per bottle and distributes according to its own principles?

The answers (N=293) given were:

Decision making system	fair	unfair
(a) Price	27%	73%
(b) Tradition	76%	24%
(c) Random	14%	86%
(d) Administration	43%	57%

As expected, the price system is considered to be somewhat less unfair; 'only' 73% of the respondents take it to be unfair compared to when the price system is evaluated in isolation (where 83% found it to be unfair). There is a clear ranking of the decision making mechanism: tradition, i.e., an allocation according to the principle of 'first come, first served' is by far considered to be the fairest; more than three-quarters of the respondents find it to be fair. More than 40% of the respondents find an allocation

² It turned out that the following excess demand situation referring to water was considered to be very similar to the one referring to snow shovels. The situation was changed because most inhabitants of Berlin are never confronted with the need to shovel snow as the overwhelming majority lives in large multi-family houses where snow shovelling is the duty of the caretaker.

predicted³. We distinguished three treatments representing different institutional conditions under which people act:

- (i) anonymity in which the allocator does not know who the recipient is;
- (ii) identification where the two players can look at each other but may not talk;
- (iii) discussion which allows the participants to talk to each other before the allocator makes the division.

In our experiment, the allocator was given SFr. 13.-- (i.e. ECU 8.13 or US\$ 10) in real money, and there were (depending on the treatment) between 78 and 34 persons involved.

Table 2 shows the results of our experiments. 'Fairness' is defined as the share given by the allocator to the recipient.

Table 2. - Dictator Game under three institutional conditions

Institutional Conditions	Fairness-Share
Anonymity	26%
Identification	50%
Discussion	48%

SOURCE:

Our experiments.

The outcomes of the experiments differ massively from the theoretical predictions:

- (a) The fairness share is substantial under all institutional conditions. Even under anonymity, on average the allocators pass on one quarter of the sum received to the

³ For a more complete presentation of the results see Frey and Bohnet (1995) and Bohnet and Frey (1995) where the experimental design is fully described.

recipients; when the two persons can establish verbal and non-verbal communication, the sum received is divided equally.

- (b) Communication doubles the fairness share even when no binding contracts are possible. Identification and discussion⁴ establish a sort of 'psychological contract' which has a binding effect.

The experiments suggest that human beings do not act so egoistically as presumed in orthodox economic and game theory. They moreover show the importance on human behaviour under different institutional conditions. Obviously, the experimental work discussed is only a beginning, but it presents an important step towards a more realistic - and fortunately also more agreeable - homo oeconomicus.

V. CONCLUDING REMARKS

Institutional Economics can make a distinctive contribution to better understand human behaviour and its dependence on varying circumstances. While positive Political Economy has been generally accepted and has been increasingly used, the policy conclusions have been rather neglected. The constitutional approach concentrating on how the rules are chosen which then determine the outcomes presents an important avenue consistent with the individualistic basis of modern economics. It has been argued that the underlying model of human behaviour as it is now commonly used has serious shortcomings and must be further developed. Most importantly, psychologically based anomalies in decision making and fairness have to be introduced. So far neglected aspects of human behaviour can be made directly useful for institutional analysis.

⁴ That discussion raises cooperation in prisoner's dilemma games has been well established in the literature (for an extensive survey see Sally 1995). The prisoner's dilemma and the dictator game have the same basic structure as in both cases individuals refrain from acting in their egoistic self-interest by either acting cooperatively (in the prisoner's dilemma game) or fairly (in the dictator game); see Andreoni and Miller (1994).

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