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Conventional Growth Policy and the Forgotten Potential Resources: A Case for the Ethical Economic Resource

Comments:

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Tag el-Din's interesting paper (Tag el-Din, (1997) aims to prove that the "conventional" positivist (secular) growth theory fails to optimize growth in the broader sense of maximizing social welfare. The reason for this failure, according to him, is its narrow positivistic motivation, which sees economic agents as maximizing only their own utility, unconcerned about what this exercise means for the well being (in the strictly utilitarian sense) of other individuals and of the society as a whole. The author argues that if public policy, breaking out of the positivist box, seeks to mobilize people's ethical religious resources to grow economically more prosperous, then a high growth target will be achieved not only efficiently but also equitably. To prove his thesis, the author shows that individual satisfaction will be more fully achieved if we not only allow for, what he calls, the "household utility component" but also an "external utility component" -- the former reflecting only the economic agent's actual and potential commodity possessions, and the latter denoting the additional satisfaction that they get by helping others (the poorer people) in the society. A logical policy recommendation is, therefore, to mobilize the society's ethical potential with a view to maximizing social welfare.

We generally sympathize with Tag el-Din's concern for taking a wider view of people's utility-maximizing calculus --- by including in it both the economic and the ethico-religious factors. We also agree with the (unstated) implication of his analysis that social welfare is better accomplished by laying greater (policy) emphasis on cooperative economic strategies rather than on just the competitive strategy prescribed by the mainstream positivist economics.[1]

1. There is a vast *literature on the importance of altruism in economic calculus*. For a *useful review* see **Hausman** and **Mc Pherson** (1993).

1. Modeling Morality

The author's analytical strategy, to bring ethics (morality) into the economic agent's economic calculus, is to regard the total "population" as comprising three types: the N (neutral) -type; the E (Envious) -type; and the C (Concerned) -type. Two observations need to be made about this taxonomy. First, the distinction between the N- and E-types is artificial because these two types share the common characteristics of being narrowly focused on their own welfare, neglecting the welfare of every other individual in the society, both the rich and the poor. The real distinction is between the N- and the C-types; and, indeed, the entire analysis presented in this paper turns on only this distinction. Thus, by Occam's razor, the E-type should be cut out from the author's taxonomy. Second, it is unrealistic and analytically unhelpful to regard the total population as divided into these three (or two) types of individual. Such "pure" types of individuals do not exist in the real world. In fact, people are mixtures of these "types". It would be a daunting task to determine the relative "weights" of each of these types of individual on *a priori* grounds.

The only analytically valid procedure is, therefore, to regard this taxonomy as a three-in-one (or two-in-one taxonomy, in which a representative individual is guided both by altruism and by selfish motives. In this context, the author will do well to recognize the well-known Harsanyi's equi-probability model (Harsanyi's, 1977), which explicitly postulates that a representative individual possesses not only personal (selfish) preferences but also moral preferences. While personal preferences are guided by the self-interest maximization rule, moral preferences reflect the Harsanyi's individual's capacity to make an impartial moral judgment by putting himself into another individual's position[2]. The remarkable aspect of Harsanyi's research is to prove, on strictly normative grounds, that social welfare is a weighted average of individual utilities.

Also important for Tag el-Din's thesis is the Rawlsian justice-as-fairness rule (Rawls, 1985), where the emphasis is on the creation of a just social order through a democratic process of (voluntary) cooperation between free and equal persons who are born into the society in which they live and mentally pass through "the veil of ignorance" to make impartial decisions from the "original position" about the basic structure of the society. What these persons in the original position maximize is the welfare of worst-off individuals in the society, no matter what else is maximized. This is the function that Tag el-Din's C-type individual is supposed to perform to maximize growth and social justice.

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2. According to this model, each individual will choose that social system which would maximize his expected utility, which represents the arithmetic mean of all individual utilities in the society.

2. Morality And Social Welfare

The point just made, however, has disturbing implications for Tag el-Din's hypothesis. According to it, public policy in an Islamic society should most properly be geared to maximizing the welfare of the least-privileged in the society. (This is a direct implication of Result-2 of his paper (p. 18) with which we whole-heartedly agree) [3]. But such information amounts to rejecting the "selfishness of preferences" assumption - i.e., a representative consumer's preferences depend only on the commodity bundle that he receives, and not on the pattern of production of the commodity bundles assigned to other consumers in the economy, which is the cornerstone of the utilitarian analytical framework. The point is that if such a policy is consistently followed then a utility indicator will *not* exist in any operational sense. Instead, this situation will be portrayed by a "lexicogaphic ordering" of individual and social preferences (Debreu, 1959). In other words, the indifferences curves, used by Tag el-Din to analyze the impact of Result-2 on consumer and social welfare, are simply not there!

The problem with the utility functions is discussed in more detail in the last section. To summarize it, the utility function is necessarily hyperbolic, and hence depends on the variables *muliplicatively*, to be maximizable. Tag el-Din's *additive* function is not maximizable in the same sense and is hence not a utility function.

3. Altruism And Economic Growth

A more promising approach to modeling altruism as a factor in economic growth is to maximize social welfare (represented by a utility functional), subject to the usual growth constraints and the additional (ethical) requirement that the distribution of income in the society should become more egalitarian in the end-state. The latter requirement which is meant to ensure that a high growth rate does not worsen equity (Tinbergen, 1959) characterizes such an end-state -- where growth and equity constraints of the welfare functional are satisfied to yield maximum social welfare -- as an "optimum regime". This model has been adapted (Naqvi, 1999) to model the Islamic concern that the needs of the least privileged in the society are given priority over all else. It is shown that maximizing the social welfare in this sense would entail the following:

a) that the opportunity cost of capital accumulation (a greater inequality of income and wealth) is reduced by a more egalitarian distribution of income and wealth (taking from the rich and giving to the poor);
b) that the share of wages in national income is increased; and

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3. The implication of Result-2 noted in the text should be obvious Since the C-Type individual is concerned about the welfare of the poor, a policy of increasing the 'weight' of these individuals would amount to assigning primacy to raising the economic well being of the poorer section of the society.

c) that the proportion of wage goods in total production is increased[4].

Qadir (1992) made the proposal more concrete, suggesting that the ethical norms proclaimed by a society should be built into the social welfare functional and the individual utility functions should then aggregate to give the required social welfare functional. This would not mean that all utility functions would be identical -- which would give an "ant society", but that these utility functions would incorporate the ethical teachings of the society. Thus, for example, instead of work effort being *minimized* in the utility function and being forced on the individual by the requirement for earning, a certain amount of work effort would be *desirable* as part of the utility function. The average work effort deemed proper by the society would then be the optimal work effort in the social welfare function.

4. Comparattve Statics vs Dynamics

It needs to be emphasized at this point that Tag el-Din's model is not a dynamic model; it is rather an exercise in comparative statistics in which he compares the post-growth structure with the pre-growth situation. Consequently, the only effect on growth that he can trace is in the form of an upward shift of the indifference curves when it is not informed by ethical concerns and a lowering of the indifference curves when it is so informed. But this is not very interesting because such a comparative static exercise tells us nothing about the re-arrangement in the forces of production and in the structure of property rights of the society that are required to optimize social welfare. Even worse, such an analysis, by its very nature, cannot analyze a situation in which a specific rearrangement of the production process and the basic social structure will in fact lead the economy off the (dynamic) equilibrium path, if adequate safeguards are nor taken. The point is that, contrary to what Tag el-Din appears to assume, there is no *a priori* guarantee that the indifferences curves, even assuming that they exist, will move up or down as a result of a specific exogenous "shock"!

The key point is that what may be better in the long run may appear to be uneconomical at any given time. For example, an under-developed country might find the cost of importing any technology too much compared with obtaining the finished product. *Comparative statics* would rule out such technological development. However, over a long run, the *dynamic* analysis would require it.

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4. The point of this model is to show that such an Islamic optimum regime will be at least as good as the one envisaged by the neo-classical growth theory, which is what Tag el-Din has sought to prove.

5. Islamic Ethics

The ethical perception offered by Tag el-Din in this paper does *not* adequately reflect the Islamic point of view. According to him, the C-type individual, whose superior relative weight and importance in the total population differentiates an Islamic society from a secular one, is concerned only about the welfare of the low-income class but is not worried about the "upper income" class (see page 16). Now, this is obviously an incomplete specification in the sense that it does not leave enough space for a full interaction of ethical and economic imperatives. Indeed it resembles the "basic-needs" approach, which requires that an increasing proportion of the increments in the national income be devoted to the provision of basic needs, or to the creation of assets owned by the poor. It has been shown that this approach does not satisfy either the objectives of a sustainable poverty reduction program nor does it meet the basic conditions of equity, both of which require a substantial transfer of resources from the rich to the poor. Thus, for instance, the Rawlsian justice-as-fairness rule noted above is not a principle of equity because it does not prescribe, like Tag el-Din's C-type individual, how much resources accrue to the rich; nor does it contain any instruction of how to reduce the number of poor people in the society. In sharp contrast the Islamic approach, as indicated by the Divine principles of *al adl wal ihsan*, would be to go beyond the Rawlsian rule and to reduce the number of people as well as the degree of existing inequality of income and wealth (Naqvi, 1993). This point of view gets strength from the Quranic commandment: "in whose wealth a due share is included for the needy and the dispossessed" (20:24-25). In other words, the C-type individual to play the role of a catalyst of economic change, transforming secular growth, an Islamically just growth, *must* also be concerned with how much wealth accrues to the rich, how much they spend and on what.

There is an additional concern. An incremental policy, providing a marginal increase in the welfare of the poorer sections of the society compared to the richer, will *ultimately* reduce inequalities in principle. However (Naqvi and Qadir, 1985), the time scale involved is so impossibly large (for a ratio of 10, a growth rate of 10% per annum and an incremental change of 1% per annum, about *four and a half centuries*) that people may just as well wait for the ultimate reward in Heaven! For any realistic time frame (say, within a generation) the ratio of growth has to be by a factor of two, which is not an incremental but a structural change. Such a change will not be provided by Tag el-Din's "C-type" individual.

6. Mathematical Structure

The crux of Tag el-Din's proposal is to add a *shift*, $V(S_1, S_3)$, to the utility function, $U(X_1, X_2)$, in a two-commodity economy, where S_1 and S_3 are the average incomes of the richer and poorer sections of society, respectively. Thus, he takes the total utility function to be

$$U(X_1, X_2, S_1, S_3) = U(X, X) + V(S_1, S_3). \quad (1)$$

This utility function is taken only for a middle income (average S_2) individual. It is assumed that either the individual is indifferent to variations in the income of the rich (C-type), the poor (E-type), or both (N-type). If there is interest in the former, it is with a desire for its decrease; and if in the latter, for its increase. This ignores the fact that there can be individuals desiring both; desiring the opposite changes in one, or the other, or both. Furthermore, the dependence of the individual's utility on S is totally ignored! More seriously still, the function of *two* variables is treated as if it depended on one variable, as may be seen from his equation [A1] and figure 4. As such there are basic problems with the implementation of the idea. On the assumption that these problems could be resolved, let us look at the general proposal of adding an ethical shift to the utility function.

There is a problem with the idea of the shift of a utility function yielding a utility function. So long as the shift is by a real number there is no problem. However, what the author proposes is a "shift" by a *function*. Thus the indifference *curve* of the two commodity space would have to be replaced by an indifference *surface* (if the shift function depends on only one variable) or *hyper-surface* (if it depends on two variables). *The new function* (of three or four variables) *will have to be minimizable under a budget constraint if it is to be a utility function*. Furthermore, if the new variables do not enter the budget constraint then this is not even meaningful. This aspect of the formulation has not been considered by Tag el-Din.

To resolve the above problems, we can always define a hyperbolic-like utility function (Qadir, 1974) satisfying Tag el-Din's requirement as:

$$U(X_1, X_2, S_1, S_3) = X_1^a X_2^b S_1^c S_3^d, \quad (2)$$

where *a, b, c, d* are positive real numbers. This can replace the function given by equation (1) to eliminate the problems mentioned at the start of this section. The corresponding budget constraint needs to incorporate the so-called "ethical" behaviour of the individual. The C-type would have to be a *philanthrope* ready to spend money to increase the income of the poor, while the E-type would have to be a misanthrope ready to spend money to *decrease* the income of the rich. Both behaviours would generally be associated with each individual. Thus the budget constraint would be of the form

$$B = p_1X_1 + p_2X_2 + p_3\,\delta S_1 + p_4\,\delta S_3, \quad (3)$$

Where *B* is the total income, p_1, p_2 are the usual prices of the commodities, p_3, is the cost of *reducing* the income of the rich by an amount δS_1 and p_4 is the cost of *increasing* the income of the poor by an amount δS_3.

There remains the standard problem of incorporating the concern *for one's own income*, which has not even been considered by Tag el-Din. This is clearly the dominant consideration for most individuals and incorporating it would totally change the analysis. As such, even inserting the changes necessary to make the author's analysis self- consistent would not make his model any more realistic. The irrelevance of the distinction between the N-type and E-type individuals, noted earlier, would also have to be dealt with. To incorporate Islamic ethical considerations into economics would require a more careful, a more thorough, and a deeper analysis.

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