PRINCIPLES FOR THE RANDOM SCRUTINY OF INCOME TAX RETURNS

A. DAS-GUPTA

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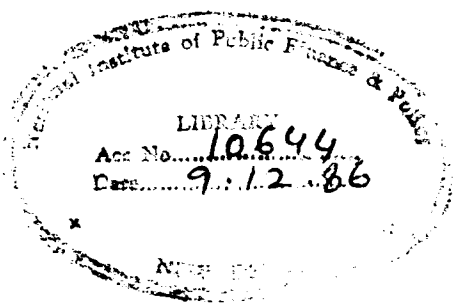

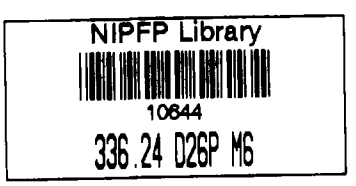

NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY
18/2, SATSANG VIHAR MARG
SPECIAL INSTITUTIONAL AREA
NEW DELHI 110067

PRINCIPLES FOR THE RANDOM SCRUTINY OF INCOME TAX RETURNS*

1. Introduction

In the Long Term Fiscal Policy (1985) and the recent Discussion Paper on Rationalisation and Simplification of Direct Tax Laws, the Finance Ministry has expressed the intention of providing for random scrutiny of a sample of Income Tax returns. Measures suggested in the Long Term Fiscal Policy, Section 5.31 (i) are as follows:

"Accept, in general, the returns in all cases (other than companies or trusts) showing returned income of not more than Rs 1 lakh, and in company cases with returned income of not more than Rs 25,000 (except for new assessees). However, a thorough scrutiny of a specified random sample of the accepted returns will be undertaken. The procedure will be refined by applying principles of stratified sampling to select higher proportions of non-salaried taxpayers and sub-groups of them, believed to be particularly prone to evasion, for scrutiny, (emphasis added)".

"In addition paragraphs (iii), (iv) and (v) of Section 5.31 of the Long Term Fiscal Policy suggest measures to strengthen the machinery for establishing tax evasion in courts of law and improving detection (including search and seizure) operations. Section 11 of the Discussion Paper

gives further substance to some of thsse measures. Additionally, important measures suggested in the discussion paper germane to the issue of random sampling include:

(i) Substituting the present penal provisions under Section 271(1)(c) prescribing penalty for cancealment of income by a simple system of charge of additional tax equal to 30 per cent of the amount by which the returned income falls short of the assessed income'. (Section 8.3)

(ii) Provisions with respect to prescribing minimum punishment wherever it is not so provided, allowing for immediate prosecution without completion of assessment and shifting the areas of proof of 'culpable mental state'/'reasonable cause' to the taxpayer . (Section 8.4)

While, in the interests of cost-effectiveness, acceptance of the principle of random sampling is welcome, various specific measures proposed in the two Finance Ministry document are problematic. Specific plus and minus points are:

(i) The ceiling of Rs 1 lakh on random assessments violates basic economic principles of random sampling [Reinganum and Wilde (1985)].

(ii) That the size of the random sample is to be pre-specified is welcome and in accord with the game theoretic principle of precommitment[1].

(iii) The intention to stratify the sample of returns to be scrutinised certainly accords with maximising cost-effectiveness but one is left uneasy at the brief manner in which principles for selection of scrutiny proportions for strata have been enunciated without any apparent justification.

(iv) The intention to strengthen detection and judicial machinery is welcome, though comments on the specific measures are beyond the competence of the author of this paper2/.

(v) The reduction in the severity of penalties - which is what Section 8.3 of the Discussion Paper amounts to - is incomprehensible and will result in added burdens on the scrutiny machinery. However, the intention to widen the area of penalties (expressed in Section 8.4) is sound.

In this note an enunciation of the economic principles of random scrutiny is undertaken with special reference to the Indian Income Tax case. A scheme for the implementation of random scrutiny is also proposed.

2. Why Random Scrutiny? Cost-Effectiveness

The captioned issue is easily dealt with. Random scrutiny is undertaken since the costs of complete scrutiny of all returns would be prohibitive in terms of manpower, time and materials. However, if the scrutiny were non-random and partial, then taxpayers who were not to be scrutinised would have no incentive to truthfully declare incomes (apart from their own moral rectitude). Thus random scrutiny ensures cost-effectiveness while ensuring that no taxpayer is free of the risk of scrutiny.

Economists have extensive experience in providing prescriptions for cost-effectiveness and it is the issue of cost-effectiveness which is the central concern of this note. But a first principle is easily enunciated at this stage.

PRINCIPLE 1. RANDOM SCRUTINY CANNOT BE MADE COST-EFFECTIVE WITHOUT A KNOWLEDGE OF SCRUTINY COSTS. THUS ESTIMATION OF THE COSTS OF SCRUTINY IS PREREQUISITE TO AN EFFECTIVE RANDOM SCRUTINY STRATEGY.

Costs of scrutiny should ideally include not only the costs of the scrutinising I.T.O.'s time, but also an estimate of the costs of search and seizure, prosecution, appeals and the cost of the legal process. However, if such an estimate is unavailable, some estimate is superior to no estimate at all.

Costs can be divided into fixed and variable costs. Fixed costs include the cost of setting up and maintaining the basic scrutiny and judicial machinery. These costs are independent of the number of scrutinies undertaken. In contrast, variable costs increase as the number of scrutinies increase. Well-known economic principles suggest that fixed costs play no role in deciding the number of scrutinies to undertake. Applying basic economics once more we arrive at the second principle for random scrutiny.

PRINCIPLE 2. THE PROPORTION OF ASSESSEES TO BE SCRUTINISED[3/] SHOULD BE DECIDED IN A MANNER SUCH THAT THE ADDITIONAL TAX PLUS PENALTY REVENUE REALISED AS A RESULT OF THE SCRUTINIES EXCEEDS THE EXPECTED COST OF THE SCRUTINIES.

If the expected cost per scrutiny is not constant but, instead, varies with the number of scrutinies, a joint

decision on the total number of scrutinies to be undertaken must be made. One may note, for clarity, that "additional tax plus penalty revenue expected" includes three elements:

(i) The expected penalty revenue which is the penalty rate multiplied by the estimated amount by which the tax payer underreports income.

(ii) The expected additional tax revenue which is the tax revenue at the expected taxable income less the tax revenue on declared income.

(iii) Interest for delayed payment, if any.

(iv) The proportion of reassessments which result in realisation of additional taxes and penalties after judicial proceedings: The sum of the items in (i), (ii) and (iii) above is to be multiplied by this proportion to arrive at a measure of expected benefits.

The item identified in point (iv) above leads us directly to the third principle:

PRINCIPLE 3. TO PROPERLY EVALUATE REVENUE BENEFITS FROM SCRUTINY, AN ESTIMATE OF THE PROPORTION OF REASSESSMENTS RESULTING IN ADDITIONAL REVENUES AFTER JUDICIAL AND APPELLATE PROCEEDINGS IS REQUIRED.

The discussion above has restricted itself to easily measurable benefits. However, the deterrent effects, of, say, jail sentences for offenders, clearly leads to large additional benefits to scrutiny through its impact on the behaviour of other prospective tax evaders. Thus, it must be emphasised that the mechanistic principles advocated

above are not sufficient in themselves to permit a proper accounting of the benefits to scrutiny in both the long and the short run. Given the difficulties inherent in measuring the benefits from jail sentences and other non-monetary penalties, the need for tempering the principles enunciated above with the fruits of experience and with informed judgement must be emphasised[4].

PRINCIPLE 4. INDIRECT DETERRENCE DUE TO NON-MONETARY PENALTIES (AS, FOR EXAMPLE, JAIL SENTENCES) MUST NOT BE NEGLECTED IN ASSESSING THE EXPECTED BENEFITS FROM SCRUTINY.

3. Should Files be Reopened if Additional Information on Evasion by a Taxpayer Becomes Available?

This should be a non-issue except that, in conversation with income tax officials, it is learnt that reopening of files not subject to random scrutiny in the first instance is being disallowed. If true, this violates cost-effectiveness.

PRINCIPLE 5. IF ADDITIONAL INFORMATION ON EVASION BECOMES AVAILABLE (AFTER SUMMARY ASSESSMENT) ON RETURNS NOT SUBJECTED TO RANDOM SCRUTINY, SUCH INFORMATION SHOULD BE USED TO REOPEN FILES SINCE EXPECTED COSTS OF SCRUTINY ARE NOW LOWERED AND/OR THE PROBABILITY OF PROVING EVASION RAISED.

The game-theoretic notion of precommitment implies that the authorities should be able to convince taxpayers that announced policy to scrutinise at least a given proportion of taxpayers will in fact be adhered to. If this figure is publicised, it will be taken into account in the taxpayer's tax declaration calculations. However, the precommitted policy is ineffective (not credible) if the authorities are suspected to be unable to carry out the promised proportion of scrutinies. Nothing however prevents the authorities from carrying out more than the promised number of assessments. The only possible reason for adhering rigidly to the random sample is fear of misuse of reopening provisions by some corrupt Income Tax Officers and consequent harassment of taxpayers.

4. Stratification

Discovering the extent of tax evasion is relatively easy for some groups of taxpayers in comparison with other groups[5]. Furthermore, different groups of taxpayers may be more prone to underreport income than other groups. Thus, cost-effectiveness demands that the proportions of taxpayers scrutinised in different groups should not be identical. This position has been accepted by the LTFP. However, the two factors cited above tend to work in opposite directions so that it is impossible to say a priori what groups should be audited more heavily: If, for a group of taxpayers tax evasion is relatively easy to detect, then cost-effectiveness dictates that they should be scrutinised more than hard-to-detect groups. However, cost-effectiveness also suggests that groups prone to underrport more income

should be audited more heavily[6]. Since ease of detection and proneness to evasion are likely to be negatively correlated it is hard, without empirical study drawing upon past experience, to prescribe which groups should be scrutinised more and which groups less. However, the principle is clear.

PRINCIPLE 6. ACROSS DIFFERENT (ROUGHLY HOMOGENEOUS) GROUPS OF TAXPAYERS THE PROPORTION OF TAXPAYERS SCRUTINISED SHOULD VARY. THE PROPORTIONS SHOULD INCREASE WITH THE EASE OF DETECTION OF OF EVASION AND WITH THE EVASION PRONENESS OF THE GROUP OF TAXPAYERS.

Some criteria which may be used in selecting strata are the following[7]:

(i) Salary earner/professional/self-employed (Major source of income).

(ii) Individual/HUF/AOP.

(iii) Type of business(es) or profession(s) of the taxpayer: Retail trade, wholesale trade, small-scale industry, financial and other services, etc.

(iv) Rural/Urban/Metropolitan.

(v) Proportion of income from salary, dividend, income from property, etc.

(vi) The taxpayer's history of evasion.

Of these items, only the first criterion appears to have been considered by the LTFP. Further, whether their prescription of the scrutiny of higher proportion of non-salaried taxpayers is based on principle 6 is not clearly specified.

Of the criteria for stratification, items (v) and (vi) deserve additional comment. Given information on the sources of a taxpayer's income and his job designation/ occupation from the I.T. return and in some cases the W.T. return, norms can be devised for effective auditing. For example, a taxpayer's job description serves to convey information as to the expected gross taxable income. This is especially true for government officials. On the basis of a study of both the Income Tax Act and statistics, the following ratios can be computed[8].

(i) Expected ratio of deductions to gross taxable income for a taxpayer with a particular job description/occupation.

(ii) Expected ratio of salary to other income for salary earners with a given gross taxable income.

(iii) Expected ratio of other income to profit income from business for self-employed, AOPs, etc.

(iv) Expected ratio of salary to value of perquisites for the given job description.

The proportion of taxpayers whose ratios (where applicable) exceed the expected ratios should automatically face a higher probability of scrutiny[9].

The evasion history of a taxpayer is also useful since it reveals details of the evasion proneness of the taxpayer (or even, with enough accumulated evidence over the years, the tax-paying group). It is suggested[10] that three

groups be formed. All individuals within a strata start out in a middle group, called group 2. If an individual is found to underreport less than the average for the strata (plus or minus an appropriate margin) (s)he is shifted into group 1 which has a lower proportion scrutinised. If the individuals underreporting is greater (s)he is moved into group 3 which has a higher proportion of scrutiny cases[11]. The principles discussed above may now be enunciated.

PRINCIPLE 7. NORMS SHOULD BE DEVISED AS TO EXPECTED RATIOS OF VARIOUS KINDS OF INCOME ACCORDING TO GROUPS OF TAXPAYERS (AS EXPLAINED ABOVE). SCRUTINY PROBABILITIES SHOULD BE RAISED OR LOWERED WHENEVER A TAXPAYER'S PERSONAL RATIOS (WHERE APPLICABLE) DEVIATE SIGNIFICANTLY FROM THE NORMS.

PRINCIPLE 8. THE TAXPAYER'S EVASION HISTORY SHOULD BE USED. THOSE WHO, ON SCRUTINY, ARE FOUND TO UNDER-REPORT LESS THAN EXPECTED SHOULD BE SCRUTINISED WITH LOWER PROBABILITY IN FUTURE ASSESSMENTS AND CONVERSELY FOR HIGHER UNDERREPORTING.

The discussion above does not attempt to suggest that all stratification measures should be implemented at the first instance. They may be implemented in a phased manner. A suggested implementation strategy is given in Section 8.

What rule may be devised for the proportion of each stratum that is to be scrutinised once strata have been chosen (apart from modification due to norms and evasion

history)? While the actual numerical formula will inevitably be approximations, given the complexity of the tax system and human behaviour[12], the principles outlined above suggest the following guidelines:

Other things equal, scrutiny should be higher

(i) when potential tax revenues are higher (due to, say, higher tax rates);

(ii) among groups expected to have higher income[13];

(iii) for groups for whom scrutiny costs are low;

(iv) among groups against whom the percentage of reassessments by the IT Department upheld by courts is higher[14].

Furthermore, modifications to the basic proportions of taxpayers to be scrutinised in each group should be carried out in line with Principles 7 and 8.

5. Declared Taxable Income and Scrutiny Proportions

While it is true that it is cost-effective to scrutinise higher proportions of taxpayers expected to have higher incomes scrutinising higher proportions of taxpayers with higher declared incomes is logically unsound. The logic behind this assertion is straightforward: If a potential tax evader knows that he is more likely to have his return scrutinised if he declares a high taxable income rather than a low taxable income, then he will have every incentive to declare a low income. Not only does the tax "saving" increase with this strategy but so does his chance of getting

away with it! Thus the LTFP proposal to scrutinise all persons declaring incomes above Rs 1 lakh and randomly persons declaring incomes below Rs 1 lakh is highly questionable.

The argument above suggests that it would make more sense to scrutinise higher proportions of those who report low incomes (within each stratum). Two arguments may be made to counter this position. The first counter-argument is that this would put inordinate strain on the I.T. Department since most taxpayers declare low incomes. This is clearly spurious. Once the total percentage of scrutinies to be made is fixed, the proportions within each declared income category can be fixed in any manner desired without upsetting cost and manpower calculations.

The second counter-argument has more substance: The size of genuine taxpayer errors or difference of opinion in computing their tax liabilities is likely to increase with declared income if no evasion is contemplated. Thus, in the absence of evasion, scrutiny percentages should increase with declared income. While the basic point is beyond dispute, the task of error detection is best handled prior to the random scrutiny stage (See Section 8). Furthermore, as the LTFP makes clear it is the checking evasion that is the major problem rather than detecting errors and differences of opinion. Presumably, revenue losses from evasion are more serious than those from errors and differences of opinion.

Thus we are led to our next principle:

PRINCIPLE 9. WITHIN EACH GROUP (OR STRATUM) OF TAXPAYERS HIGHER PROPORTIONS OF PERSONS DECLARING LOW INCOMES SHOULD BE AUDITED.

In fact, had it been possible to determine the maximum income that could occur within a given stratum with some degree of accuracy, it would be cost-efficient not to scrutinise those for whom the cost of audit exceeds the difference between the maximum income and their declared income[15].

6. Cross-checking of Income Tax Returns

Cross-checking of income tax returns against other income tax returns prior to random scrutiny is feasible with computerisation. Cross-checking will greatly facilitate the detection of errors by taxpayers[16] in a cost-effective manner. Furthermore, computers will enable cross-checking of IT Returns against WT Returns in order to further curb errors by taxpayers[17]. With effective cross-checking, the argument for applying Principle 9 is further strengthened. Cross-checking is, of course, dependent on computerisation just as random sampling itself is[18].

PRINCIPLE 10. RANDOM SAMPLING OF RETURNS SHOULD TAKE PLACE ONLY AFTER (COMPUTER-AIDED) DETECTION OF TAXPAYER ERROR HAS TAKEN PLACE. ERROR DETECTION INCLUDES CHECKING FOR CONSISTENCY WITHIN A TAXPAYER'S DIRECT TAX RETURNS AND CROSS-CHECKING ACROSS RETURNS.

7. Penaltics and Random Sampling

Three points need to be made about penalties chargeable in the event of evasion being detected and proved.

(i) Imposition of high penalties by the government is costless. The government incurs no expense by imposing as high a penalty as can be legally upheld. High penalties are extremely cost-effective methods of deterrence19/.

(ii) As penalties decline, scrutiny proportions should decrease as it is not cost-effective to audit.

(iii) As penalties get increasingly higher, scrutiny proportions should, once again, decrease, since penalties themselves act as strong deterrents to evasion.

From the points made above, another crucial point emerges: deterrence depends on not only scrutiny proportions but also the penalties leviable (and the proportion of scrutiny cases in which evasion is detected and proved legally). High penalties can substitute for high scrutiny proportions and are thus cost-effective. Thus, the recent move to take measures tantamount to lowering penalties - in the Discussion Paper of the Ministry of Finance - appears particularly ill advised.

PRINCIPLE 11. THE BURDEN ON THE RANDOM SCRUTINY MECHANISM IS INVERSELY RELATED TO SEVERITY OF PENALTIES AND SUCCESS IN PROVING EVASION ONCE IT IS DETECTED. THUS HIGH PENALTIES FOR EVASION AND CONSTANT EFFORTS TO IMPROVE JUDICIAL FUNCTIONING ARE REQUIRED FOR COST-EFFECTIVE RANDOM SCRUTINY.

8. Implementation of Random Scrutiny: A Suggested Strategy

STAGE I: Preparation of a phased plan of activities. Implementation of a strategy for Random Scrutiny would, first of all, entail identifying the tasks to be performed and the preparation of a time-bound implementation plan. From a perusal of Sections 2 to 7 above it may be seen that the following tasks have been identified:

(i) Design of a stratification plan in two stages. Initially, occupational, sectoral, rural/urban and individual/AOP/HUF criteria to be used in identifying strata. In stage II, remaining stratification criteria.

(ii) Estimation of costs of scrutiny within strata. Initially judgemental, using readily available data. Detailed study should be carried out breaking down costs not only by strata but by items (scrutiny, computer time, preparation of cases, judicial costs, etc.) to be used in Phase II.

(iii) Estimation of proportion of reassessments resulting in imposition of penalties. Initially judgemental.

(iv) Selection and estimation of scrutiny norms. May be reserved for implementation in Phase II. Explicit provision should be made for monitoring and updating of norms periodically.

(v) Design of cross-checking procedures both across direct tax returns for an assessee and across assessees for Phase II implementation.

(vi) Review of IT and WT forms and annexures to permit:

(a) easy data entry into computer data banks,

(b) ready identification of the taxpayer and stratum characteristics of the taxpayer,

(c) ready implementation of automated cross-checking.

(vii) Estimate of computer facilities and personnel required:

(a) projections of computer requirements and and data storage requirements over the next 15 years,

(b) personnel requirement for (i),

(c) procedure for data sharing between different regions,

(d) software development costs,

(e) procedure for data entry from returns, and

(f) random scrutiny selection procedures.

(viii) Evaluation and design of assessment procedures. Balasubramanian (1986) identifies three stages of assessment:

(a) ensuring the completeness of a return (return validity).

(b) checking arithmetical accuracy and correct payment of the tax.

(c) detailed scrutiny of randomly selected cases.

He is of the opinion (which is shared by this author) that real saving in work is possible only if stage (i) and stage (ii) are computerised. Stages (i) and (ii) should be completed for a return before a "tear off" acknowledgement slip is given as the assessment order. Thus the assessment procedure (and its computerisation) need to be carefully worked out. Given

advance tax and other tax law complications, immediate issuance of assessment orders at the counter should be seen to be impractical (Balasubramanian, 1986). A three to four months' delay for computer entry and checking should be contemplated.

(ix) Estimation of proportions of scrutiny cases in different strata for cost effectiveness. This entails working out average income estimates within strata and using information on costs of scrutiny and the judicial success rate. This information may then be used in an appropriate formula to decide on scrutiny proportions.

(x) Design of a procedure for the selection of scrutiny cases. Well-known statistical methods exist for this step. A possible procedure is given in the Appendix.

(xi) The requirements for training of personnel should be estimated and an appropriate plan formulated.

STAGE II: Phase I activities. In phase I of the implementation of random scrutiny, a limited number of strata may be identified and preliminary estimates may be used in deciding scrutiny proportions. There is no alternative to partial computerisation of assessment steps (i) and (ii) as described in point (viii) above. Steps may also be initiated for compilation of detailed estimates, acquisition of computer capability and training. This stage may easily be implemented in a 12-month period.

STAGE III. Phase II activities. This will consist of implementation of the remaining components of the strategy from the list in (i) to (xi) above.

Appendix I

SUGGESTED PROCEDURE FOR RANDOM SELECTION OF SCRUTINY CASES BASED ON A TRIANGULAR PROBABILITY DENSITY

Step (i) Compute the average declared income of the persons in the group.

Step (ii) To each individual assign the following proportion of the numbers between 1 and M, where M is some suitably large number (say 1 crore):

$$\frac{Y_m}{N(Y_m - Y_a)} \qquad \frac{1 - Y_i}{Y_m}$$

where Y_m is the maximum declared income within the stratum;

Y_a is the average income computed in Step (i).

Y_i is the total number of individuals.

The numbers assigned to each individual should be distinct.

Step (iii) Compute the number of people to be scrutinised: This number is simply N multiplied by the proportion of persons to be scrutinised. Let this number be P.

Step (iv) Use readily available random number generators (or tables) to pick P numbers between 1 and M.

Step (v) The individuals against whom the selected numbers are assigned are the individuals to be scrutinised.

Step (vi) In case two or more random numbers correspond to a single individual, find out by how much the number of individuals selected falls short of P. Call the short fall P_1. Set aside the individuals already selected.

Step (vii) To the remaining individuals assign proportions of numbers between 1 and M equal to $\frac{N}{N-P+P_1}$ of the proportions selected earlier for them.

Step (viii) Select P_1 new random numbers. The individuals corresponding to these random numbers are added to the list of those to be scrutinised.

Step (ix) If a shortfall is still present, call the new shortfall P_2 and repeat steps (vi) onward[20].

This procedure results in the selection of higher proportions of those with low declared incomes with probabilities of selection declining linearly to zero as declared income increases to the maximum declared income.

Appendix II

OPTIMAL SCRUTINY PROPORTIONS FOR EVASION-PRONE AND HARD-TO-DETECT GROUPS

Notation:
- R : proportion of income declared by the taxpayers.
- y : actual income of the taxpayers.
- q : real number of measuring 'proneness to declare income' of the taxpayer.
- t, p : proportional tax and penalty rates (given).
- s : proportion of persons scrutinised.
- j : probability of a scrutinised case resulting in proven evasion - measure of the ease of detection.
- x : sj
- c : constant cost per scrutiny.

We assume for simplicity (but without affecting the results) that evasion is either fully detected or remains undetected. The government is assumed to be a risk neutral expected revenue maximizer. Thus it solves the problem

$$m \times G \equiv (1-s)\, tRy + sj\,(ty+py(1-R)-c)$$

$$\text{subject to } R = qf(x,t,p,y),\ \partial f/\partial x \equiv f_1 > 0$$

The function R is assumed to be the given reporting behaviour of an individual where q, j and y are individual characteristics.

Assuming $0 < S < 1$ at the optimum, we have the first order condition

$$-tRY + (1-s)\,tyqf_1 + j\,(ty + py\,(1-R) - sjpyqf_1 - c = 0$$

and the second order condition

$$V \equiv mf'' - 2(t+pj)\,f_1 < 0, \text{ where } m \equiv (1-s)t - sjp > 0$$

Above, m represents the expected income benefit to the taxpayer from underreporting an additional currency unit of income and must be positive for tax evasion to occur.[21/]

Totally differentiating the first order condition with respect to s, q and j gives us

$$\frac{ds}{dj} = \frac{1}{V}\left[(t+p\,(1-R)) + (t + (j+1)p)qf_1 S + mqf_{11}\right]$$

$$\frac{ds}{dq} = \frac{1}{V}\left((t+jp)f - mf_1\right)$$

The first term in each of the square brackets divided by V is the direct impact on optimal scrutiny fof increased j or q. We see that $\frac{ds}{dj}\Big|_{direct} < 0$ so that hard to detect group should be audited less ceteris paribus $\frac{ds}{dq}\Big|_{direct} > 0$ so that evasion-prone groups should be audited more, ceteris paribus. However in both cases, if reporting is extremely sensitive to proportions audited, ceteris paribus (captured though f_1 and f_{11}), then the results may get overturned due to the indirect impact on reporting induced by higher/lower scrutiny levels. This is, of course, unlikely, a priori.

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NOTES

* I am indebted to A. Bagchi, K. Srinivasan and Kunal Sen-Gupta for valuable comments and discussions which have resulted in substantial improvement in the note. All deficiencies and errors that remain are my responsibility alone.

1/ This principle is receiving increasing attention in the policy literature. For effective recent use of this principle, see T.N. Srinivasan's article in the Economic Times, September 29, 1986.

2/ See Balasubramanian (1986) for a careful appraisal.

3/ Within a given group of individuals. See Section 4 of this note for details. All comments in this section apply to a prespecified group of individuals.

4/ I am indebted to Dr. A. Bagchi for raising this vital issue. Note that it is not being suggested that rules formulated on the basis of these principles should allow I.T.O.s discretion in the selection of cases for scrutiny, but that these principles should not be blindly applied in the formulation of rules.

5/ By ease of detection we are actually referring to discovering and proving evasion, given that scrutiny is undertaken.

6/ Strictly speaking, this claim refers only to the direct impact of scrutiny. If taxpayer behaviour is sufficiently volatile, nothing can really be said. See Appendix II for a formal analysis.

7/ It is clear that not all this information is available in current returns. But this is easily remedied.

8/ These norms should be applied after arithmetical checks - see Section 6. Thus, for example, the case of the senior IAS Officer who claimed his DA and ADA as deductions should be detected prior to application of these norms.

9/ These norms are only tentative. A study of the norms used by the U.S. Internal Revenue Service and further refinement may prove fruitful.

10/ See Greenberg (1984) and Landsberger and Meilijson (1982) for some related theoretical work.

11/ It has been suggested that tax evaders who are detected seldom indulge in evasion again due to the psychological impact of detection. If true, then detected evaders should uniformly be scrutinised with lower probability instead of as in Principle 8.

12/ For proportional taxes and penalty rates, no deductions and constant relative risk aversion, the optimal scrutiny proportion is given by

$$\frac{t}{(p+t)\,q\,(1-t)} - \frac{ptc}{\text{tax}\;yq^2\,(p+t)^2\,(1-t)}$$

where t is the rate, p is the penalty rate on undeclared income; q is the proportion of convictions upheld by courts; c is the cost of auditing and y is the average expected income (true income and not declared income). All items apply to a given stratum.

13/ This is not the same thing as scrutiny increasing with declared incomes. See Section 5.

14/ The formula in footnote 9 suggests that for extremely high conviction rates scrutiny can be relaxed since the conviction rates will significantly deter tax evasion. This, of course, is not applicable in India.

15/ For an illuminating analysis of such "cut off" scrutiny rules, see Reinganum and Wilde (1985).

16/ Once taxpayers know that cross-checks get done, it is unlikely that evasion can be detected by this means to any significant extent. However, cross-checks must be precommitted to be an effective deterrent.

17/ Currently, since cross-checks are not done systematically and diligently, cross-checks can also be used to identify probable evaders. For example, besides arithmetic balance, if consumption expenditure (roughly equal to current income by the IT Return less increases in wealth

from the previous year's to current year's WT Returns) is too low for the income bracket, scrutiny can be carried out.

18/ This view is shared by Balasubramanian (1986).

19/ It has been claimed that tribunals and courts tend to be more cautious when penalties are severe than when they are light. If this is true, when of course the penalty structure must be carefully designed. However, one notes that if true, the assertion suggests that the judiciary is careless when small sums of money are involved.

20/ The new proportion must be $\frac{N}{N-P+P_2}$ of the first step proportion and so on.

21/ Setting $m = 0$ in the first order condition and correspondingly, $R = 1$, we see that such high levels of random scrutiny violate the first order conditions.