Munawar Iqbal

Zakah, Moderation and Aggregate Consumption in an Islamic Economy JRIE Vol. 3, No. 1, Summer 1405/1985

1 – Comments: Zubair Hasan
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Muslim economists have of late shown much interest in formulating a consumption function for explaining the process of income determination or distribution in an economy regulated by Islamic values and injunctions. Munawar Iqbal presents in his note a critical review of some of the writings⁽¹⁾ in the area primarily "to show that the Islamic economists ... have committed some theoretical mistakes" in their formulations (p.46).

Iqbal's mission is not devoid of success. He rightly points out that the works he examined do not present any Islamic theory of consumption. They seek to explain merely the effects of Islamic teachings on the existing secular models and remain, for that reason, firmly anchored in the Keynesian tradition (p. 46). His rejection of Metwally's claim that Islam directs to relate consumption only to current income (not wealth) is valid (p.47). Likewise his demonstration that Metwally overestimates the effects of *Zakah* on propensity to consume (pp. 50-51) while Darwish and Zain underestimate the same (p.53) looks convincing. Also, Iqbal's introduction of *Zakah* collection charges into the picture vide his equations (27) to (30) is a welcome refinement, though of marginal significance.

However, beyond a few pertinent points of the sort stated above, Iqbal's note is not very illuminating. He tends to confuse issues, does not always keep his formulations error-free and overstretches his argument for arriving at conclusions which are hardly *new* by any measure. Some of his main weaknesses are briefly indicated below:

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First take the vital issue of consumers' rationality. Iqbal agrees that "in the ideal Islamic system consumers will behave neither as spendthrifts nor as misers" (p.47). However, in his view the capitalist model also has exactly the same notion of rationality. He supports Fahim Khan on the point that "the secular assumption of rational behavior for utility maximization implies that the consumer will neither be a miser nor a spendthrift" (p.48). Interestingly, none of them, Iqbal or Khan, explains how he deduces this implication, nor quotes any authority on the point.

I have already refuted this view of rationality claimed for secular economics in my comments on Fahim Khan (Hasan pp.79-80) and must reiterate that it has nothing to do with such value loaded concepts as extravagance or miserliness. Iqbal confuses the matter by contradicting his above stated position later. He writes:

"For a self-centered individual of the secular model, very little will fall in this category (*israf*) because he may well derive 'pleasure' from lavish spending on himself and hence is quite 'rational' by the definition of that model" (p.48).

It must be added that the secular view of rationality is not violated also if one is a miser and hoards wealth to have 'pleasure' from looking at his treaure when he pleases. Secular economics grants such pleasure legitimacy and the liquidity preference theory justifies interest as a reward to forego the same. Utility need not have an externally injected ethical content in secular economics.

Secular macro theory has a straightforward view that in a *ceteris paribus* case the consumer is rational if in allocating his current income he balances the satisfaction from savings against that derived from consumption in such a way as to get equi-marginal returns. Exactly where the balance will be struck depends on a number of factors. These include also the individual's temperament. He will doubtless save more if he is of a thrifty disposition than if he were of a less provident type (Brooman p.104). Clearly this in no way implies, as Iqbal and Khan imagine, that the consumer in secular model will neither be a miser nor a spendthrift.

The misconception that this rationality view is common to both models-secular and Islamic-leads Iqbal to the logical conclusion that the level of *israf* will be zero in each case. But then moderation i.e. avoidance of *israf* in consumption does not remain, contrary to the learned opinion, the distinctive feature of the Islamic model. To overcome the difficulty Iqbal argues:

"There may still be a lower level of consumption in the Islamic economy than the secular economy because of differences in individual perceptions about what constitutes *israf*" (p.48).

One may reasonably ask why Iqbal compares here one economy with the other because a moment earlier he was vigorously raising the warning signals: "one should not forget that one is comparing 'models' or ideal states and not actual economies". (p.47). Later he unceremoniously discarded by implication the identical rationality assumption in constructing equation (31) where 'f' is the parameter representing the level of *israf*-not perceptional differences-in a secular economy (not model) (p.55). The *faux pas* in Iqbal's argument is obvious.

Again, Iqbal presumes that *israf* is likely to be lower in an Islamic model, But he does not agree with Khan that it will partly be so because the Islamic consumer would face a smaller basket of consumption than a secular consumer. He is right but his argument for rejecting Khan's proposition is redundant. Iqbal says:

"A smaller basket does not *per se* lead to a lower propensity to consume as long as the consumer has a sufficiently large number of commodities in the basket (which in fact is the case) and is free to substitute one commodity for the other." (p.55)

Evidently he fails to realise that the relevant factor is neither the *number* of the commodities in the basket nor the *substitution* possibility, it is the *money value* of the basket that alone can clinch the issue. A person can spend much more on permitted goods only than the other does on both the permitted and the prohibited ones because of, say, temperamental difference (Hasan p. 81 n).

Last but important, Iqbal like his precursors, is not very sure of the issue he wants to investigate. His declared objective is to examine the effect of *Zakah* and moderation on aggregate consumption in an Islamic economy. This he could do neatly on the assumption of given group consumption propensities as I have done in section III below. However, Iqbal chose to show how secular model propensities to consume would tend to change under the impact of *Zakah* and moderation. This is a much bigger task. Many more factors are involved and their interactions are complicated. Therefore, macroeconomic analysis tends to proceed generally on the assumption of table propensities. Iqbal fails to take note of these facts and this is one reason why he could not arrive at any firm conclusions. However, I treat him below within his framework.

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Iqbal's mathematical manipulations have a number of blemishes. (2) Here we indicate some of the major ones only.

Iqbal observes that the *Zakah* payers transfer a certain proportion (α) of *their* income to *Zakah* recipients. This income is only a portion of Y i.e, β Y. The amount of *Zakah* payments should therefore be specified as α β Y and not as α Y. Consequently, equation (2) in Iqbal (p. 48) should be:

$$C_{1} = a + \left[\delta + (1 - \alpha)(b - \delta)\beta\right]Y \tag{1}$$

This error vitiates some of the major mathematical formulations in Iqbal, and a number of his equations need correction for the same. Of course, one can express Zakah Z as a proportion of the aggregate income Y. One can for example write $Z=a^*Y$. But then we have $\alpha \beta Y=a^*Y$ or $a^*=\alpha \beta$ where a^* is less than both α and β because each one of these parameters is a positive fraction. Iqbal uses a in place of a^* implying an overvaluation of Zakah incorporated in his affected equations. It is queer that he does not provide any reason for his linking Zakah payments to Y instead of X0.

The lapse assumes significance in the case of Iqbal's expression (35) which is:

$$(d-c)\sigma > < cf(\beta-\sigma)$$

where 'c' is the marginal propensity to consume (MPC) of the Zakah payers and 'd' of the Zakah recipients (d > c), 'f' is the proportion of Zakah payers' income (β Y) constituting israf in consumption, and ' σ ' is the proportion of their income specifying $net\ Zakah$ payments.

However, if one substitutes $\sigma \beta Y$ for the inappropriate σY in equation (31) of Iqbal, the above expression becomes:

$$(d-c)\sigma > < cf(1-\sigma) \tag{2}$$

It is important to note that while in Iqbal's (35) β plays a role in deciding if the marginal propensity to consume in an Islamic model (MPC1) is less or more than that in a secular model (MPCs), in its revised version given in (2) above β just does not appear, showing that it has nothing to do with the fact whether MPC1 - MPC, will be positive or negative. It is only after the *sign* of the difference has been determined on the basis specified in (2) that β would enter into the picture to influence the determination of its *magnitude*, positive or negative, ⁽³⁾ This role of β follows from the following corrected version of (34) in Iqbal.

$$\left(\frac{dC_{1}}{dY}\right) - \left(\frac{dC_{s}}{dY}\right) = \beta \left[(d-c)\sigma - cf(1-\sigma) \right]$$
(3)

One serious consequence of the correction is that it requires a revision of the entire sensitivity analysis, specially the tables, in Iqbal (pp. 56-58). However, more important is the question whether, even after the revision of tables, such analysis would have utility commensurate with the effort involved. Presumably more can be obtained and with ease from the diagrams given below than from Iqbal's cumbersome tables,

Equation (3) above can be written as under:

$$MPC_1 - MPC_s = \beta (d - c) \sigma - cf (1 - \sigma)$$
(4)

where c, d, β , σ and f are all positive fractions. Assuming c, d, and β as given, let us put:

$$MPC_1 - MPC_s = x$$
$$(d-c)\sigma = p$$
and $c(1-\sigma) = m$

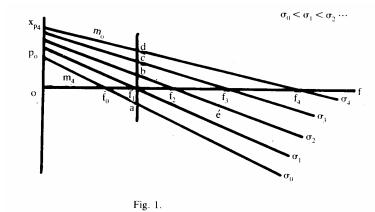
This transforms (4) into:

$$x = (p - mf)\beta \tag{5}$$

It is the equation of a straight line, β being an additional factor influencing its position in the plane. By definition, P varies directly and m varies inversely with σ . The equation depicts inverse relationship between x and f independent of the value of β , Further,

$$x \ge 0$$
 as $f \ge \left(\frac{p}{m}\right)$ (6)

Under the assumptions stated above for equation (5) the following diagram brings out clearly the implications of equation (4)

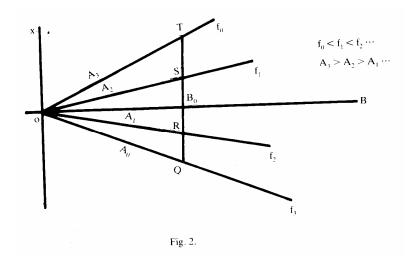


It follows from this simple diagram that the difference x is a decreasing function of israf f along any straight line such as σ_1 . It remains positive $(MPC_1 > MPC_s)$ until $f = f_1$ but assumes negative values as f increases beyond f_1 . In contrast, for any given value off say f_1 , x varies directly with σ along a line such as 'ad' and moves up from a negative value 'af_1' to a positive one like 'bf_1' as σ exceeds σ_1 . Whether the difference $(MPC_1 - MPC_s)$ will be positive or negative would, in a particular situation, depend on which of the two opposing forces, f and σ , operating on x is stronger. To illustrate, if $\sigma = \sigma_2$ their net effect is positive as measured by bf_1. But it would be completely neutralized as f increases to f_2 and would assume negative values (e.g. ef_3) if f increases further beyond f_2 .

In the above discussion we assumed c, d, and β as given. If changes in only c and d are allowed such that the constraint d > c remains intact, both p and m may change but the main relationships discussed above would remain undisturbed. Presumably it would be more revealing to investigate the implications if β is allowed to change. For this, let us put (p - mf) = A. We have from (5)

$$x = A\beta \tag{7}$$

This again is the equation of a straight line passing through the origin. If p and m are held constant, A varies inversely with f, remains positive so long as p > mf but would become negative once the increasing f makes p < mf. Interestingly an increase in β would make the magnitude of x larger (and vice versa) in each case i.e. whether A is positive or negative. The following diagram illustrates the point.



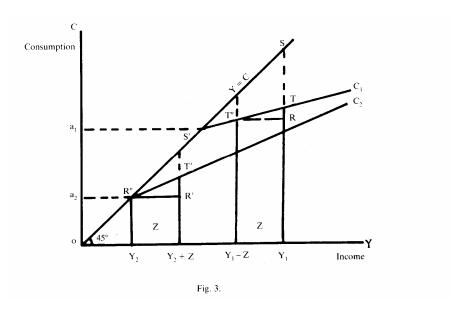
It follows that for any given $\beta = \beta_0$ x varies inversely with *israf* along the QT line, and the magnitude of x, positive or negative, varies directly with β along any line such as f_0 or f_3 . The crucial point is that β in no way affects the slope of the lines.

Lastly, Iqbal writes "f is the parameter representing the level of *israf* in a secular economy and its value ranges from zero to one" (P.55). The statement is untidy in several ways. First, f in Iqbal does not show strictly the *level* of *israf*, it shows the *ratio* of Group I consumption which constitutes *israf*. Second, in the Islamic consumption model depicted in his equation (31) Iqbal specifies moderation i.e. *israf* free income proportion as (1-f). It is difficult to understand how moderation will be promoted in the Islamic model if *israf* f rises in the *secular* model? Third, the interval defined as $0 \le f \le$ is faulty. For if f = 1, the entire consumption of the *Zakah* payers beyond its component in 'a' would vanish in an effort to avoid *israf*. Clearly, the term (1 - f) $c[\beta y - \sigma Y]$ in equation (31) will become zero. A more sensible interval would presumably be $0 \le f \le 0.25$ implying that at the most 25% of the consumption of the rich would constitute *israf* in a secular model from the Islamic viewpoint. It would tend to vanish if the *same* model is Islamized. Iqbal's own sensitivity analysis tables assign f the maximum value of 0.20 only.

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Writers in the area of Islamic macroeconomic theory seem to be obsessed with a desire to introduce moderation-avoidance of *israf*-in their models as a compensatory factor for the consumption increasing potential of *Zakah*. They are usually haunted by the fear that increased consumption would reduce savings and investment in the economy slowing down its rate of growth compared to a secular model. Such obsession is meaningless, fear misplaced. Important for the believers is not primarily the superiority or otherwise of the Islamic models over the secular ones but the moulding of their thinking, behaviour and social institutions according to the dictates of the *Shariah*, what then follows must be welcome as the best.

On the rational plane, one must recognize that the concept of moderation in consumption is vague as *israf* is not a verifiable quantity. The consumer himself may not usually be able to separate *israf* from legitimate requirements. An external observer like an economist is all the more a poor judge in the matter. In contrast, *Zakah* including voluntary expenditure in the way of Allah is at once objective and a quantifiable variable. It is better to desist from obscuring its impact on aggregate consumption by introducing negative *israf* i.e. moderation as a balancing factor in an Islamic model. Such models can rarely have descriptive utility or predictive value. Presumably one should prefer analyzing the impact of *Zakah* on consumption in an Islamic model with the assumption that the level of *israf* is zero. Then one can describe how the results are likely to change if *israf* does take place. We may explain this approach by using a familiar type of diagram.



Here C is the consumption function of the Zakah payers with Y_1 income and a_1 the minimum consumption constraint. The corresponding values for Zakah recipients are C_2 Y_2 and a_2 . Z is the amount of Zakah transfers-calculated on appropriate basis- from the payers to the recipients. The amount could be gross or net depending on whether Z includes or excludes collection charges and intrapayer transfers. The slopes of C_1 and C_2 indicate that the MPC of the payers is smaller than the MPC of the recipients.

Before Zakah transfers the entire Y_2 is consumed by assumption $(y_2=a_2)$. After transfers, Y_2 increases to Y_2+Z and Y_1 is reduced to Y_1-Z . As a consequence, the consumption of the payers is reduced by TR and of the recipients increased by T' R'. The slope of C_2 being greater than of C_1 , T' R' > TR. Hence, for given $\overline{Y}=Y_1+Y_2$ aggregate consumption must increase as a net result of Zakah transfers, Savings are obviously reduced.

Now, if *israf* is introduced into the picture, the slope of C_1 will tend to rise as extravagance of the rich increases. The positive effect of Zakah on aggregate consumption will not, however, be reversed - though progressively reduced - so long as the increasing slope of C_1 under the impact of *israf* remains less than that of C_2 . It will be zero when the two slopes become equal. The net Zakah effect would be negative-because of it, aggregate consumption would be less and savings more-only when *israf* makes C_1 become steeper than C_2 . Such possibilities are expected to be rare in an Islamic economy. Therefore, the conclusion drawn in the above paragraph is likely to remain intact.

To my mind it is not *israf*, but some other factors which require more serious thought and investigation in formulating a consumption function in an Islamic economy. Some of these are briefly indicated below.

- 1) An individual's consumption expenditure depends *inter alia* on his total resources. There is an a *priori* expectation that his consumption will rise with the level of resources but in such a way that it takes a smaller proportion of them the larger they are. This relationship however is not the consumption function as defined in the writings of Muslim economists reviewed by Iqbal. They relate consumption not to resources but to income, and there may be considerable difference between the two cases. Iqbal does mention this deficiency in Islamic models but does not provide even hints for an alternative construct.
- 2) These models leave out not only the assets part of the consumer's resources but even income here means his *current* income i.e. which accrues during the same period in which his consumption expenditure is done. However, most people receive their incomes in *arrears*. It is last month's income for example which A is spending this month. Why should then one not relate the consumption of a given period t to the income of the preceding period t_1 ? Again, his consumption may also be influenced by expectations about his income in the future. Time horizon variations may influence even a *static* consumption function of the sort discussed in Iqbal.
- 3) Even the conclusion stated above that the net effect of Zakah and avoidance of israf on consumption in an Islamic model is likely to remain positive is subject to two qualifications: (i) both the Zakah payers and recipients stay on their respective consumption functions, and (ii) these consumption functions are linear. But the qualifications may not hold good.

Income tends to be associated with social status and different social groups have different norms of consumption expenditures. Redistribution through Zakah, as otherwise, gives more income to a 'lower' group and its members-at least some of themmay respond by joining a higher group and thereby change their consumption standards. For example, in Fig. 3 they may jump from C_2 to a higher consumption function passing through say S', instead of moving from R" to T'. If Zakah payers remain on C_1 , merely moving from T to T", consumption would increase considerably. "Nothing can be taken for granted about the result of income redistribution; it is necessary to know something about the MPCs of the income groups concerned, and also to assess mobility between social classes" (Brooman P. 118).

Again, a linear consumption function may be a convenient analytical device but a curve say of the sort $C = a + b (Y - a)^{y_2}$, where Y > a, is a closer approximation of reality. It means that MPC on the same curve in Fig. 3 will be different at points Y_2 and Y_1 . (5) How will that affect the analysis must be considered.

Last but not the least, the consumption function $C = a + b \ Y$ which forms the basis of discussion in lqbal as in others is not a concept which describes consumers' behaviour over time. "It indicates a set of simultaneously existing possibilities which arise from the state of preferences at a particular moment." (Brooman P. 122). This may serve well at the most for very short periods. But to suppose that the shape and position of the function remain unchanged say over a decade would be a very dubious proposition.

Given sufficient time, an individual's income level, magnitude and composition of his net assets, his attitudes and even temperament, liquidity preferences, price levels, relative prices, national income and its distribution, tax structure, business income policies etc. may all show considerable changes having far reaching repercussions' on consumption. The imponderables are indeed too many to permit any reasonably precise conclusion concerning the effects of factors like *Zakah* and *israf* on aggregate consumption if a secular model is Islamized by introducing these variables into it. Even in secular economics, the consumption function now seems to be in a state of flux.

For the short run, one may prefer to presume that, other things being equal, aggregate consumption would be higher and savings lower if secular model is Islamized, as some writers in the area have chosen to do. However, this need not to be taken as an unsavoury inference from the viewpoint of investment needed for growth. One must emphasize that as a productivity raising factor, there is not much of a difference between consumption and investment in the case of developing economies (Meier pp. 269-70)-a group to which most of the Muslim countries belong. Furthermore, to the extent increased consumption tends to enlarge the size of the market it may help, not impede, economic growth in the Muslim countries.

IV

To conclude, Iqbal's effort is good in patches, suffers from some serious errors, and hardly makes any contribution to the available literature on the subject.

Notes

1. Some important omissions are AI-Jarhi, Mehdi and Naqvi. Their writings contain some methodological merits and theoretical clarifications which Iqbal would have found useful for his work. For example Mehdi's comments on consumers' rationality in secular economics are quite instructive and could have saved Iqbal from repeating the misconceptions contained in Khan. Likewise, Al-Jarhi and Naqvi's comments on him give some formulations concerning propensity to save. As Y = C + S propositions about savings may be translated into propositions about consumption and vice versa. Iqbal could have benefited from Naqvi's income groupings which I have used in Fig. 3.

2. Some of the minor errors are for example in equations (4) and (5), (8), (9) and (10). The correct versions of these equations are given below. Only the right hand side of the equations is provided.

$$d (1+a-b)-b (1+a-b)$$
 (4) and (5)
 $a (d-c)Y$ (8)
 $a (d-c)$ (9) and (10)

Since Iqbal is dealing with linear functions APC_t - APC_s must be the same as MPC_1 - MPC_s . This simple statement was enough instead of demonstrating the fact repeatedly. His equations (4) and (5), (9) and (10), (15) and (16), (18) and (19), (21) and (22), (25) and (26), (33) and (34) hardly serve any useful purpose. In any event, one derivation instead of two was enough in each case.

- 3. This is demonstrated later. See Fig. 2.
- 4. The value is purely arbitrary implying only that the upper limit as 1 for f is too high, rather naive.
- 5. The same curve will be steeper at Y_2 than at Y_1 , i.e. MPC at Y_2 shall be higher than at Y_1 . This would complicate the analysis of the effects of *Zakah* and *israf* on aggregate consumption in an Islamic model, and it may become all the more difficult to arrive at any firm conclusions.

References

AI-jarhi, Mabid Ali, "Towards an Islamic Macro Model of Distribution: A Comparative Approach", *JRIE*, Vol. 1, No. 2, 1984.

Brooman, F. S., Macroeconomics, Bombay: George Allen and Unwin, 1970.

Hasan, Zubair, "Comments on M. Fahim Khan", JRIE, Vol. 2, No. 2, 1985.

Khan, M. Fahim, "Macro-Consumption Function in an Islamic Framework" JRIE, Vol. 1 No. 2, 1984.

Mehdi, S. Iqbal, "Comments on M. Fahim Khan", JRIE, Vol. 2, No. 2, 1985.

Meier, Gerald M., "Leading Issues in Economic Development", (Third Edition), New York: Oxford University Press, 1977.

Naqvi, K.A., "Comments on Mabid Ali Al-Jarhi", JRIE, Vol. 2, No. 2, 1985.