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Tax Compliance: Social Norms, Culture and Endogeneity

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1. Introduction

Neo-classical welfare economics offers normative prescriptions premised on the preferences and capabilities of *homo economicus*. *Homo economicus* is described as:

(i) 'rational';
(ii) egoistic;
(iii) with egoism predicated on self-interest narrowly defined in terms of income or wealth (Brennan and Lomasky, 1993).

'Rational' behaviour is consistent behaviour. Predictions are made when *homo economicus* faces new constraints (relative prices, income) but when preferences are assumed exogenous and constant (Stigler and Becker 1977). This is the essence of the Allingham and Sandmo (1972) tax evasion as crime model of evasion In this chapter the focus is on the extent to which *homo economicus* might be deemed 'unrepresentative' and the implications when considering the question of tax evasion in the light of a different actor.

A well established behavioural empirical literature now describes a *homo-realitus* (see Cullis and Jones (2007) as:

(i) reliant on bounded rationality;
(ii) concerned with more than pure self interest;
(iii) responsive to reference frames (with endogenous preferences).

This suggests three dimensions of concern that form the substantive sections of this chapter.

Homo realitus displays anomalous behaviour (individual failure) which might be interpreted as a form of bounded rationality. Defenders of neoclassical theory see conventional predicted behaviour as a close enough approximation to sustain the argument that *homo economicus* is representative. They argue that anomalous behaviour observed, largely, in laboratory testing arises because participants lack a "correct" understanding and that, in practice, anomalous behaviour is far less than

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implied in experiments. In short, they see neoclassical theory as being applied in 'evolved' settings, where similar decisions are repeated. However, study after study reports the ubiquity of anomalies and tax evasion theory and policy should reflect this. Tax framing is a particularly important issue here. Closer analysis of 'ego' suggests that narrow self interest is far from representative. There seems to be some dissatisfaction with narrow instrumental rationality when modelling tax evasion so that psychic and stigma costs and 'norms of convention' have been noted above. There are a number of authors who have sought to introduce a variety of related concepts to give greater content to *homo economicus*. Further Neo-classical microeconomics predicts the behaviour of *homo economicus* when preferences are assumed constant. However if it is accepted that preferences are context-laden and to some extent endogenous then a third dimension needs to be added to the analysis of tax evasion. The tax policy context and statues employed by government itself informs preferences (Jones, Culls and Lewis 1998) and the question of tax evasion may be better addressed in the light of this.

If neo-classical microeconomics appears to address the question 'how much tax evasion will there be?' in practice it is addressing the question 'how much tax evasion should be undertaken by *homo economicus*'. However, the argument here is that the question cannot be satisfactorily addressed without recognising research in behavioural economics and economic psychology which has questioned the degree to which *homo economicus* is representative such that the question becomes 'how much tax evasion should be undertaken by *homo realius?* The general view is that people evade less than is predicted by the Allingham-Sandmo 'instrumentally rational economic actor' approach – there appears to be too little evasion!

A growing literature calls into question the proposition that the decision to evade tax is as instrumental as implied by the Allingham-Sandmo model. A "… purely economic analysis of the evasion gamble implies that most individuals would evade if they are rational because it is unlikely that cheaters will be caught and penalised" (Alm et al 1992:22) but Andreoni et al (1998) survey a plethora of studies to demonstrate that tax compliance exceeds predictions premised on self-interested instrumental behavior.[2] Risk aversion is lower than required to explain such high levels of compliance (Graetz and Wilde 1985; Alm et al 1992; Frey and Feld 2002).

[2] For example, Andreoni et al (1998) comment that, in 1995 the audit rate in the United States for individual tax return was 1.7%, the civil penalty for underpayment of taxes was 20% of the underpayment; very large values for risk aversion would be required to predict tax compliance.

Slemrod (2005) has qualified this criticism. The probability of audit may be low across the population as a whole but a wage, or salary, earner (whose employer submits the employee's taxable income) realizes that dishonesty will be transparent. Yet even with this qualification, Slemrod (2005) accepts that "…there is more to the story than …amoral…cost benefit calculation…". Allingham and Sandmo's (1972) model points to the tax rate, the probability of detection and the fine for evasion as the determinants of tax compliance. An empirical literature explains the determinants of 'tax morale' when 'tax morale' is defined as the difference between tax compliance and compliance that would be predicted with reference to instrumental self-interest.

2. Alternative explanations

A 'market' for alternative explanations was already developing as early as 1982 where a review of the literature, based on experimental and social survey evidence, revealed that taxpayer compliance was determined by the 'tax mentality' or 'tax morale' of taxpayers; whether or not taxpayers were aware of the benefits of paying taxes by making the 'fiscal connection' between taxation and public expenditure, whether they felt a sense of civic duty or perceived tax evasion to be morally wrong (Lewis,1982). In the intervening years a considerable amount of relevant work has been undertaken and the list of explanations has become lengthy and includes the role of government in increasing or crowding out intrinsic motivation; framing effects; social norms; perceptions of justice and fairness, even the nature of democracy itself (Kirchler,2007). Once Allingham and Sandmo's floodgates were open we have become awash with explanations: how are we to choose between them?

It maybe helpful to consider three categories: 'tinkering', 'cognitive' and 'social'. In the first, exemplified by the work of Spicer (1986), the model remains analytic and individualistic. Spicer (1986) amends the Allingham-Sandmo model to embrace analysis of: the expected tax gain; the expected punishment for evasion and the 'psychic costs 'experienced if individuals prefer to act honestly. Citizens evade if:

$$(1 - p)t\theta Y - pst\theta Y - c > 0$$

when t = the tax rate;

θ = the fraction of taxable income not reported;

Y = income;

s = the fine rate imposed on evaded tax;

p = the probability of detection;

c = the psychic costs of tax evasion.

Here the trick is to specify a source of utility, namely concern with your own conscience that will save the theory. In Frey and Eichenberger's (1989) terms it represents an attempt to, minimally, rewrite the underlying objective function so that results at odds with the initial theory are now apparently predicted by the revised one. This ex-post rewriting looks methodologically unsound.

The second is driven by a contemporary interest in the findings of cognitive psychology and in particular the work of Kahneman and Tversky (19..) on heuristic decision making. The 'framing effect' is especially relevant to the study of tax compliance (see Kirchler, 2007 for a helpful review). If for example, income in one tax system is declared at the end of the fiscal year and tax is then subsequently deducted this may be 'framed' by taxpayers as a loss, encouraging tax evasion. Alternatively if taxpayers have already had tax deducted and are likely to receive a rebate on completion of a tax return this will be framed as a gain, encouraging compliance. For the interpretation of this result to be attributed to framing effects the total liability in both cases must be the same. Using self reported measures of tax evasion Kirchler and Maciejovsky (2001) were able to show that among a sample of 60 self employed respondents an unexpected demand for payment led to low tax compliance (risk seeking for losses) and a surprise refund led to high tax compliance (risk aversion for gains). An analysis of US Internal Revenue Statistics convincingly shows that compliance decreases as a function of supplementary payments due (Cox and Pumley,1988: Schepanski and Shearer, 1995). Here the unit of analysis is the brain and the way it works. The implication seems to be that if the tax system can be set up to exploit 'framing' tax evasion would be minimal.

The 'social' category seems to be the largest, covering studies which are at the social/cognitive margins to much broader considerations of the influence of culture on compliance. Some examples include:

(i) Tax morale might reflect altruism. When Orviska and Hudson (2002) employ the concept of civic duty they define this (in part) in terms of concern for **others**.[3] The

[3] In addition they want to recognize the fact that some people are honest and law abiding accepting that a legal authority has a right to dictate their behaviour.

problem with explanation is that altruistic individuals have no incentive to take altruistic action if they feel that action by one individual would have no impact. If each individual feels that personal tax will have only a miniscule impact on the provision of services then there is no incentive to comply beyond instrumental levels predicted by Allingham and Sandmo because altruism has the hallmarks of a public good (Collard 1978). In 'large' number situations there is no instrumental motivation to pay tax even if taxpayers are concerned for others because in 'large' numbers situations individual action is (by definition) insignificant (Buchanan 1968).

(ii) A second approach distinguishes between utility from action and utility derived from outcome contingent on action. Individuals are described as "...intrinsically motivated to perform an activity when one receives no apparent reward except the activity itself…" (Deci 1971:105). A growing empirical literature presents evidence that perceptions of the intrinsic value of action depend on moral considerations and low-cost signals that acknowledge action (e.g. Deci and Ryan 1980; 1985; Frey 1997a). In this context taxpayers' response depends on signals that are emitted by tax policy and by the administration of tax policy (Frey 1997; Feld and Frey 2002). Taxpayers are also more compliant if the action of other taxpayers acknowledges the value of honest response. Frey and Torgler (2007:23) emphasize that taxation is 'social act': "An individual taxpayer is strongly influence by what he or she perceives to be the behavior of **other taxpayers**. If taxpayers believe tax evasion to be common, their tax moral increases…".They report that, on average, "…the percentage of persons reporting a high tax morale falls by 7.4. percentage points when the extent of tax evasion rises by one not (on a scale from 1 to 4)…"

(iii) A third approach focuses on reciprocity. Individuals are sensitive to the way they "…are treated by others…" (Bowles and Gintis (2006:172). "Reciprocity means that in response to friendly actions, people are frequently much nicer and much more co-operative than predicted by the self interest model: conversely, in response to hostile actions they are frequently much more nasty and even brutal." (Fehr and Gachter (2000:159). Once again behaviour by others is a very important consideration. Individuals take repay gifts (or take revenge); incurring cost that generates neither present nor future material rewards. In 'public good experiments' Fehr and Gachter have found that where there are punishment opportunities, 'reciprocal types' can induce 'selfish types' to choose co-operative action as opposed to free-riding. Individuals are more willing to trust one another when there are signals that it is

possible or trust one another.[4] In this way it is also the case that a tax system perceived to be fair will increase willingness to reciprocate. Slemrod (2007: 40) argues that taxpayer behaviour depends on government behaviour. As Levi (1998: 91) notes, "…if citizens believe that the government will act in their interests, that its procedures are fair, and that their trust of the state and **others** is reciprocate, then people are more likely to become 'contingent consenters' who cooperate in paying taxes even when their short term material interest would make free-riding the individual's best option".

If there is overlap between different studies of tax morale this overlap is, perhaps, most obvious when focusing on analysis that highlights the importance of the behaviour of others (hence the bold type).

The basic 'social' premise is also picked up by Hindrick and Myles (2006) who argue that decisions depend on the payoff from non-compliance (determined by the tax to be paid, the probability of detection and the fine for evasion) and the payoff from compliance (determined by perceptions of the value of acting honestly). Any shift from equilibrium leads to 'corner solutions'. Fixing enforcement parameters, the payoff from non-compliance in Figure 1 (i.e. NP) increases with the number of non-compliers (because the chance of getting away with evasion increases when tax auditors have more evaders to monitor). Focussing on reciprocity or response to the intrinsic value of action signalled by others, the more others evade the lower is the perception of compliance payoff. In Figure 1 the compliance payoff (CP) falls the more others evade. "The reasoning behind this social interaction can be motivated along the following lines: The amount of stigma or guilt I feel if I do not comply may depend on what others do and think" (Hindricks and Myles 534).
At the intersection of the two payoff functions taxpayers would be indifferent between compliance or non compliance. If there is a small reduction in non-compliance this alter indifference in favour of compliance. This change will trigger a chain reaction toward increasing compliance. Hindricks and Myles argue that "…a short but intense audit policy backed by a harsh punishment in order to change the decisions of enough taxpayers that the dynamics switch toward full compliance" (p. 535).

[4] Positive reciprocity has been documented in 'trust', or 'gift exchange' games. A 'proposer' receives an amount of money x from the experimenter and can send between zero and x to the 'responder'. The experimenter then triples the amount of money sent, y, so the responder has 3y. The responder is then free to return anything between zero and 3y to the proposer. In experiments, proposers usually send money and responders usually give back some of the money

Of course, a small increase in non- compliance triggers a chain reaction in the opposite direction making non-compliance progressively more and more attractive. The important concern here is that if tax evasion depends on 'how others behave' analysis of the dynamics of tax evasion suggest that the outcome will be at one or two extremities (all comply, or no one complies). While analysis of tax morale highlights the relevance of perceptions of the way that others behave the observation that there is a positive relationship leads to 'corner- equilibriums'. In the neoclassical world with all adjustments generally being conceived of as marginal ones 'corner solutions', although good for exercise sets, fit oddly and an analysis yielding interior solutions seems attractive.

3. Some Lines of Criticism

It is accepted that social norms, taking into account what other people do, is an important ingredient of tax morale yet both concepts are surely more complex than this. Tax morale is also about the attitudes, values and beliefs which represent elements of choice and preference among taxpayers. Social norms ,or what constitutes acceptable behaviour within a given culture, can vary within cultures e.g there are differing speech styles and varying 'manners' deemed appropriate to rich compared to poor, people in manual occupations and the professions: there are cultures within cultures. Social norms are not about aping the behaviour of nebulous others, rather normative behaviour requires that one follows the manners of people in the social group with whom one identifies: in the case of tax compliance this may be other self employed people or other workers in the construction industry. Whether instrumental behaviour is acceptable or not is also determined by social norms and cultural understandings e.g. Frank, Gilovich and Regan (1993) have shown that students who study economics are often less co-operative than other students: Cullis et.al. (2006) present evidence that economic students are more instrumental and more likely to do the rational calculations in tax evasion scenarios .Rational economic man (an individual who does the relevant tax evasion calculations) is likely to be unevenly distributed across cultures and within them.

At the start of this chapter was a relatively simple analytic model (Allingham and Sandmo) but now considerable complexity has emerged and parsimonious models and *homo realitus* are not readily compatible bed-fellows. The problem becomes, which of these alternative explanations are the most pertinent and how is it possible to choose between them? Take framing effects as an example. Studying framing effects is very popular at the moment and there is extensive evidence that these

effects can be reproduced outside laboratory settings and when real money is involved. Studies of this kind are very persuasive as they are easy to understand, are repeatable and appear to have something to do with how the brain works. Nevertheless some aspects of the methodology are akin to a party game where participants are tricked by a kind of mental illusion in a very restricted stimulus environment. It is therefore a simplification of a more complex world and should not be taken as a comprehensive description of the way people make decisions.

If tax authorities withhold (too much) tax and taxpayers have to claim it back, this is perceived as a gain rather than a loss (where taxpayers have to declare their liabilities at the end of the year).However this framing effect is underpinned by something else; tax morale, which include the attitudes beliefs and preferences of the actors concerned. The perception of tax liability as a loss is dependent not only on the framing effect but also on whether the money is ever seen as 'mine' as opposed to the revenue's in the first instance; some people would never see the money as their own however it was framed. A question of property rights emerges. Framing effects are not purely mechanical, they require interpretation from participants and are constructed differently depending on the value systems of the participants and the social context (similar points have been made by Reckers et.al. 1994).

Cullis, Jones and Lewis (2006) show that framing effects may not always be powerful (and we suspect that the current enthusiasm for framing effects means that studies which fail to demonstrate them might be difficult to publish; the so-called file-drawer problem). Furthermore there is an interaction recorded by Cullis et.al. between effects and micro-cultural understandings: economists and presumably other instrumental people are more susceptible to framing effects, so it is not purely a cognitive phenomenon.

Attempting a critical examination of the relative merits of alternative explanations merits a chapter, or perhaps a book, of its own. The emphasis here is more on the question of tax morale /tax mentality and culture. It may be that the cultural level of analysis is something newer and is a refreshing change from micro-analytic perspectives. Furthermore tax morale /tax mentality are useful generic terms which include a range of variables of relevance to comprehending tax compliance beyond instrumental assumptions and heuristic biases.

4. A 'Norms' Exercise

The proposition to be considered is that the dynamics of tax evasion is better analysed simply with reference to analysis of what taxpayers believe to be the social norm. Hargreaves-Heap (1992) offers insight on response to perceptions of 'norms of behaviour'. The proposition is that there is a relationship between the *prevalence* of a norm to comply and the proportion of taxable individuals who conform to this norm. The *strength* of the norm is the proportion of individuals who think they ought to honestly pay taxes whether they actually do or not. The prevalence depends positively on the strength of the norm of honest tax paying. More individuals actually act honestly the greater the proportion who think they ought to act honestly.

Predictions of the way in which tax evasion will change are possible by comparing the strength of the norm with the prevalence of the norm. When the strength of the norm exceeds the proportion actually conforming to the norm, more individuals will be induced to behave in accordance with the norm and vice versa. Equilibrium occurs when the norm is self-supporting (in that the proportion thinking they ought to conform equals the proportion that conforms).

The following examples demonstrate the different equilibriums possible and the dynamics of tax evasions:

(i) In the 'square box' figure (Figure 2) the 45° line is the equilibrium line. In Figure 2 the tax compliance equilibrium is EE. Below EE (e.g. at point 1) the strength of the norm (S) exceeds the prevalence of the norm (P) and increased prevalence is induced (i.e. $\Delta P/\Delta S > 0$). [5] Above point EE (say at point 2) the strength of the norm (S) falls short of the prevalence of the norm (P) and prevalence is reduced (i.e. $\Delta P/\Delta S < 0$). Equilibrium EE is stable. Any deviation will be self correcting as $\Delta P/\Delta S > 1$ at EE.

(ii) In Figure 3 the equilibrium EEu is an unstable equilibrium (as any deviation, or tremble, to points like 1 and 2 from EEu induces feedback effects that make 0 and 0' the stable equilibria - $\Delta P/\Delta S$ is less than 1 at EEu).

[5] Below EE the curve is strictly convex f'>0 and f''>0 whereas beyond EE the curve is strictly concave f'>0 and f''<0.

(iii) Figures 4 and 5 show multiple equilibria that have a paradoxical element. Figure 4 is a low or completely stable equilibria tax compliant population. Figure 5 is a high or zero stable equilibria tax compliant population.

Other patterns are clearly possible. However in order to proceed it is necessary to consider the strength of the norm concerning honest compliance. This norm might depend on culture, political, religious and other factors.

In summary, when the strength of a norm exceeds the proportion actually conforming to the norm more individuals will be induced to behave in accordance with a norm and vice versa. Equilibrium occurs when the norm is self-supporting in that the proportion who think they ought to conform to the norm equals the number who actually conform with the norm (strength = prevalence). Using available data it is possible to carry out an exercise that can tabulate a version of the strength of the norm for honest tax paying with the prevalence of honest tax paying. As regards the strength of the honesty norm questionnaire responses have been employed

Torgler and Schneider (2007) use a tax morality variable from the World Values Survey where responses to the general question "Please tell me for each of the following statements whether you think it can always be justified, never be justified. Or something in between (…) Cheating on tax if you have the chance." are coded into ranks ranging from 1 = Never justifiable to 10 = Always justifiable. This is essentially an attitudinal question relating to the morality of tax evasion as opposed to a behavioural one and can be construed as data on norm strength for tax honesty. Their data are used here. It must be recognized that proxying tax morality in this way is telescoping a fairly rich concept into a very humble measure.

As regards the prevalence of the norm a major element in measures of the shadow economy is tax evasion so the estimated size of the shadow economy might be interpreted as the prevalence of the norm of tax honesty in a country. Schneider

(2005) provides estimates of the shadow economy for a number of years for many countries.

In order to abstract from problems associated with considering economies with very different underlying structures the focus is OECD countries. The years considered are for each country as close to 1989 and 1999 as possible. Whilst it must be readily recognised that the data must be viewed very cautiously it must nevertheless be worthy of consideration.

The size of the shadow economies for 19 of 21 OECD[6] countries as reported in Schneider (2005) were converted into percentages that gave the size of the official or honest economy for each of those countries compared to the size of the official plus shadow economy. They are used to proxy the prevalence of the honesty norm in each economy. For the same countries a measure of the strength of the norm of honesty came from the World Values Survey as noted above. There is an obvious problem in that only code 1 corresponds to complete honesty as regards tax paying while the remainder are increasing degrees of dishonesty. As a starting point it was decided to treat all respondents coded 1-5 as 'honest' (a sort of democratic 50% view of honesty!). Chart 1 plots the outcome of this exercise and shows via the bunching in the North-East corner, that visually, the sample of countries are fairly honest. A country in apparent equilibrium, in that the strength of the norm equals the prevalence of the norm, would be on the diagonal line. Choosing as a measure of equilibrium a 1% or less difference between the strength and prevalence of the norm only the Netherlands (0.95 %) was in this position. Taking the numbers at face value an, others things equal, predictions for 1999 can be formed in that 14 of the 19 countries are located above the diagonal suggesting the prevalence of the economic honesty norm exceeds the strength of that norm suggesting a future fall in the size of the honest economy. The data for 1999 are fairly supportive of this prediction (see Chart 2) in that the percentage size of the honest economy fell in all 19 countries (the

[6] Greece and New Zealand were excluded as necessary data were missing.

prediction would have been a rise in Austria, Ireland, Italy, Spain and Sweden). Evidence of 'equilibrium' adjustment seems weak in that only three countries seem to be in equilibrium on the above definition. These were Austria, Finland and the Netherlands. This analysis seems ideal for the Dutch! As for post 1999 rises in the honest economy are predicted for 11 of the 'non-equilibrium' countries and falls for the other 5.

Clearly a myriad of other charts and predictions based on a more or less stringent view of honesty could be drawn up and doubtless with a different definition for each country for each year a 'good fit might' be obtained. However this would appear to be a somewhat arbitrary process. Correlating the size of the honest economy with different aggregations of the codes1 -10, helpfully, reveals that the sum of codes 1 to 5 has the highest correlation for 1989 (r = 0.53). Using only code 1 results in r = 0.43. For 1999 overall the correlations are lower with ironically code 1 in isolation yielding the highest correlation (r = 0.29). Using this 'correction' Chart 3 appears to suggest a massive post 1999 fall in the honest economy with Japan being closest to a 'blue eyed economy' with a 90% honest economy and 81% reporting 'cheating on tax if you have the chance is never justifiable' but even here more honesty is apparently displayed than is claimed. A bold interpretation of the data might reason that the gap between the strength and prevalence of the norm is a crude measure of the effectiveness of the tax regulations and administration in operation in different countries in preventing evasion – an 'enforced equilibrium' above the diagonal. Table 1 ranks 19 OECD countries on this 'prevented evasion', or to coin a phrase Tax Value Added (TVA) criterion recording the difference between the percentage size of the honest economy and the percentage number of purely honest individuals for circa 1999.

Table 1 Tax Value Added (TVA) Rankings circa 1999

1. Germany	46.6	11. USA	30.0
2. Belgium	44.4	12. Ireland	29.7

3. Netherlands	42.1	13. Portugal	28.8
4. France	39.6	14. Australia	25.7
5. Switzerland	39.5	15. Italy	23.0
6. Norway	36.8	16. Spain	21.8
7. Austria	33.8	17. Denmark	19.5
8. GB	33.5	18. Canada	19.3
9. Sweden	33.5	19. Japan	9.4
10. Finland	32.5		

Sources: Calculated from Schneider (2005) and World Values Survey.

The crude empirical work raises a number of questions as to how reliable are honesty data and measures of the honest economy. The numbers employed in the charts are certainly inaccurate.

As for asking people directly about their own 'honesty' intuition would suggest the reported numbers are too high in absolute terms but are they too high by the same proportion in each country so that the relative position can be trusted? This is obviously a difficult question to answer. There is however evidence that individuals make more of 'honesty' questions than perhaps might be expected. For example, Orviska and Hudson (2002) use the annual survey data from the British Social Attitudes Survey (Jowell et al, 1997). With respect to tax evasion two basic questions were asked. First, an attitudinal question relating to the morality of tax evasion: "A householder is having a job done by a builder. He is told that if he pays cash, he will not be charged VAT. So he pays cash and saves £500. Do you feel he is right or wrong?" The possible responses were: not wrong, a bit wrong, wrong and seriously wrong, which the authors coded 0 to 3 respectively. Secondly, a hypothetical behavioural question: "And how likely do you think that *you* would do this if you found yourself in this situation". The responses were coded 0 (very likely), 1 (fairly likely), 2

(not very likely) and 3 (not at all likely). In addition, there are two similar sets of questions asking: “An unemployed person on benefit takes a casual job and is paid in cash. He does not report it to the benefit office and is £500 in pocket. Do you feel this is right or wrong?” and “A person in paid work takes on an extra weekend job and is paid in cash. He does not declare it for tax and so is £500 in pocket. Do you feel that this is right or wrong?” Again there are similar follow up questions as for the VAT one relating to whether the individual would or would not do this.

It is possible that there may be other factors underlying the responses than considerations of tax evasion. For example, with respect to the VAT question, a builder who expresses a desire to evade VAT may be viewed as untrustworthy. The data is also subject to the criticisms (see for example. Elfers et al, 1987) that responses are strategic and imply little or nothing about real tax behaviour – a common fear in economics. The survey data on these questions are from a survey ranging over a variety of topics where respondents might be less suspicious of the uses to which the data might be put. Combining the attitudinal and behavioural questions may induce respondents to display coherence - a created cognitive consonance. In short a healthy scepticism needs to be exercised about the value of survey data.

Table 2: Attitudes to tax evasion

Response	VAT	BENEFITS	PAY
Morally Wrong			
not wrong	29.9% (37.8)	6.9% (12.0)	16.6% (23.2)
a bit wrong	29.6% (34.1)	18.4% (26.5)	30.6% (38.0)
wrong	32.8% (22.8)	51.2% (43.0)	44.1% (32.9)
seriously wrong	7.7% (5.3)	18.5% (23.5)	8.8% (5.9)
Would Do			
very likely	36.2% (46.9)	9.8% (13.7)	15.9% (21.3)
fairly likely	33.0% (35.3)	16.7% (19.4)	25.6% (32.7)
not very likely	19.3% (14.6)	32.9% (34.5)	28.9% (27.5)
not at all likely	11.5% (5.2)	42.6% (32.4)	29.6% (18.5)

Figures in parentheses relate to that part of the sample aged under 40.

The proportions responding to these questions are shown in Table 2. Attitudes are clearly most hostile to the evasion involving benefits and least hostile to the one involving VAT. With respect to the latter question almost 60% of the sample thought it at most only "a bit wrong" whilst almost 70% of the sample thought it at least fairly likely that they would do this. Even with respect to benefits over a quarter of the population thought it at least fairly likely that they would engage in such behaviour. Clearly, there is a considerable culture in the UK which condones tax evasion and this must be of concern to the revenue agencies. Moreover, the problem would appear to be greatest amongst younger people as the figures in parentheses show. One possible explanation for the differing levels of response between the three types of question is their coding in respondents minds. How might respondents 'see' these scenarios? The VAT question condones evasion by someone else you have met, which you gain from[7], but does not directly lead you into breaking the law yourself. (Perhaps Coded "I'm not cheating/ stealing?") Whilst the benefits question is not so much evading tax, but the false acquisition of welfare benefits. (Perhaps Coded: "Cheating/ stealing from other anonymous taxpayers?") The public, apparently, see a difference between evading tax on 'extra' earned income (Perhaps Coded: "Cheating/ stealing from the anonymous taxmen who has already had their share?) and the acquisition of transfers which have not be earned.

Referring back to section 2 is this variation of responses 'cognitive' or 'social'? The different responses obtained may be seen as artefacts of 'framing' in that the underlying prospect remains the same – an individual obtaining £500 dishonestly with only the wording for different contexts changed inappropriately choosing different responses across the questions. But they are different contexts and the variation in responses may reflect genuine aspects of British tax mentality – a 'social' explanation. Where does framing end and revelation of genuine preferences begin?

[7] Smart thinkers will assume the builder will charge you the same as if VAT was included and therefore not going along with the builder actually financially punishes them.

As for measures of the 'shadow economy' many different methods have been employed (see Schneider 2005 Appendix A). Schneider (2005) notes "There are many obstacles to overcome in measuring the size of the shadow economy … but progress has been made." Here the assumption is of sufficient progress not to invalidate the exercise above.

5. Conclusions

A number of big debates are touched upon in this chapter. First it is evident that once analysis goes beyond the relative safety of 'homo or femina economicus' the tax evasion waters get muddier and, perhaps, misplaced clarity is lost. Whist dissatisfaction with the amoral 'economics of crime' approach to tax evasion is widespread sometimes there appears to be labels for more 'amending/intervening' concepts than there are different behaviours to describe. Are differences being made without a clear underlying distinction? Questions of the relevant 'unit of analysis' and motivations arise. Should the unit of analysis be the workings of the brain, the individual or an organic view of society? Are individuals victims of their limited brain capacity, instrumentally rational, altruistic or what? Is it that the mysteries of tax compliance and evasion in any society become no mysteries to those sharing a culture but are, as it were, in the air they breathe[8]? Do individuals comprise all or some of these aspects and do differing societies systematically contain individuals with differing proportions of these attributes? Here the use of the individual as the unit of analysis has been retained but the individual has been made responsive to the actions of others around them (an attenuated form of 'social' analysis). In a crude 'social norms' numerical exercise 'corner solutions' were avoided and analysis permitted the prediction of the direction of change in the size of 'shadow economies' in a selection of OECD countries. Further the analysis allowed the construction of a

[8] This is a corruption of Marshall's (?) description of pure external economies that take the form of informational spillovers.

TVA league table putting Germany at the top and Japan at the bottom. The weight to be attached to these rankings depends on the weight readers are prepared to attach to widely reported and used statistics in this area of study.

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