HONESTY IS SOMETIMES THE BEST POLICY

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1. Introduction

This paper examines two central points in the economics of tax evasion: if the taxation authorities have reason to believe that tax is being illegally evaded, how far should they go in pursuit of the missing income? And what roles should thoroughness of investigation and severity of penalties play in the pursuit of that income?

Previous contributions have examined the positive economics of various control instruments on taxpayers' behaviour, the degree of threat or the level of policing required to enforce truthful reporting and the desirability of different types of policy in terms of taxpayers' expected utility. Some writers have investigated the design of sophisticated investigation schemes to maximise expected government receipts or to enforce truthful reporting at low resource cost. The approach adopted here is to examine the desirability of various combinations of policy instruments in the context of an explicit model of social welfare. It is not self-evident that honesty is 'desirable' from the point of view of the government; if honesty is desirable it is not obvious that people should be forced to be completely honest; and it is not obvious how they ought to be forced.

The 'desirability' of an economic policy depends on two major issues, which are sometimes left submerged: the objectives of the government, or its agents; and the constraints under which such objectives must be pursued. The objective is often assumed to be a simple form of ex ante expected utility. This is surprising since value systems other than utilitarianism are frequently invoked in the design of tax systems, and so it seems reasonable to

*I am very grateful for comments by Tony Atkinson, Jonathan Baldry, Luis Corchon and Jim Gordon; remaining errors are my own.
1See, for example Allingham and Sandmo (1972) and the papers surveyed in Cowell (1985, section 3).
2See, for example, Singh (1973).
4See, for example, Graetz et al. (1984, 1986), Greenberg (1984), Reinganum and Wilde (1985).
consider such alternatives in analysing the enforcement of tax systems. In particular it is important to examine the way in which objectives such as horizontal and vertical equity might shape enforcement policies, and to look at social welfare from the ex post standpoint as well as ex ante.

2. The model

We take one of the simplest versions of the tax evasion model: a taxpayer has an exogenously given income $Y$ which cannot be directly observed. He is liable to tax on this income at a proportional rate $t$, so that his full tax liability is $[1-t]Y$, but he may decide to conceal part of his income. If he is caught in such evasion then he is forced to pay a surcharge $s$ per dollar of tax evaded; the probability of being caught is perceived to be $p$. Evading income tax is thus equivalent to 'purchasing' a risky asset with 'rate of return' $r$ which takes the values $(-s, 1)$ with probabilities $(p, 1-p)$. Write the expectation of $r$, namely $1-p-ps$, as $\bar{r}$.

Suppose the taxpayer is inherently selfish, myopic and isolationist: he takes no account of social goals, nor of what other people might be doing. He evades an amount of income $E$ (an amount of tax $tE$) such that his disposable income is $c=(1-t)Y+tE$, and maximises a von Neumann–Morgenstern utility function $\varphi(c)$ by choice of $\bar{E}$ where $u'>0$, $u''<0$ and $0 \leq E \leq Y$. The first order condition is

$$\varphi(u'(c)r)=0 \text{ if } 0<E<Y,$$  \hspace{1cm} (1)

with appropriate inequalities for the corner cases $E=0$ and $E=Y$. Critical values of $s$ and $p$ at the lower corner are given by $s=(1-p)/p$, i.e. the case where $\bar{r}=0$: this condition depends only on the assumption of risk-averse von Neumann–Morgenstern preferences and the correct perception by the taxpayer of the values of the parameters. The comparative statics results are easily obtained by differentiating (1); one finds $E_{\mu}E_{r}<0$ if $E>0$, where the subscripts denote partial derivatives. If we additionally assume decreasing absolute aversion then $E_{r}<0$.

In order to analyse the government's behaviour we need to specify the constraints under which it must operate. For simplicity let us suppose that there is a fixed sum $nR$ which is required to be raised in tax from $n$ identical individual taxpayers, that $n$ is large and that to enforce a probability of detection $p$ incurs a cost $n\phi(p)$; the government's budget constraint is then

\footnote{See Cowell (1985,1989).}

\footnote{Heterogeneity of tax-payers and endogenously determined revenue could easily be introduced to the model, but we shall neglect such complications: see Cowell (1989).}
Honesty is sometimes the best policy

\[ nT - n\phi(p) \geq n\bar{R}, \]

where \( T := t[Y - E] \) is the total expected amount of tax revenue raised per person. The set \( F \) of feasible values of \((p, s, t)\) that satisfy (2) is illustrated in figs. 1 and 2. In fig. 1 \( \mathcal{F} \) represents the boundary of \( F \) and has the slope:

\[ \frac{ds}{dp} = \frac{\phi'(p) - T_p}{T_s}, \]

\( \mathcal{H} \) is the boundary of the 'enforced honesty set' \( H \), the set of \((p, s)\)-values for which \( E = 0 \). All points above \( \mathcal{H} \) and to the left of \( A \) belong to \( F \), and given that \( \phi' \) is strictly increasing, the slope of \( F \) is (positive) infinite in the neighbourhood of \( A \). Fig. 2 is constructed in a similar manner in \((t, s)\)-space. Once again \( \mathcal{F} \) is vertical at \( A \), the point where \( \mathcal{F} \) and \( \mathcal{H} \) intersect. The figures illustrate two interesting sub-cases, if the tax-enforcement agency and the legislature operate independently:

7The set \( F \) cannot have any points to the right of \( A \), because at \( A \) the revenue constraint (2) has just been met by forcing everyone to be honest, raising \( p \) yet further would raise the enforcement costs \( \phi(p) \) without any increase in the collected tax \( T \).
(i) The tax rate $t$ is fixed by considerations external to the model: the enforcement agency can choose $p$ and may have freedom to vary the actual penalty imposed within a range $[0, s]$.

(ii) The probability of detection is fixed. The problem then becomes one of fixing discriminatory tax rates, $[1+s]t$ and $t$, on two groups, the demonstrably guilty and the presumed innocent.

To complete the specification of the government's problem we need a description of the social welfare function. As we noted in the introduction, how this should be specified is not immediately obvious. It has often been assumed that evasion is, of itself, a Bad Thing which ought to be suppressed: the policy problem then reduces to a search for the combination of instruments that will efficiently suppress evasion (i.e. get one into the set $H$). This rule may be suitable for some formulations of the problem; but in a wider context 'enforced honesty' must be seen as a derived policy objective rather than an absolute desideratum. Accordingly we need to consider an a priori approach to the objective function. An important distinction which

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608  F.A. Cowell, Honesty is sometimes the best policy

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8See, for example, Steurle (1986, p. 24).

9It may be particularly appropriate where there is a substantial interaction amongst taxpayers so that tax evasion has an 'epidemic' effect, as in Benjamini and Maital (1985) and Gordon (1988).
needs to be made is that between ex ante and ex post concepts of social welfare. An ex ante social welfare function takes as its arguments the expected utility of each of the citizens whose welfare is to be respected and makes the implicit assumption that individuals are well informed about the risks involved and that their preferences over uncertain prospects are respected. In view of the special way in which the risk element enters the problem — an artefact of government policy — these assumptions are questionable. An ex post social welfare function has more latitude since it takes account of the various realisations of the state of the economy that may occur in a way that allows for misperceptions or feelings of regret. In sections 3 and 4 we shall examine two major variants of the tax evasion model corresponding to ex ante and ex post social welfare.

3. Utilitarian social welfare

In the context of this simple model utilitarianism means that the government uses an ex ante individualistic social welfare function. Social welfare is thus \( W = \mathcal{E} u \), where the expectations operator \( \mathcal{E} \) and the utility function \( u \) are those given in section 2 above. However, the utilitarian assumption is richer than this stark simplicity might suggest. Observe that it incorporates two assumptions:

(1) the cardinal utility function \( u \) which is used by individuals to weight stochastic payoffs against certain payoffs is also used by the government to evaluate the social value of monetary payoffs;

(2) the same probabilities are used by both the government and the individual taxpayers.

Assumption 1 means that ex post (social) aversion to vertical inequality is taken to be identical to (private) risk aversion. Assumption 2 means not only that individuals are as well-informed as the government about the probability of being investigated but also that, ex post, investigated taxpayers are accorded the same social weight (for given disposable income) as the uninvestigated. If the uninvestigated are assumed innocent until proven otherwise this means that the guilty and the innocent are accorded the same social weight. It could be argued that Assumption 1 is perfectly reasonable as a general basis for aversion to ex post inequality, of incomes, but Assumption 2 may be more questionable. Recall that \( p \) is not the probability of some event exogenous to the system, like ill health, but a choice variable of the government. By increasing \( p \) it 'makes' more apparently poor people; but these apparently poor people are exactly those who are reneging on their obligations to the State. It might be argued that a specific fixed weight \( \hat{p} \) — independent of \( p \) — be assigned to the utility of proven scoundrels.

10 See Hammond (1981)
Fig. 1 illustrates the point that in subcase (i) it can never be optimal to eliminate evasion given that the social welfare function is utilitarian. To see this note that $\bar{H}$ intersects the interior of $F$: $\bar{H}$ is a contour of the social welfare function in $(p, s)$-space, and evidently there is another contour, below and to the left of $\bar{H}$, which also intersects the interior of $F$: this contour must represent higher social welfare.

The slope of a contour of $W$ in $(p, s)$-space is given by

$$\frac{ds}{dp} = -\frac{W_s}{W_p} = -\frac{\Delta u}{pu_0Et},$$

where $\Delta u = u(c_1) - u(c_0) \geq 0$, and the subscripts '0' and '1' indicate the two states 'unsuccesful' and 'successful'. From this it is easy to see what the optimum policy must look like in sub-case (i). The family of curves in fig. 1 represents the contours of $W$, with $\bar{H}$ as the first contour and the arrow indicating the direction of preference. Point B is the optimum, at which the 'social marginal rate of transformation' (3) equals the 'social marginal rate of substitution' (4) so as to yield the rule: $\phi' = T_p - \Delta u/\lambda$, where $\lambda$ is the Lagrange multiplier associated with the revenue constraint and equals $pu_0Et/T$. Evasion is only reduced to the point where the marginal cost of enforcement equals the marginal tax yield from increased enforcement less the value of the utility loss from increased enforcement. This is in sharp contrast to subcase (ii). Using (1), the slope of a $W$-contour in $(s, t)$-space is given by

$$-\frac{W_t}{W_s} = -\frac{Y[1 + s]}{E},$$

which implies negatively sloped contours that become vertical as they intersect $\bar{H}$, irrespective of the utility function, and that the direction of increasing welfare is South-West, in fig. 2: the optimum can only be at point A. So, if $p$ is fixed, the optimal utilitarian policy is always to increase $s$ (and reduce $t$) until evasion is eliminated.

What happens if the two parts of the problem are put together, so that one optimises with respect to $p, s$ and $t$ simultaneously? There is no solution. The reason for this can easily be seen from the Figures. Imagine $p$ fixed at some initial value $p_0$; the optimal policy, given $p_0$, is to set $s_0 = (1 - p_0)/p_0$ and $t_0 = (R + \phi(p_0))/Y$: point $A_0$ in fig. 2. But, from fig. 1, this solution is not optimal since, given $t_0$, it would be better to raise $s$ above $s_0$ and lower $p$ below $p_0$ to $p_1$, say, so as to reach point B. This then shifts the curves $F$ and $\bar{H}$ so that the new policy, given $p_1$, is at $A_1$. Since $\phi$ is strictly increasing, this sequence can be repeated indefinitely: one continues cutting the tax rate and cutting the resources for law-enforcement, while augmenting the penalty so as to instill a wholesome horror of tax evasion that is

11 If one considers a point on $\bar{H}$ to the left of $A$ this is a situation where zero evasion is enforced at lower cost, so that realised government revenue is higher than $R$. 

sufficient to balance the government's budget. One hangs offenders with a very, very tiny probability.\textsuperscript{12}

There is an interesting variant on this model, where the marginal cost of enforcement is zero. In subcase (i) the rule is now 'adjust $p$ and $s$ such that $T_p = \Delta u/\lambda$: if $t > \bar{R}/Y$ then there is still no reason to eliminate evasion, so that one has a solution such as $B$, with $E > 0$. Subcase (ii) is also essentially unchanged. However the general problem, where one optimises simultaneously on $p$, $s$ and $t$, now has a simple solution: one reduces $t$ until it equals $\bar{R}/Y$ and sets $s \geq [1 - p]/p$ with $p$ at any arbitrary value in $(0,1]$. The interpretation of what has happened is this. Enforcing honesty is now costless so, since everyone is risk averse, the utilitarian rule says 'enforce it'; and it does not matter \textit{how} it is enforced, so any positive probability of detection and an appropriately high surcharge will do.

4. Non-utilitarian social welfare

The 'solution' of the general problem raises a serious question as to the appropriateness of the utilitarian approach. Do we \textit{really} want an arbitrarily high penalty to ensure that the revenue requirement is met? In the light of this doubt it seems unreasonable to insist that tax enforcement policy should so preoccupy itself with ex ante utility that the individual ex post realisations are completely ignored. Accordingly let us examine the policy rules that emerge from an ex post social welfare function.

For simplicity we continue to assume that the social welfare function is additively separable and individualistic. The general formulation is thus:

$$\hat{W} = \hat{p}(p)\hat{u}(c_0) + (1 - \hat{p}(p))\hat{u}(c_1),$$

where $\hat{p}$ is the population weighting given to the investigated group, and $\hat{u}$ is an ex-post social evaluation function for the realised value of disposable income for each person. The population weightings $\hat{p}$ may depend in an arbitrary way on the probability of detection $p$ – or indeed $\hat{p}$ may be independent of $p$; the 'curvature' of $\hat{u}$, $-c\hat{u}''/\hat{u}'$, is society's imputed inequality aversion. As a convenient shorthand write (5) also as $\tilde{\delta} \hat{u}$, where $\tilde{\delta}$ refers to the 'expectation' taken with reference to the imposed weights $(\hat{p}, 1 - \hat{p})$ and \textit{not} to the probabilities $(p, 1 - p)$. Specification (5) allows us to distinguish between two distinct components: (i) aversion to ex post inequality, embedded in the concavity of the function $\hat{u}$; (ii) the relative weight given to the welfare of known malefactors, the number $\hat{p}$. We can investigate the role of each of these by examining the contours of $\hat{W}$.

\textsuperscript{12}This is a variant on the Becker (1968) result – see also Baldry (1984). See also Shavell (1987) who shows that if there is a maximum penalty $\bar{s}$ available, then it should be used. Notice that the result stated in Kolm (1973) is not quite correct.
always forms a contour of \( \hat{W} \) in \((p,s)\)-space, since putting \( E = 0 \) in (5) yields a constant value of social welfare, \( \hat{W} \): this may represent a maximum or a minimum depending on the exact specification of the social welfare function. The slopes of the contours of \( \hat{W} \) are:

\[
\frac{ds}{dp} = -\frac{\hat{W}_p}{\hat{W}_s} = \frac{Ept\delta(u'r) - \delta'(u')\Delta u}{\hat{p}u'tE - E_tE(u'r)},
\]

and
\[
\frac{ds}{dr} = -\frac{\hat{W}_r}{\hat{W}_s} = \frac{Y\delta'(u') - \delta(u'r)[E + tE_t]}{\delta(u'r)tE_s - \hat{p}u'tE},
\]

and could be of either sign.

Let us use the information about the contours to examine the implications of differing social attitudes to ex post inequality. Applying a strictly concave transformation to \( u \) is equivalent to imputing to society a system of values which is unambiguously more averse to inequality. Now as \( u \) is made more concave, the expression \(-\hat{p}s + [1 - \hat{p}]u_t/u_0\) decreases and so if \( \delta' = 0 \), \( ds/dp \) increases: the indifference curves in fig. 1 become flatter. As greater ex post inequality aversion is imputed to society, the optimal policy shifts in favour of using lower penalties but higher detection probabilities. Likewise we see that, if the amount evaded is small, then as social welfare function is made more concave \( ds/dt \) decreases. This suggests that if \( u \) is more concave than \( u \) then the solution to subcase (ii) in fig. 2 will remain at \( A \); but if \( u \) is less concave than \( u \), then the solution may shift to some other part of \( \Pi \).

Now consider the effects of changing the system of social weights \((\hat{p}, 1 - \hat{p})\). We may take \( \hat{p} \) to be a nondecreasing transformation of the interval \([0, 1]\) into itself; it is interesting to examine the implication of a change in this transformation. Suppose \( \hat{p} \) is replaced by \( \hat{p}^e \) where \( e \) is a positive number: if \( e > 1 \) then the social weights become more sensitive to changes in \( p \), and vice versa for \( e < 1 \). In the neighbourhood of the utilitarian solution the right-hand side of (6) will decrease if \( e > 1 \), so that the contours in \((p,s)\)-space become steeper: the welfare optimum, if it exists, will be at a higher level of \( s \) and a lower level of \( p \) when the social weights are made more sensitive to \( p \). Alternatively, we could assume \( \hat{p} \) to be exogenously fixed for all values of \( p \): if \( \hat{p} \) is arbitrarily increased then \( ds/dp \) rises and \( ds/dt \) falls. So, if more weight is given to the ex post welfare of proven evaders we expect the optimum in subcase (i) to be one where the surcharge \( s \) is lower, but the probability of detection \( p \) is higher.

Using the results derived from (6) and (7), we can also see the effect of marginal shifts in imputed social preferences upon the nature of the optimum, if it exists. The analysis shows that, for small departures from, utilitarianism, the rules should be modified in the following ways: in subcase (i) if more weight is given to proven evaders or if there is ex post inequality aversion
F.A. Cowell, Honesty is sometimes the best policy

that is greater than ex ante risk aversion, then greater reliance should be made on detection probability than on surcharges; in subcase (ii) if ex post inequality aversion is less than ex ante risk aversion, total enforcement of honesty may no longer be optimal. However, for some non-marginal shifts, these conclusions are not valid, as we shall see below.

To obtain more specific results let us investigate some important special cases. The first of these is that of indifference to inequality: where the government takes as its objective function some weighted average of disposable income of the two groups. The weight \( \hat{\rho} \) might equal the actual population proportion \( p \), but this does not have to be so. In general we have

\[
\hat{W} = \hat{\theta} c = [1 - \hat{\beta}]Y + [1 - \hat{\beta} - \hat{\beta}s]tE. \tag{8}
\]

The social judgement is that ex post inequality is irrelevant: all that matters are the (weighted) income levels. From (8) we find \( \hat{W}_s = -\hat{\rho}[1 + s]tE + [1 - \hat{\beta} - \hat{\beta}s]tE_p \), \( \hat{W}_t = -\hat{\rho}tE + \hat{\rho}[1 - \hat{\beta} - \hat{\beta}s]tE_p \), \( \hat{W}_r = -Y + [1 - \hat{\beta} - \hat{\beta}s][E + tE_r] \). If \( \hat{\rho} = p \) these will be negative (so \( \hat{W} \) represents a point of minimum social welfare for given \( t \)) and the slopes of the contours of \( \hat{W} \) are given by \( ds/dp = -T_p/T_s \) and \( ds/dt = -T_p/T_s \). Two results follow.

Firstly, if \( \phi' > 0 \), then the slope of any \( \hat{W} \) contour where it cuts \( F \) in fig. 1 is steeper than \( F \). From this, and the fact that \( \hat{W} \) is in this case a minimum level of welfare with the direction of increasing welfare being leftwards, we may deduce that sub-case (i) has no solution: one can always increase social welfare by reducing the probability of detection a little and increasing the surcharge on evaded tax. Clearly this outcome runs into exactly the same objections as the outcome of the full utilitarian model.

However, secondly, we now find that sub-case (ii) does not have a unique solution. To see this observe that the direction of increasing welfare is again 'South-West' and that the boundary of \( F \) in \( (s, t) \)-space is itself a contour of \( \hat{W} \) if \( p = \hat{\rho} \): any point on \( F \) represents a solution. Therefore it does not matter whether the government raises the required revenue through determinate or stochastic taxes, and it is not bothered about whether tax-payers are honest or not. Indifference to inequality implies indifference to honesty, as long as the government's bills are met.

The second special case is that of Rawlsian social welfare. In our simplified model this means exclusive concern for the realised utility levels of the unfortunates who get caught with their hands in the till. In other words we have the ex post welfare function:

\[
\hat{W} = c_0 = [1 - t]Y - sEt. \tag{9}
\]
Given $R$ and $t$, $\hat{W} \geq \hat{\hat{W}}$ for all values of $s$ and $p$. Also $\hat{W}_p = -sE_p > 0$, $\hat{W}_s = -Et - sE_t$, and $\hat{W}_t = -Y - s[E + tE_t] < 0$. $\hat{W}_s$ is positive or negative as the elasticity of evasion with respect to the surcharges is less than or greater than $-1$; for $E$ close to 0 it must be positive.

Consider the sub-problem (i) in fig. 1. In the neighbourhood of $H$ the contours of the social welfare function are now negatively sloped, with the direction of increasing welfare being 'North-East'. So if $t$ is given one achieves the maximum welfare level $\hat{W}$ by increasing $s$ until the taxpayer is forced into $H$. There is also a unique optimum in sub-case (ii): the contours of $\hat{W}$ are positively sloped in the neighbourhood of point $A$ in fig. 2, with the direction of increasing welfare being 'North-West'. However there is, again, no general optimum if one can alter $(p, s, t)$ simultaneously. For, consider any point on $\hat{H}$ to the left of $A$ in fig. 1, which will be a solution to sub-case (ii), as noted above: this lies in the interior of $F$, so that a small reduction in $t$ could be achieved whilst still maintaining the budget constraint (2). Such a reduction would increase social welfare, and reduce the size of $F$ in fig. 1 as $F$ is shifted upwards. As long as $p > 0$ one can always do this – the tax burden on everyone can be cut and total honesty enforced by the threat of a sufficiently high penalty $s$ – but $p$ can never be reduced to zero, so that $T$ remains strictly greater than $\hat{R}$.

The outcome appears to be similar to the utilitarian case: an arbitrarily high surcharge, a very low probability of detection, and a low tax rate. There is, however, an important difference. Under utilitarianism when there is a best policy, the instruments are adjusted so that evasion is merely reduced to an 'acceptable' level, so that ex post there will always be some people who actually suffer the crippling penalties. But in the Rawlsian case this is not so: the instruments are adjusted in such a way as to terrify everyone into compliance.

The Rawlsian case illustrates the limitations of the marginalist argument above, where the effect of parameter changes was evaluated in the neighbourhood of the utilitarian solution. Whilst a small increase in the concavity of $\hat{u}$ or in the level of $\hat{p}$ shifts the optimal policy in favour of lenient penalties and more rigorous policing, this is not true for changes in the objective function that are so large as to reverse the sign of $\hat{W}_p$ and $\hat{W}_t$. For social welfare functions 'close to' utilitarian these partial derivatives are strictly negative. But for any social welfare function such that $\hat{W}_p$ and $\hat{W}_t$ are positive elimination of evasion is desirable; given that evasion is to be eliminated and that $\hat{W}_t < 0$ then one might as well achieve this enforced honesty through enormous (but uninvoked) penalties rather than costly policing, thus releasing resources that permit a reduction of the tax rate.

Finally we consider the see no evil case in which overwhelming weight is given to the welfare of the uninvestigated (and presumed honest) citizens. We abandon the assumption of individualism and assume that the social welfare
F.A. Cowell, *Honesty is sometimes the best policy* 615

...function depends on observable only, i.e. the income variable for the uninvestigated\(^\text{13}\)

\[ \tilde{W} = [1 - \epsilon][Y - E]. \]  
\[ (10) \]

Notice that the contours of (10) in \((p, s)\)-space are downward-sloping and the direction of increasing welfare is 'North-West' in fig. 1 since \( \tilde{W}_p, \tilde{W}_s > 0 \). Also \( \tilde{W}_t = E - Y - [1 - t]E_t \) which may be positive or negative, depending on the tax rate; hence in fig. 2, we find that the direction of increasing preference is either 'North-East' or 'North-West'. However, in the neighbourhood of \( E = 0 \) it is clear that \( \tilde{W}_t < 0 \) so that the contours of \( \tilde{W} \) would be upward sloping where they intersect \( R \). The optimal policy in sub problem (ii) is to adjust \( s \) and \( t \) so that one is at point A, where evasion is eliminated and the tax rate minimised subject to (2).

The result is similar to that of the Rawlsian policy, and leads to an important general conclusion. Let \((\tilde{e}_0, \tilde{e}_1)\) denote observed disposable income of the two groups; then for any social welfare function of the form \( \tilde{W}(\tilde{e}_0, \tilde{e}_1) \) which is non-decreasing in both arguments it is always desirable to enforce honesty.

5. Concluding remarks

Whether honesty is the best policy or not depends on two main features of the authorities' decision problem: whether there is a best policy, and the type of social welfare function. The essential distinction is between welfare criteria that are based on full income of all persons and those that are based only on observed incomes. If the welfare function is based on full income then ex-post inequality aversion determines whether or not it is a good idea to enforce honesty.

Ex-post inequality aversion can also influence the choice of instruments, if evasion is not to be totally eliminated, but merely attenuated to a degree sufficient to ensure that the government's budget constraint is met. On the whole, the more one is concerned about ex-post inequality the more one relies on the rigour of enforcement \((p)\) than the severity of sentence \((s)\). But if it is a good idea to eliminate evasion completely then irrespective of the particular specification of the social welfare function \( \tilde{W} \) or \( \tilde{W} \) – and hence irrespective of the degree of inequality aversion – the same method of enforcement should be used: an arbitrarily low (but positive) \( p \) and a surcharge of \( s = \frac{1 - p}{p} \).

\(^{13}\)This is the value of (disposable) income as will be conventionally measured in the national accounts.
Apart from the irritating technical problem of there being no true optimum this ‘solution’ leaves one feeling uneasy, a feeling that is exacerbated by the fact that the result is so robust. In the case of utilitarianism (ex-ante optimality notwithstanding) one ends up with a group of impoverished malefactors who just happen to have had the misfortune of getting caught; in the Rawlsian case outcome of the policy, and the objections to it, are rather different. No one evades and no one gets penalised, or so the story goes. Aside from any moral qualms one might feel about the use of terror to enforce honesty or about the disproportionate severity of the threatened punishment for evasion compared with other wrong-doing, there are two practical difficulties. The first is that the result is sensitive to the conventional assumptions about rational risk-averse behaviour by individuals in the face of uncertainty: if there is one risk neutral person who is undeterred by a zero expected rate of return the above honesty-enforcement policy can no longer be Rawls-optimal. Secondly the policy relies on everyone having an accurate perception of the probability of investigation and conviction, $p$. There is little evidence to suggest that the potential taxpayer has a clear view of what the true $p$ is; and if $p$ is very small tax-payers may be unable to distinguish between ‘small but positive’ and ‘absolute zero’. Moreover if the penalties are never actually applied, will they be believed? One might need to display a few heads on long poles round the tax office from time to time to encourage honesty; but this situation is unlikely to be considered a welfare optimum.

14 A related point is that the only source of uncertainty is that which the individual tax-payer perceives ex ante, and which is created by the investigation policy of the government. After the realisation of the random variable all is fully known by both taxpayers and government. It is assumed that all genuine mistakes (by either party) can be unambiguously resolved.

References

F.A. Cowell, Honesty is sometimes the best policy