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Towards a New Paradigm for Economics

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Asad Zaman departs from the widely quoted moralist critique of the neoclassical economics in its undue emphasis on wealth creation and virtual negligence of socio-economic justice. His article presents the basic problem with the neoclassical theory as being the absence of 'poverty' in the language of economics, which is a valid starting point, together with the premise that 'thousands of people die of hunger when there is enough grain available locally to feed all of them'. Although 'poverty economics' has recently emerged as an independent field of inquiry and that the concept of 'poverty-line' is a by-product of it, Zaman's point is still valid in relation to the absence of 'poverty' in the standard text-book approach which furnishes the educational foundation for economists. His article seems to echo the idea that unless morality is taught as part and parcel of the standard economic curriculum, the learning outcome of economics will generate professional economists who have little regard to the concept of economic justice. This is the seminal idea fervently argued by Hausman and McPherson *Economic Analysis and Moral Philosophy*, 2000, by reference to the scandalous behaviour of the one time World Bank chief economist who has adopted a model of cost-benefit analysis to advocate the dumping of harmful industrial waste in the poor countries!

Yet, as it is argued below, a paradigmatic shift in economics cannot be achieved through Zaman's proposed discontinuity in individual utility functions. Discontinuity in terms of **u** and **v** is nothing more than the installation of the conventional 'poverty line' in utility theory which, after all, is an exogenous policy control parameter enforceable by an exogenous policy maker. Obviously, there is no paradigmatic shift in this approach as it simply describes the existing practice. The Islamic paradigmatic shift, on the other hand, underscores the idea that change for the better is a responsibility that must be shared by all society members from within since sustainable change will never come from without. This implication follows from the general Quranic principle: "… Never shall God change the condition of people until they change what is in themselves" (The Qur'an 13:11). Hence, the paradigmatic shift should be based on continuous utility functions, suitably modeled through moral policy, which we refer to as the *generalized utility function,* rather than Zaman's proposed discontinuity.

Poverty and 'Scarcity'

Nonetheless, it is rightly argued by Zaman that the 'central economic problem' ought to be re-stated as one of socio-economic justice – which he reduces down to the basic call for poverty elimination – as against the centrality of 'scarcity' and productive efficiency in the mainstream economics. The central economic problem should indeed be stated as a matter of moral policy rather than one of positive economics, a point which I have argued without playing down the role of scarcity in economics. It is not clear, however, if Zaman is avoiding the untenable position of a few Islamic economists who seek to refute the pertinence of scarcity to economics. Given the real life fact that resources do have rival uses, and that economic choice entails sacrifice of alternative uses, one cannot deny the law of 'scarcity' as the backbone of economics. In particular, the law of scarcity does predict the incidence of 'poverty' when economic resources are largely devoted to the satisfaction of wealthy class luxurious pleasures. Had it been possible to eradicate poverty while at the same time satisfying endless wants of the rich class, poverty would not have arisen in the first place - which we definitely know is a myth!. It is in this sense that the law of scarcity explains the problem of poverty, not in the naive sense of shortages of grain to feed the starving world. Al-Ghazali uses the term 'dear' in his economic analysis of money in the same sense as 'scarce'. Similarly, 'efficiency' cannot be disputed on any ethical grounds as it arises from the practical need to avoid waste in the allocation of the resources. Therefore, the fact that 'poverty' is not acknowledged in the standard text book approach is not due to the failure of 'scarcity' and 'efficiency' to formulate the problem of 'poverty', but merely the result of incidental consensus within the mainstream on how the standard text book should be set out.

Turning now to how a paradigmatic shift in economics can be achieved, the key term in this respect is 'utility function policy' as opposed to 'production function policy'. This point seems to be touched upon by Zaman in his cursory mention of 'policy designed to change utility functions' and the question: 'How can we do a cost benefit analysis of policies designed to induce changes in utility?' Taking this point further, I have elsewhere stated the Islamic method in economics as a critique to conventional human resource policy rather than a critique to positive economics. The conventional human resource policy focuses mainly on production function norms (how to build productive skills) rather than utility function norms (how to build ethical utility functions through religious education). On the other hand, the Islamic human resource policy is shown to combine both. I have lately formulated the same idea by reference to the most daunting problem of interpersonal comparison of utility, which outdated the classical egalitarianist cardinal utility theory and hence placed the last nail on the coffin of social welfarism. Our proposed resolution rests on the statement of problem of interpersonal utility comparison as one which presumes selfish behaviour and hence falls back on a 'third party' (government) to do the comparison. To formally state the problem of inter-person comparison of utility, we define a simplified model with a single commodity X and two individuals A and B, as below.

Statement of the Problem

The two utility functions $U^A (X_a)$ and $U^B (X_b)$, are defined respectively for the two parties where the commodities X_a and X_b are deliberately indexed to denote ownership of the commodity by A and B. Then, in accordance with neoclassical theory, the marginal utility of income is assumed positive for each of the two individuals A and B:

$$\partial U^A / \partial X_a > 0, \quad \text{and} \quad \partial U^B / \partial X_b > 0 \qquad [1]$$

The above property implies that each of the two individuals generate utility from his *own* commodity. This emphasis is added because an individual in the standard neoclassical theory generates *zero* utility from a commodity that is not his own. Thus, the marginal utility of external commodity is typically assumed zero:

$$\partial U^A / \partial X_b = 0, \quad \text{and} \quad \partial U^B / \partial X_a = 0 \qquad [2]$$

This implies that the marginal utility of an individual's own commodity X is always higher than the marginal utility of another commodity that he does not have. No matter how richer is individual A than individual B, any additional unit to A's own commodity X_a would give him more utility than any additional unit of B's commodity. In other words, whatever little utility adds to A is better for him than what adds to B. Hence, given [1] above, it is always true that:

$$\begin{aligned} &\partial U^A / \partial X_a > \partial U^A / \partial X_b \\ &\partial U^B / \partial X_b > \partial U^B / \partial X_a \end{aligned} \qquad [3]$$

The problem with the classical egalitarian cardinal utility approach has been to arbitrarily contradict equation [3] by concluding from the law of diminishing marginal utility that: the marginal utility of a unit commodity to the rich individual A is smaller than its utility to the poor individual B,

$$\partial U^A / \partial X_a < \partial U^A / \partial X_b \qquad [4]$$

It appears clearly well that relation [4] does not fit with the calculus of utility theory since it represents two different utility functions for two different individuals. Utility is a subjective quantity and, therefore, a relation like [4] cannot make sense unless it arises from one and the same individual. In a nut shell, this is the dilemma which compelled advocates of economic justice to give up any appeal to utility theory and resort to alternative approaches to justify the economics of equitable re-distribution. The deep humanitarian concerns with economic justice are then assigned to a third party, government, in mixed capitalist systems without any appeal to utility theory. While it is a pragmatic remedy of the harmful inequities arising from capitalist growth, government intervention proves to be a non-sustainable strategy unless it is fortified by a moral policy which invokes ethical human behaviour. Our aim here is not to work out the details rather than offer the broad analytical framework.

The Generalized Utility Function

The above statement of the problem has led to the conclusion that: if a utility relation like [4] is to act as a basis of re-distribution policy, it must arise from the individual himself and not from a third party. Yet, to be founded on utility theory, such relation must rely on an individual's ethical attitude towards the other. The point of departure is, therefore, to offer a more general definition to the state of satisfaction than that which an individual gets from the bundle of goods he consumes over a period of time. The neo-classical approach deals with consumer satisfaction within the limited household context, hence it treats as irrelevant *externalities* all other influences beyond the household. The source of an individual's satisfaction in the neo-classical consumer theory is strictly limited to his own household boundaries, an assumption which is too restrictive as indeed it is unrealistic. By contrast, the *generalized utility function* should allow for the fact that an individual's state of satisfaction is determined not only by his own basket of consumption goods but also by external socio-economic factors. Apart from redressing a restrictive limitation in the neoclassical model, the generalized utility function provides for the existence of a 'social welfare function' that is consciously recognized and impacted by the behaviour society members. If 'society' is not recognized in individuals' utility functions, Arrow's impossibility theorem should not come as a great contribution. The existence of a social choice function requires the formulation of a generalized utility function as follows:

$$u\,(X_1, X_2, \dots , X_n\,;\; S) = V(S)\,U\,(X_1,\; X_2, \dots , X_n) \qquad [4]$$

Where $U(X_1, X_2, \dots, X_n)$ is the conventional neo-classical utility function satisfying the standard first-order and second order conditions. The additional component V(S) captures the effect of the external socio-economic order on the individual's utility through the external income variable, S, used as a measure of general standard of living in the given economy. As such the generalized utility function consists of two elements:

- A household utility component = $U\,(X_1, X_2, \dots, X_n)$
- A socio-economic utility component = V(S), [5]

Both of which are necessary to determine an individual's general state of satisfaction at any given point of time. The former relates to choice of the most preferred commodity mix $(X_1, X_2, \dots, X_n)$ while the latter relates to what the individual considers as the most preferred economic order in terms of the society's living standard. The behavioural impact of S on an individual depends on his ethical attitude towards the other. The optimal commodity mix $(X_1, X_2, \dots, X_n)$ embodies an individual's subjective *taste*, but the preferred S depends on his *ethical attitudes.* The best way to eliminate consumer taste for goods and focus on the ethical element of the generalized utility function is to take the latter after the consumer has already maximized utility for goods subject to his own income constraint. The result will be a multivariate utility function defined in terms of own income Y, external income S and commodity prices. Hence, holding prices constant, the result will be a two-variable utility function of the individual's income and external incomes, Y and S, as below:

$$u\,(S,Y) = V(S)U(Y) \qquad 0 < S,\, Y < \infty \qquad [6]$$

Hence, the above relation [4] which involved an exogenously enforced equitably policy through the interference of a third party will now act through individual's indigenous behaviour as :

$$\partial\, u^A / \partial S_a \;<\; \partial\, U^A / \partial Y_b \qquad [4]$$

In a nutshell the above framework should offer the needed paradigmatic shift in economics where moral policy (in the sense of utility function policy),aims at producing the Islamic ethical type which generates the equitable wealth distribution at the grass-root level of free economic behaviour.

References

Hausman, M. and **McPherson, Michael S.** (2000) *Economics Analysis and Moral Philosophy*, New York, Oxford University Press.