Understanding Taxpayer Behaviour – New Opportunities for Tax Administration

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Abstract

There is a growing literature on the contribution of behavioural economics to the design and improvement of tax policy. A less well-developed area is the potential for behavioural research to contribute to better tax administration. Better understanding of the motives of taxpayers and their attitudes and behaviour towards taxation can improve both voluntary compliance levels and the efficiency of the tax administration. The literature suggests tax compliance is determined by five broad factors: deterrence; norms (both personal and social); fairness and trust (in the tax administration); opportunity and complexity; and the role of government and the broader economic environment. Research in Ireland suggests that deterrence, the more traditional tool of tax administrations, is important but not sufficient to explain the level of tax compliance in society. Other factors are shown to be important, particularly the influence of personal norms and the level of trust in the tax administration. The perception of the prevailing social norms is also an important determinant to compliance but appears to exert less influence on taxpayers than personal norms.

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1 Introduction

In Ireland, the Office of the Revenue Commissioners is responsible for the administration of the tax system and the customs regime. In areas of tax policy, Revenue’s role is to provide advice to the Department of Finance and others responsible for policy. This separation between tax policy and tax administration is common to the tax system in many countries.

The primary objectives of most tax administrations, including Revenue, are to ensure compliance with tax laws and improve customer service satisfaction for taxpayers.

Much of a tax administration’s work is based on trying to influence the behaviour of taxpayers. This is not a new concept. Tax administrations have a wide range of compliance and customer service programmes and all aim to change behaviour among the taxpayer population.

What is new is an increasing focus on developing a better understanding of taxpayer behaviour. Research is being undertaken in Ireland, in tax administrations in other countries and at EU and OECD levels to improve knowledge of the motives of taxpayers and their behaviour towards taxation. This research ties in with behavioural economics, an expanding discipline within economics that seeks to better explain how and why decisions are made.

An improved understanding of taxpayer behaviour (and attitudes to taxation) can help tax administrations to develop stronger and more effective compliance risk treatments. Tools like audit are an expensive way to attempt to improve compliance (even when targeted at risk). Understanding and influencing behaviour may offer an effective but less expensive option.

The next section discusses the literature on the main factors that influence taxpayer behaviour. Section 3 examines what is known about attitudes and behaviour of taxpayers in Ireland. Section 4 reviews some practical experiences from the application of behavioural insights to taxation. Section 5 concludes and considers options to further develop these areas in Ireland.
2 Factors that Influence Taxpayer Behaviour

There is already a considerable literature on the subject of taxation and behavioural economics – see for example, Congdon et al. (2011, 2009) for useful summaries. However, for the most part, this literature is focused on the implications of behavioural or psychology research for tax policy or tax design.

As noted in the introduction, in Ireland and many other countries there is separation between tax policy and tax administration. Using behavioural insights to inform tax administration is a less developed area in the research literature but it is growing.

The work of a tax administration includes activities that cover both compliance and customer service. For example, Revenue’s range of functions includes: assessment, collection, debt management, audit and other interventions, anti-smuggling and other customs functions and anti-avoidance.

Many of the functions of tax administration depend to at least some degree on the voluntary compliance of taxpayers. In addition, large elements of the tax system in Ireland are based on self-assessment. In this context, there is clearly potential to influence behaviour to improve compliance.

The central contribution of behavioural research to tax administration is to understand why taxpayers are compliant or not. This can inform the work of tax administrations across a range of their functions.

Several factors that determine the level of compliance in a taxpayer population have been identified. The sections below present an overview of these factors (Section 3 examines the relevant findings for Ireland). The factors are grouped under headings adapted from research by the OECD Forum of Tax Administration (OECD, 2010): deterrence; norms (personal and social); fairness and trust; opportunity and complexity; and the role of government and economic factors.

2.1 Deterrence Effects
The standard model of tax compliance, derived from Becker (1968) and Allingham and Sandmo (1972), assumes that a rational taxpayer assesses the costs and

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1 Compliance in taxation has a broad meaning, it covers filing compliance (filing returns on time), reporting compliance (reporting incomes correctly) and payment compliance (paying tax due on time).
2 The recent European Commission / Fiscalis report (EC, 2010) also covers similar topics.
benefits of evading taxes. If the expected benefits (less income “lost” to tax) outweigh the costs (the chances of a non-compliant taxpayer being caught and the sanctions incurred) then the taxpayer will evade tax. The taxpayer makes a rational choice after considering the options.

This standard model alone is not enough to explain the level of compliance in society (Braithwaite, 2009; Phillips, 2010). The evidence suggests that, given the probability of being caught evading taxes and the size of the punishment if caught, the level of tax evasion should be higher than it is in many countries (i.e., that taxpayers should evade taxes more than they actually do).

One explanation is the tendency of people to overestimate the probability of being audited and the sanctions that might follow if evasion is uncovered (Reeson and Dunstall, 2009). However, others factors beyond deterrence also influence taxpayers and these are discussed below.

Deterrence (the risk of detection and the punishments incurred) should positively influence taxpayer compliance (Slemrod, 2007). However, the empirical evidence is somewhat mixed. OECD (2010) discusses several studies that examine the role of deterrence. Some findings are as expected (increases in the probability of detection improve compliance) but the effects are quite weak. One reason is that auditing compliant taxpayers is found to sometimes undermine their willingness to comply. In some cases taxpayer behaviour is found to worsen after an audit (either to get back “losses” or in the belief that they will not be targeted again).

While deterrence is a vital tool (audit, other interventions and sanctions) for any tax administration, simply increasing the level of deterrence (often an expensive process for the tax administration) is not guaranteed to improve compliance. A targeted approach to deterrence is likely to be more effective.

2.2 The Impact of Norms on Behaviour
A key factor in tax compliance is a widespread desire to “do the right thing”. Taxpayers seek to comply because they believe it the right thing to do, not because of fear of punishment if they do not comply (Wenzel, 2005). The desire of a taxpayer to comply is strongly linked to behavioural norms, both the personal norms (or beliefs) of the individual taxpayer and the social norms that prevail in society at large.
Personal norms are the result of a combination of factors inherent to the individual. These guide a taxpayer’s posture to the tax administration (OECD, 2010; Kirchler, 2007) but are difficult to influence. Tax administrations can try to send messages that stress the importance of compliance to educate taxpayers and build up positive personal norms. Engagement by tax administrations with young people (early working age or younger) can influence their personal norms and this benefits tax compliance in the long-term.

There is evidence from diverse areas (not just tax related) that people seek to conform to social norms and that the behaviour of others strongly influences an individual’s choices (OECD, 2010). This influence is important though in many cases people do not consciously realise it. This effect can be heightened when the relationship to the social grouping is stronger or closer (peers or neighbours may exert greater influence than those more distant to the individual).

Social norms influence taxpayer behaviour. If there is a perception that tax evasion is limited and the majority of the people are compliant, this makes people less willing to evade taxes themselves. Often people tend to believe that non-compliance is more prevalent than it is in practice so correcting misperceptions regarding the scale of evasion is also a positive way to reinforce compliance.

### 2.3 Fairness and Trust in Tax Administration

Whether an outcome is perceived to be fair will often influence behaviour. Experiments have shown that people prefer an option in which they receive no reward to an option in which they are rewarded but is perceived as unfair – they are rejecting an outcome that would make them better off (Braithwaite, 2009; Delaney and Harmon, 2009). Often trust and legitimacy are linked to fairness, as the perceived fairness of an outcome will be contingent upon them.

OECD (2010) discusses three types of fairness in taxation: distributive fairness (the perception that government acts as a wise spender of tax revenues); procedural fairness (the perception that the tax administration adheres to procedures that are fair in dealing with taxpayers); and retributive fairness (the perception that the tax administration is fair in applying punishments when the rules are broken). The latter two are more relevant to (and can be influenced by) tax administrations. Distributive fairness depends on policy-makers.

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3 Reinforcing positive norms is also important – if a taxpayer accepts that tax evasion is wrong then stressing the seriousness of evasion can strengthen that belief.
If taxpayers do not trust the tax administration to collect tax fairly, this will increase non-compliance (Murphy, 2004). A perception of fairness and trust are important tools for a tax administration in attempting to reduce evasion. The key to establishing trust is to frame the collection of taxes to the population in a transparent manner and emphasise the perceived fairness of the approach taken.

Norms and the motivation to pay taxes are influenced by fairness – both in how a person is treated by the administration individually and perceptions of fairness of the taxation system in general (whether other people are also paying their fair share). If a tax administration can demonstrate its commitment in these areas, there should be a compliance benefit (Reeson and Dunstall, 2009).

A “service and client” approach by the tax administration is more likely to encourage trust than a “cops and robbers” approach based on sanctions (Kirchler, 2007). The more respectfully taxpayers are treated by the tax administration, the less likely they are to evade and this contributes to the desire to “do the right thing” (NEF, 2005). Revenue’s customer charter and the presumption that taxpayers are honest reflect this type of approach.

2.4 Opportunity and Complexity in the Tax System

A key assumption in decision-making is that people are capable of assessing a range of complex choices, and by correctly evaluating all of the available information, select the option with the best outcome for them. In reality it is rare to find situations in which people are fully informed of all their choices and always select the best option. In many cases, people fail to make the optimal choice.

When faced with a range of choices, picking the correct option depends on calculating probabilities of events or risks occurring but in practice people tend to revert to rules of thumb (heuristics). While these rules of thumb may work in many cases, which explains why people fall back on them, they will be subject to biases by the person and this can lead to poor choices.

Several concepts that influence decision-making have emerged from behavioural research and are summarised in Table 1.

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4 By extension, if there is a lack of trust in the broader government to spend tax revenues wisely (or a lack of legitimacy in the government), this will also have negative effects on tax compliance.
Table 1: Factors Affecting Decision-Making

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
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<tbody>
<tr>
<td>Loss aversion</td>
<td>People are far more reluctant to give something up once it’s in their possession than they are happy to gain the same thing: a loss of €100 is felt much more sharply than a gain of €100. This is linked to risk aversion: people will be averse to taking risks for gains but may take large risks to avoid losses.</td>
</tr>
<tr>
<td>Inertia</td>
<td>Default options are strong drivers of behaviour. People often follow a path of least resistance and this results in selecting default options and failing to alter behaviour or choices even when better opportunities are available.</td>
</tr>
<tr>
<td>Salience</td>
<td>People tend to overestimate the likelihood of something that has been recently experienced or is easily imagined.</td>
</tr>
<tr>
<td>Discounting</td>
<td>People tend to underestimate the relevance of future effects but this discounting is not consistent. Given the choice between 5 hours work today or 6 hours work next week, people tend to choose the latter. However, in a choice between 5 hours work in a month’s time or 6 hours work in a month and a day’s time, people will often select the former.</td>
</tr>
<tr>
<td>Framing</td>
<td>Decisions are influenced by how choices are presented. A medical treatment with a 10% chance of death may seem less appealing than one with a 90% survival rate. Framing is important when used in conjunction with other behavioural insights. For example, suggesting that an action would conform to social norms is often used in advertising “two thirds of people agreed that product X was better than product Y”. Or to encourage people to claim back tax entitlements on health expenses – “do it and save €X” may be less persuasive than “don’t do it and lose €X”.</td>
</tr>
<tr>
<td>Intuition</td>
<td>People often jump to answers that seem intuitively correct but are wrong. This can apply to relatively simple questions. For example, a ball and a bat cost €1.10 together and the bat costs €1 more than the ball, how much does the ball cost? Most people answer 10c instinctively.</td>
</tr>
<tr>
<td>Fundamental attribution error</td>
<td>People tend to assume that they have more control of their own situation and the importance of random events is underestimated. For example, people are aware of the share of marriages that end in divorce in the US (about 50%) but when asked about their own marriage prospects, over 90% believe they will not divorce. Representativeness is a similar heuristic: people relate opinions to something with similar characteristics (a sort of stereotyping) but biases can develop when similarity and frequency diverge (e.g., if flip a coin 3 times and get 3 heads, people may assume the coin is dodgy because the result is not representative of what they expect but in fact it is not unusual).</td>
</tr>
<tr>
<td>Anchoring</td>
<td>People tend to lock on to something that is known as an anchor for their expectations and make adjustments from that point. Thaler and Sunstein (2008) give the example of asking someone to guess the population of a city and providing them with the population of a similar city to help. Anchoring is useful provided the anchor is close to the truth. In another example, advertising a course for Australian government employees, when enrolment was free applications were low but when a fee was included enrolment increased. The initial price (zero) provided an anchor suggesting the course has no value.</td>
</tr>
</tbody>
</table>

Source: The material in the table below draws heavily from several sources: NEF (2005), Thaler and Sunstein (2008) and Delaney and Harmon (2009).
People find making complex decisions difficult. Complexity and an overwhelming number of options can distract individuals or channel their decisions towards easy or default choices that are not optimal. More information or more choices is not always the best solution if it complicates the decision.

To many people, tax is a complex subject and complexity has been shown to contribute to non-compliance (GAO, 2011). Assistance directed at lowering unintentional non-compliance (by way of taxpayer error) should reduce evasion and perhaps boost the legitimacy and perceived fairness of the tax administration. Simpler tax systems should encourage greater compliance and lower costs through the use of less tax agents. Less complexity should reduce the scope for tax avoidance and evasion (Alm et al., 2010).\(^5\)

Significant shares of taxpayers in Ireland (especially business taxpayers) make use of the services of tax agents and advisors (the same is also true in many countries). This partly reflects the complexity of the Irish tax system. However, it also offers a channel for Revenue to reduce uncertainty by engaging with tax agents. Interactions between Revenue and tax agents and representative bodies improve communication and compliance. Working together can help to achieve buy-in and support for changes in the tax system.\(^6\)

Opportunity is a related concept to complexity. Tax administrations seek to reduce the opportunities for taxpayers to evade or avoid tax. Prominent examples of this in Ireland are Revenue’s extensive use of third party data or withholding tax systems (such as pay as you earn (PAYE) income tax).\(^7\)

OECD (2010) argues that tax administrations have tended to overlook the “lazy non-compliers”, taxpayers who would have complied if opportunity for compliance had been easier. Suggestions to make it easier to comply include the use of plain language in communications and simplifying forms and tax laws where possible.

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\(^5\) Reeson and Dunstall (2009) conduct a detailed examination of the Australian tax system from a behavioural perspective and their recommendations focus overwhelmingly on simplification.

\(^6\) It’s worth noting that the problems in decision-making and deficiencies in accessing full or useful information on choices are likely to be particularly prevalent among the less well off in society. Wealthier individuals are often better informed in terms of their choices (or can afford to pay others to assist them). Therefore, failing to take heed of these difficulties may lead to a failure to provide entitlements to those most in need (Reeson and Dunstall, 2009).

\(^7\) As OECD (2010) notes, withholding systems can also have compliance and simplification benefits as they place less burden on taxpayers (as well as reducing opportunities for non-compliance).
Targeting improvements in complexity and opportunity should increase taxpayer compliance. This should reduce unintentional non-compliance if fewer errors are made completing returns and make it easier for those seeking to comply.

2.5 Role of Government and Broader Economic Factors

There are many other factors that influence the level of compliance in a population. These are grouped together here, as for the most part they are beyond the control of the tax administration. Some involve tax policy or public spending, while others relate to the broader economy.

Section 2.3 notes that distributive fairness influences compliance. Taxpayers link the tax they pay to the ability of the State to fund expenditure on public goods and services (Barone and Mocetti, 2009). If there is a perception that the government spends tax revenues wisely, this should encourage tax compliance. If taxes are associated with spending on goods and services that the taxpayer values (for example, schools or hospital beds), then the taxpayer is likely to be less reluctant to comply.

Economic conditions are important to compliance. For example, businesses with liquidity problems may be more likely to consider evading taxes. At a more macroeconomic level, OECD (2010) notes that although the research is limited, factors that promote economic growth also tend to promote tax compliance. Likewise, economic downturns are often associated with increased tax evasion. Higher tax rates are often linked with tax evasion if they incentivise taxpayers to move into the shadow economy.

While these issues are clearly important in determining tax compliance levels they are not discussed further as the focus here is on behavioural insights for tax administration. In the Irish case, these factors are beyond the control of Revenue, some are beyond the influence of any policy-makers, but they should certainly be borne in mind when considering the issues raised in the paper. Tax administrations can and do attempt to mitigate their impacts as much as possible. One example in Ireland is Revenue’s introduction of new arrangements for taxpayers facing payment difficulties arising from the recession.8

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2.6 Compliance Characteristics
Aside from the five factors discussed above, there is also a body of the literature that looks at the characteristics (economic, demographic and social) of compliant and non-compliant taxpayers. The points shown in Table 2 draw primarily on studies conducted or cited by Andreoni et al. (1998) and Boame (2008, 2009).\textsuperscript{9}

It is important to note that these characteristics are mainly seen as being correlated with higher or lower compliance. This correlation does not necessarily also imply causation.

\textsuperscript{9} Most of results cited rely on studies using US data. The Boame papers use Canadian data and there studies that find some similar results in Europe (for example SKAT (2009a, 2009b) for Denmark).
### Table 2: Research Findings on Compliance Characteristics

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Older people are more compliant, perhaps as they generally more risk averse. Some studies suggest both the young and old are more compliant than the middle aged.</td>
</tr>
<tr>
<td>Gender</td>
<td>Males evade taxes more than females (a similar result is found in the broader literature relating to overall levels of crime).</td>
</tr>
<tr>
<td>Marriage</td>
<td>Some studies find married people tend to have higher tax morale and are more constrained (less opportunity for non-compliance) but others suggest non-compliance is higher in households where the head of the household is married. Widowed taxpayers are more compliant.</td>
</tr>
<tr>
<td>Education</td>
<td>Educated people may be better informed of tax laws, which should positively influence compliance, but they may also have better knowledge of the opportunities for tax evasion. The empirical results are inconclusive.</td>
</tr>
<tr>
<td>Tax Status</td>
<td>Sole proprietors and the self-employed are less compliant on average. The self-employed often have higher compliance costs (taxes are more visible to them) and more opportunity to evade taxes. This is often linked to their sectors of trade.</td>
</tr>
<tr>
<td>Employment</td>
<td>Unemployment results in lower incomes and cash flow difficulties but also likely lower (or no) tax liabilities. The empirical results are mixed. Unemployment has a positive effect on payments but a negative effect on reporting compliance. Bankruptcies should have a similar effect to unemployment but again the evidence is limited.</td>
</tr>
<tr>
<td>Tax Rates</td>
<td>Tax rates are negatively associated with compliance (i.e., higher rates encourage more non-compliance) in most studies but there is some contradictory research.</td>
</tr>
<tr>
<td>Sector</td>
<td>Certain economic sectors are associated with non-compliance: cash and retail businesses, traders operating from a fixed business location (e.g., garage, shop or restaurant), agriculture, those with income from rental or investment sources.</td>
</tr>
<tr>
<td>Income</td>
<td>Empirical studies have found mixed results. Higher income may offer more opportunities (or motives) to evade but lower income reduces cash flow and may present payment and collection difficulties. Therefore both lower and higher income may negatively affect compliance.</td>
</tr>
<tr>
<td>Sanctions</td>
<td>The penalties and actual number of audits have a positive impact on compliance but the impact is often found to be small. The subjective level of audit (people tend to overestimate the number and probability of audit) is associated with more compliant behaviour. Prior audit has little effect on compliance, either because the experience may not have been as negative as the taxpayer expected or because once the audit is completed there is a desire to “get back” the income lost. Voluntary disclosure programmes may negatively affect compliance, perhaps due to fact that taxpayers intentionally underreport their income, hoping that they can avoid sanctions by availing of future amnesties.</td>
</tr>
<tr>
<td>Agents</td>
<td>Use of tax practitioners tends to promote compliance on unambiguous items such as reported wages and salaries but is less effective on more ambiguously defined items such as business expenses and other topics that may be more open to evasion. There are selection issues also (taxpayers chose to self-prepare or a hire an agent).</td>
</tr>
<tr>
<td>Filing</td>
<td>Electronic filing is associated with higher rates of compliance than paper filing. This may be a selection issue (more compliant taxpayers may select to file electronically).</td>
</tr>
</tbody>
</table>

2.7 Principles of Influence

To move from the literature to practical applications of the behavioural insights, Cialdini’s principles of influence offer a useful structure.

Cialdini (2001) develops six principles that can be applied to influencing individuals’ behaviour and decision-making. OECD (2009) further develops these including, as shown in Table 3, a series of possible applications of the principles to tax administration.

<table>
<thead>
<tr>
<th>Influence Principle</th>
<th>Explanation</th>
<th>Potential Tax Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocation</td>
<td>People feel obligated to return favours.</td>
<td>Indicate to taxpayers the ways in which the tax administration can assist them and emphasise the benefits of compliance.</td>
</tr>
<tr>
<td>Authority</td>
<td>People look to experts to show the way.</td>
<td>Take opportunities to communicate the tax administration’s relevant expertise and experience in taxation matters.</td>
</tr>
<tr>
<td>Commitment &amp; Consistency</td>
<td>People want to act consistently with their values.</td>
<td>Allow taxpayers the possibility to communicate their commitment to compliance and to show consistency with previous actions.</td>
</tr>
<tr>
<td>Scarcity</td>
<td>People place higher values on resources that are limited.</td>
<td>Attempt to characterise compliant behaviour as avoiding losses and show that the tax administration is unique as its services to taxpayers cannot be offered by anyone else.</td>
</tr>
<tr>
<td>Social Proof &amp; Consensus</td>
<td>People look to others to guide their behaviour.</td>
<td>Signal to taxpayers that compliant behaviour is the norm but be wary of publicising evasion as severe or widespread as this may legitimise undesirable behaviour.</td>
</tr>
<tr>
<td>Liking</td>
<td>People are supportive to ideas or actions they like.</td>
<td>Emphasise the positive aspects of the tax administration’s work and the tax system to improve taxpayers’ views.</td>
</tr>
</tbody>
</table>

Source: Based on Cialdini (2001) and OECD (2009)

The factors discussed in the previous sections and these principles offer a framework to address the issue of how to influence taxpayers to improve compliance.
3 Taxpayer Attitudes and Behaviour in Ireland

Section 2 identifies the factors that impact on taxpayer behaviour from the research literature. OECD (2010) provides some information from surveys of tax administrations on their perceptions of the influence of these factors on compliance. However, it is important to know which of these factors are the most relevant in determining the behaviour of Irish taxpayers.

Revenue has considerable sources of information on taxpayer behaviour and attitudes in Ireland. Of most relevance to discerning the determinants of behaviour are a series of taxpayer surveys.

Revenue has conducted four surveys involving small or medium sized enterprises (SME 2006, 2008) or pay as you earn taxpayers (PAYE 2007, 2009/10). The results and analysis provide information on a number of areas that can be evaluated against the behavioural factors discussed in Section 2.

In addition to these four surveys, Revenue also commissioned an independent survey of attitudes and behaviour towards taxation from a third party market research company in 2008/09. The results are not discussed here as the survey has not yet been published but they show similar outcomes across the ranges of issues examined below and provide external validation for the results of the Revenue conducted surveys.

3.1 Overall Satisfaction
Overall satisfaction with the service taxpayers receive from Revenue is high. Among SMEs, 87 per cent of those that responded to the 2008 survey are either satisfied or very satisfied (up from 84 per cent from the SME 2006 survey). For PAYE taxpayers, the satisfaction level is 91 per cent in the 2009/10 survey (up from 88 per cent in 2007).

3.2 SME Attitudes to Compliance
The survey of SMEs in 2008 asked respondents to rate the influence that ten statements have on their compliance.

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10 These are postal surveys of randomly selected samples of taxpayers from Revenue’s register.
11 Detailed reports on each survey and results are available on Revenue’s website www.revenue.ie.
SME taxpayers’ compliance appears to be highly influenced by factors related to personal norms. Factors such as Doing the ‘right thing’; Because it is the law and Presumption from Revenue that you have been honest are indicated as having a strong influence on compliance. The statement Belief that other taxpayers are declaring and paying honestly is ranked as less influential.

Concern at having to pay interest charges for late payment of tax is indicated as the most influential within the topics related to deterrence. Other deterrence factors such as Concern that Revenue will obtain a court judgment against you for failure to pay tax and publish details of that judgment; Concern that you will be published on the Quarterly Defaulters List and Concern that you will be audited by Revenue are influential for a sizeable share of the respondents. Concern that a 3rd party owing you will pay Revenue is influential only for small share of cases.

The SME 2006 survey asked respondents about their perceptions of Revenue’s fairness in administrating taxes and duties; Revenue’s efficiency in administering taxes and duties; Revenue’s effectiveness in dealing with evasion and whether public confidence in Revenue is justified. Across all four statements over two thirds of respondents agree or strongly agree that Revenue is fair, efficient, effective and has the public’s confidence. Less than 10 per cent disagree or strongly disagree in any of these areas.

3.3 PAYE Taxpayers’ Perceptions of Revenue
The PAYE 2007 survey asked respondents for their views of Revenue’s customer service delivery. Over 70 per cent agree or strongly agree with statements that Revenue explains my tax credits and relief entitlements and Revenue makes it easy for me to claim [credits and entitlements]. On questions related to Revenue’s response speed and the courteousness and helpfulness of Revenue staff, agree or strongly agree responses are 90 per cent or higher.

3.4 PAYE Taxpayers’ Attitudes to Taxation
The PAYE 2009/10 survey included a series of questions on taxpayers’ attitudes to tax compliance (and compliance with other regulations) to which the respondents were asked to agree or disagree.

Significant majorities agree that It is not acceptable to declare some but not all income for tax purposes (85 per cent); It is not acceptable to buy services knowing the income from them will not be declared to Revenue (83 per cent); It
is not acceptable to claim credits or reliefs from Revenue that you are not entitled to (92 per cent)\textsuperscript{12}; Those who evade tax repeatedly should receive a jail sentence (86 per cent) and It is acceptable to report tax evaders (92 per cent).\textsuperscript{13}

The above statements reflect some of the personal norms around tax evasion. It is interesting to note that a lower share (73 per cent) consider it unacceptable to legally avoid paying taxes by using loopholes in legislation. Also, only 72 per cent consider it unacceptable to purchase goods abroad, over the customs limit, and not declare them to customs on returning to Ireland.

The personal norm related statement responses are strong from a compliance perspective but the responses related to statements that reflect social norms are slightly weaker. Only 69 per cent believe deliberate tax evasion is considered unacceptable by Irish society. While 77 per cent believe Revenue has been successful in dealing with tax evasion in the last five years and 76 per cent believe Revenue is able to detect people not paying the right amount of tax, 81 per cent agree that deliberate evasion is on the increase.

3.5 Summary of Survey Findings
The results across the taxpayer surveys indicate that deterrence remains an important determinant of compliance behaviour, as do fairness and trust. The majority of the population considers tax evasion unacceptable and views on Revenue’s effectiveness in dealing with evasion are positive.

There are suggestions in the responses that tax avoidance and customs issues are seen less unacceptable than tax evasion to some respondents.

Responses related to personal norms are strong from a compliance perspective but the responses to statements that reflect social norms appear weaker. Many respondents hold positive personal beliefs with regard to tax compliance but the level that believe the same beliefs are widespread in society is lower.

This demonstrates the importance of misperceptions that may negatively influence compliance behaviour. The actual level of non-compliance in Ireland is most likely well below the perceived level reported in the survey questions related to social norms. The independent survey of attitudes and behaviour referred to in

\textsuperscript{12} Similarly, 95 per cent say it is unacceptable to claim welfare benefits if not entitled to them.
\textsuperscript{13} 95 per cent say it is acceptable to report someone fraudulently claiming welfare benefits.
the introduction to Section 3 shows that only 3 per cent of people in Ireland actually engage in undeclared work (in a separate Eurobarometer (2007) study 4 per cent of Irish respondents admitted to engaging in undeclared work).

Another factor that emerges from the survey responses is that many taxpayers have less opportunity to evade taxes on their wages (for example, people with PAYE only income).¹⁴

¹⁴ As NEF (2005) points out, due to loss aversion and salience, taxes levied at source (like PAYE) are likely to cause less resentment and be easier to administer than taxes that must be actively paid. This is linked to opportunity as discussed in Section 2.4.
4 International Experiences in Changing Taxpayer Behaviour

As noted in the introduction, tax administrations have long been in the business of changing taxpayer behaviour. Recent developments have seen tax administrations move towards trying to better understand taxpayer behaviour and to use the behavioural insights developed from research to change behaviour more effectively or from a more scientific perspective.

4.1 Changing Thinking in Tax Administrations

The more traditional view of the work of tax administrations focuses around detecting and correcting errors after they have been made (after tax returns have been filed or payments made). However, there is an increasing trend across tax administrations in many countries to develop more preventative approaches that seek to prevent errors before they occur (OECD, 2011b; EC, 2010). This is linked to a better understanding of taxpayer behaviour and motivations. Some tax administrations have placed changing behaviour in this way at the heart of their risk or compliance strategies.

Perhaps the most well established example of this type of approach in Europe is the “Right from the Start” model adopted by the Swedish Tax Agency (STA, 2005). This involves developing a more holistic view of the taxpayer based on knowledge acquired and research conducted. The approach incorporates education, active engagement with taxpayers and representatives, making it easier to comply and building both trust in the administration and positive norms. OECD (2011b) expands on this further by examining experiences in other countries in implementing similar strategies based on “Right from the Start” type approaches.

The Behavioural Insights Team in UK is working in the tax administration area (Dolan et al., 2012; Dolan et al., 2010; House of Lords, 2011; BIT, 2011). This includes examining ways to make it easier to comply, building social norms and looking at choice architecture changes to improve compliance.

The Dutch approach of “Horizontal Monitoring” establishes agreements between taxpayers (in some cases individual taxpayers, in other cases groups of taxpayers) and the tax administration and focuses on cooperation and mutual trust (NTCA, 2010). Others countries, including Ireland, operate similar programmes although not on the same scale.
4.2 Practical Applications to Changing Taxpayer Behaviour

Beyond beginning to change the culture of tax administrations, several countries have adopted or piloted practical applications from behavioural insights to change taxpayer behaviour.

There have been experiments in several countries examining how providing information to taxpayers affects behaviour. Most of the examples discussed below have been conducted within randomised controlled trial settings (using randomly selected treatment and control groups) to accurately measure the effect of the intervention.

This type of analysis has been conducted by tax administrations in Ireland, the UK, the US, Australia and several Scandinavian countries. Although varied in their scope, the main aim of these projects has been to research and test the response of taxpayers to various sorts of information related to compliance.

In the main, the types of information given to taxpayers concern deterrence (audit and penalty information), assistance (offering to help taxpayers meet their filing requirements), education (the positive uses of tax revenue) and social norms (honest information showing that tax evasion is not as widespread as perceived). In most cases, the information is conveyed to the taxpayers via letters sent prior to tax return deadlines.\textsuperscript{15} The effects are measured by analysing the differences in outcomes among the treatment and control groups.

Table 4 shows a summary of some of the projects undertaken.

\textsuperscript{15} This was not the case in all experiments. For example, the Swedish Tax Agency (Appelgren, 2008) conducted an experiment to assess whether phone calls or letters are better at encouraging late filers to make a return.
Table 4: Selected Evidenced Based Experiments on Taxpayer Behaviour

<table>
<thead>
<tr>
<th>Country</th>
<th>Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>Doyle et al. (2009)</td>
<td>Revenue sent letters to treatment groups of taxpayers that had not filed returns on time (a control group received no letter). Taxpayers that received a letter with soft and helpful tone showed the highest response rate. A harsher, more authoritarian letter had less effect but still had a higher response rate than the standard Revenue letter. All three treatment groups had higher response rates than the control group.</td>
</tr>
<tr>
<td>UK</td>
<td>Hasseldine et al. (2007)</td>
<td>Five letter types were sent to groups of taxpayers (small businesses, sole proprietors) before the return deadline: enable (offering assistance); citizenship (majority of people pay their proper taxes); audit (HMRC was increasing audits among small businesses); audit/penalties (as audit but noting there are penalties for incorrect returns); and pre-selected audit (informing the taxpayer they were pre-selected for audit). All had significant effects over the control group (reported turnover and net profit used as measures). The three audit letters had similar results and were most effective. Also evidence that all letters had more effect for self-preparers than taxpayers with agents.</td>
</tr>
<tr>
<td>UK</td>
<td>Behavioural Insight Team (2011)</td>
<td>HMRC sent letters to taxpayers in tax arrears for the first time. The letters noted that the majority of taxpayers paid their taxes on time. The results showed significant increases in payment by recipients of letters reflecting social norms (over the control group letters with no norms). Letters mentioning local norms (compliance rates in taxpayers’ postcode or town) were more successful than letters citing national norms.</td>
</tr>
<tr>
<td>US</td>
<td>Coleman (1996, 2007)</td>
<td>The Minnesota Department of Revenue sent letters to taxpayers prior to their filing deadline. The letter types were: increased chance of examination/audit; offer of enhanced customer assistance; and information messages (on the use of tax revenue for public services and on social norms – most taxpayers pay accurately and the number of taxpayers who deliberately cheat the system is low). The threat of examination/audit increased voluntary compliance for low to middle income taxpayers. The effect on higher incomes taxpayers was mixed. The enhanced service offer had no impact. The message regarding social norms had a positive but modest effect.</td>
</tr>
<tr>
<td>Australia</td>
<td>Wenzel (2001a, 2001b)</td>
<td>The Australian Tax Office surveyed a group of taxpayers. This showed people perceive evasion as more widespread than it is. Various forms of feedback were given to the survey respondents and their subsequent tax returns assessed (deductions claimed were compared across the treatment groups). Some respondent were given feedback on the actual prevalence of non-compliance (descriptive norms), another group feedback was provided with information on the social acceptability of non-compliance (injunctive norms). Those that received the injunctive norms feedback made fewer deductions (compared to the control group). The descriptive norm feedback had a slightly significant effect. Receiving the survey alone (no feedback) had no effect.</td>
</tr>
<tr>
<td>Australia</td>
<td>Wenzel and Taylor (2004)</td>
<td>Taxpayers were sent schedules requiring them to account for certain deductions. Sending a schedule for personal use had no effect. When the taxpayer was required to complete the schedule there was a compliance benefit. Interaction of the schedule as an educating tool and a warning of the possible examination/audit was the key to increasing compliance (warning letters alone had no effect).</td>
</tr>
<tr>
<td>Sweden</td>
<td>Appelgren (2008)</td>
<td>Letters were sent to small businesses prior to the tax return deadline. Half informed the recipient that audits would concentrate on taxpayers declaring the low cash flows and the other half informed taxpayers that audits would be conducted at random (a control group was also established). Analysis of the subsequent returns showed that declared income increased more significantly among those that received the first type of letter.</td>
</tr>
</tbody>
</table>

Source: The papers cited in the table.
As opposed to the more direct, evidence based approaches in Table 4, several tax administrations have implemented policies to change behaviour that can only be measured indirectly (for example, by surveys of behaviour before and after the intervention).

Tax administrations in Sweden and Denmark have run initiatives involving marketing campaigns (OECD, 2011a). The messages promoted varied but centred around the theme of showing the importance of tax revenue for funding public goods and services and the problems arising from shadow economy involvement. Survey results suggest that attitudes and behaviour to tax compliance improved over the period in which the campaigns were run.

Both the Danish and Swedish campaigns focused particular attention on trying to change the attitudes of young people. Sweden, along with other countries such as Canada and Austria, has tested an approach of tax officials visiting schools. These visits serve two purposes: to reinforce positive attitudes to taxation but also educate future taxpayers on the workings of the tax system. Surveys suggest these positively impacted on taxpayer behaviour (OECD, 2011a).

On a slightly different approach, in the Netherlands an investigation by the tax administration used media coverage as a tool. The investigation included a voluntary disclosure phase. By studying media reports on the investigation, combined with the timings of disclosures, several features were noted. Media reports that contained messages regarding norms are found to have had the greatest correlation with the number of new disclosures. Reports that provided information on how to make a disclosure had a positive correlation. A large proportion of the media reports covered the risks and consequences of detection but these appear to have had little influence on the number of disclosures.

The Australian Tax Office publishes information on the average activity levels in several industries (OECD, 2011a). These “Business Benchmarks” indicate to taxpayers what the tax administration expects to see from businesses operating in those industries (based on tax returns and third party data). Taxpayers are warned that if they operate outside these norms (below or above the industry averages) they may attract the attention of the tax administration.
5 Conclusions – Influencing Taxpayer Behaviour in Ireland

5.1 A Behavioural Framework for Taxpayers

Behavioural economics introduces psychology to economics to better understand decision-making. In the context of tax administration, behavioural economics offers insights into understanding the actions of taxpayers and has the potential to improve taxpayer compliance and customer service.

In building an approach to influencing taxpayers, the behavioural literature offers a framework. The five factors determining tax compliance (Sections 2.1 through 2.5) provide the basis (the interactions between the various factors should not be ignored). Cialdini’s principles of influence (Sections 2.7) are a useful model as to how to apply the factors to influence behaviour.

While there is no best practice guide on how to apply these concepts to taxpayers, this framework can offer a structure to guide tax administrations in attempting to positively influence behaviour.

The framework is informed by domestic and international research, from academic and tax administration sources. In Ireland, Revenue continues to survey taxpayers and to collect data on behaviour from a range of sources. These sources need to be fully exploited for all possible insights into behaviour. For example, statistical segmentation offers a new dimension to identify segments in the taxpayer population and may allow further refinement of projects targeting particular categories of taxpayers.

Tax administrations have many risk treatment tools available to change behaviour. However, tools like audit are expensive and resource intensive even when deployed in a targeted fashion (for example, based on Revenue’s risk model). Understanding and influencing behaviour offers a more efficient option. This is particularly the case for treatments that seek to improve voluntary compliance. Relatively small scale but targeted interventions can have large effects on behaviour.

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16 OECD (2010) stresses the need for tax administrations to be aware of the prevailing attitudes and behaviour by using regular public opinion research to provide knowledge critical to developing compliance and customer service strategy.
5.2 Interactions between Tax Administrations and Taxpayers

Considering the issues discussed above, it becomes apparent that communication is a key treatment tool for influencing behaviour. The framing of, and language used, when communicating with taxpayers will have a significant influence on behaviour. Even simple changes may make a difference.

OECD (2010) suggests that every action or message from tax administrations should “resonate” with the influencing factors and that tax administrations should be alert to public misconceptions or inaccuracies that may impact on behaviour.

As OECD (2010) notes, the challenge for tax administrations is to communicate the message that most taxpayers are honest but those that are not are successfully pursued. This should be the central message of the tax administration but there is scope for variation in the actual message regarding norms, deterrence, fairness and other factors.

Broadly speaking, there are two types of communications that can be used to influence behaviour. Direct approaches target specific taxpayers, for example through the use of a letter to individuals or groups of taxpayers. Direct approaches can also be more passive, for example providing information to specific taxpayers on a particular issue. Indirect approaches are measures that impact on large numbers of taxpayers (or even all taxpayers) in a relatively indiscriminate fashion, for example an advertisement placed on billboards, posters or television.

To fully understand the importance of the conflicting factors influencing taxpayers, pilot projects need to be constructed. Treatments need to be applied and behavioural changes measured. From the perspective of measuring the impact on behaviour, direct and indirect approaches present different challenges.

The effect of a direct approach can be measured if appropriate treatment and control groups are established in an evidence based setting. Two samples of taxpayers are selected at random, one group is targeted (the treatment group) and the other is not (the control). As the two groups are the same except for the treatment, any subsequent change in behaviour between the two groups can be attributed to the treatment.
With indirect approaches, it is often not possible to precisely measure the effect of a treatment, as there is no control group against which to compare. Behaviour can be measured, for example using surveys before and after (or comparisons made to different areas). Any changes may be assumed to have resulted from the treatment but this cannot be known with certainty.\textsuperscript{17}

It should also be noted that changing taxpayer behaviour is often a long-term project. Even if a treatment is established quickly, it may take several years before the full impact on behaviour is felt (for example, programmes to educate schoolchildren about tax may provide benefits for many years).

Another issue to consider is that messages about successful measures against tax evasion may inadvertently create an impression that non-compliance is widespread or, as OECD (2010) puts it, may promote a non-compliant norm.\textsuperscript{18}

The scientific approach and the importance of measurement are key to being able to learn from initial experiences and projects. Piloting and analysing effectiveness are vital to test proposals before they are extended to the overall taxpayer population. The results then provide feedback to develop new ideas and projects in what is hopefully an ongoing cycle of knowledge discovery.

\subsection*{5.3 Developments in Revenue}

Revenue has many channels of interactions with taxpayers (for example, tax returns, letters, call centres, walk in offices, audits, online systems, information guides). Some or all may be suitable for direct or indirect measures to influence taxpayer behaviour. However, first there is a need to test which messages are most effective in influencing behaviour in Ireland.

The research literature provides the behavioural framework to approach taxpayers. Revenue’s direct and indirect interactions with taxpayers are providing pilot projects to begin to develop the approach in practice. Ongoing learning is key to the process of behavioural research and influencing taxpayers.

\textsuperscript{17} In economics terminology, direct measurement in a treatment and control setting are referred as randomised controlled trials (Delaney and Harmon, 2009). More indirect approaches, such as comparing people affected by a particular change with a group that has not been affected (e.g., comparing people in two different jurisdictions or the same people before and after a change), are known as natural experiments. See List (2011) or Ludwig \textit{et al.} (2011) for more discussion of experiments in economics.

\textsuperscript{18} For example, for Revenue this is a factor to consider in light of the media coverage of events like the quarterly defaulters list or large customs seizures.
Tax administrations in several countries have begun to experiment with the wording and framing of direct communications to taxpayers, often with letters as discussed in Section 4. Revenue is undertaking several pilot projects in this area, across different tax heads and groups of taxpayers.

Revenue’s existing knowledge of taxpayer behaviour is informing the approach. The pilot projects are being conducted in as scientific as manner as possible to ensure that the experiences are learned from. This knowledge gained will inform further developments.

Aside from the pilot projects underway, another direct communication avenue is the pre-population of certain tax returns and forms sent to taxpayers with information that is already known to the tax administration. Revenue has begun to implement this in some cases. The underlying idea is to limit the unnecessary work needed by the taxpayer. This enhances customer services by reducing complexity and reduces the opportunity for non-compliance.

For indirect messages, Revenue’s broader communications strategy (press releases and other interactions with the media and public) builds on the framework described above and the communications themselves become tools to encourage compliance. All communications by Revenue should be informed by the factors underlying taxpayer behaviour and be in line with the organisation’s goals.

5.4 Conclusion
This paper surveys the factors determining tax compliance from the perspective of using insights from behavioural research to improve tax administration. Evidence from Irish and international research is examined. This covers both academic research and experiences of tax administrations in implementing and testing new approaches.

The paper concludes by outlining the work being done in Revenue to use this behavioural research as a framework to influence taxpayers. Pilot projects to develop and test behavioural insights are underway and future work will focus on analysing the results and putting the lessons learned to wider use.

10 See Revenue eBrief No. 52/11 and No. 20/11 for more information.
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