

Behavioural Economics

Central Expenditure Evaluation Unit

**The CEEU is a unit of the Irish Government Economic and
Evaluation Service (IGEES)**



Summary

This paper underpins some of the themes that have emerged from the Comprehensive Review of Expenditure and highlights potential methods to improve outcomes given expenditure parameters. The Government's *Public Service Reform Plan 2014-16* makes a commitment to "drive improved outcomes in terms of how citizens engage with and experience the public services." One of the key objectives of the Public Service Reform Plan is to make it "easier for the citizen to engage with the State, to obtain their entitlements and to understand their obligations." This paper examines, in a preliminary way, the potential for the growing body of research and innovative ideas emerging in the area of behavioural economics to improve the effectiveness and efficiency of policies and of State services and service delivery to the citizen.

Behavioural economics examines why people's actions deviate from the predictions of standard economic theory. This paper explains the theoretical and research-based background to behavioural economics and discusses some practical applications in the area of public policy making and public service delivery. In doing so, it draws on examples of best international practices and makes some recommendations for applying these in Ireland. It also highlights existing good practices and initiatives underway in parts of the Irish public service. There is scope for behavioural economics across the wide spectrum of public policy and state services – health care, education, pensions, back-to-work initiatives, reducing reoffending rates, and the collection of taxes, fines and charges. This paper will only touch on the possibilities but proposes that the concepts and ideas coming from research and proven successful in this area should become a part of public service reform, policy development and delivery.

Public policy is, among other things, concerned with influencing people's decisions to ensure better outcomes, and by incorporating behavioural insights in policy and service delivery, there may be opportunities to improve the effectiveness and efficiency of public services.

Behavioural insights have many potential policy applications and can be relatively simple, ranging from changing the language and tone of letters to improve compliance rates for paying fees to developing more in-depth commitment devices to ensure good health outcomes.

Improving efficiencies and outcomes with limited resources is a central theme of the Comprehensive Review of Expenditure, and behavioural economics can be used to contribute to better outcomes given expenditure parameters. This paper proposes that behavioural economics can improve new policy development, enhance the delivery of existing policy and interventions, help avoid unintended outcomes and improve productivity. At an operational level, behavioural economics has application across public services, including in the area of debt management and revenue collection, and at a policy level it can inform policy development in areas such as pensions and in health.

Behavioural considerations can be incorporated into the process aspects of the State's interactions with citizens, businesses and organisations to help make compliance easier and by improving administrative practices. The Revenue Commissioners, for example, have already seen improved compliance rates in areas where they considered behavioural economic insights and tested their applications in tax collection and licence renewal. Employing behavioural insights to process can help contribute to public sector reform and the innovation of service delivery, improving efficiency and value for money. While the application of behavioural economics is not a panacea to public expenditure challenges nor necessarily a substantial source of cashable savings, it does provide the potential to help the system manage demand pressures and increase throughput, for example, by reducing no-shows/cancelled appointments for social services.

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1. Introduction

This paper underpins some of the themes that are emerging from the Comprehensive Review of Expenditure and highlights potential methods to improve outcomes given expenditure parameters. The Government's *Public Service Reform Plan 2014-16* makes a commitment to "drive improved outcomes in terms of how citizens engage with and experience the public services." One of the key objectives of the Public Service Reform Plan is to make it "easier for the citizen to engage with the State, to obtain their entitlements and to understand their obligations." This paper examines, in a preliminary way, the potential for the growing body of research and innovative ideas emerging in the area of behavioural economics to improve the effectiveness and efficiency of policies and of State services and service delivery to the citizen.

The paper explains the theoretical and research-based background to behavioural economics and discusses some practical applications in the area of public policy making and public service delivery. In doing so, it draws on examples of best international practices and makes some recommendations for replicating these across the Irish policy system. It also highlights existing good practices and initiatives underway in Ireland. There is scope for behavioural economics across the wide spectrum of public policy and state services – health care, education, pensions, back-to-work initiatives, reducing reoffending rates, and the collection of taxes, fines and charges. This paper will only touch on the possibilities but proposes that the concepts and ideas coming from research and proven successful in this area should become a part of public service reform, policy development and delivery.

2. What Is Behavioural Economics?

All economics is concerned with how people behave. Broadly speaking, standard economic theory assumes that individuals always make choices that are rational and maximise their welfare. Furthermore, when choices are made over different time periods, standard economics assumes that people will choose the option that gives the best outcome over their lifetime. Even in the absence of perfect information, it is assumed that people will choose the option that results in the highest welfare based on the available information. Behavioural economics, on the other hand, recognises that people do not always make choices that maximise their welfare, despite best intentions; that faced with a myriad of daily choices,

some simple and some complex, we do not always have the time to assess all the options available to us for every given choice. Sometimes there are so many choices that we procrastinate, and make no change, deferring the decision to a later date. Behavioural economics does not assume that people are irrational, merely that we “are not well described by the rational-agent model”.¹

Behavioural economics, therefore, focuses on understanding people’s actions that consistently deviate from standard economic theory, examining and testing the biases and influences that impact on our behaviours and choices. It is founded in the analysis of how people respond to real situations. Its applications are concerned with establishing why policy fails and how services can be improved.

Below is a selection of biases and influences that have been identified by behavioural economists (see endnote¹). Understanding these and reflecting upon them in policy design can lead to better outcomes.

Table 1: Selected biases and behavioural influences

<i>Bias & influences</i>	<i>Description</i>	<i>Examples/Implications for policy</i>
<i>Cognitive limitations</i>	We can only process a limited level of information at a given time and examine only a few options.	Tariffs from utility providers are hard to compare and reduce the likelihood of switching. Too much information and too much choice can lead to confusion and then procrastination.
<i>Defaults</i>	Default choices and settings are used as reference points; the status quo matters.	In countries where there are opt-in systems for organ donation the rates of donation are far lower than in countries with opt-out systems.
<i>Present bias / Time-inconsistency / Hyperbolic discounting</i>	Immediate effects are given too much weight while future impacts are undervalued.	Households underspend on energy efficient measures because pay-back periods appear so long.

¹ Kahneman (2011) p411 in Lunn, P. (2012) ‘Behavioural Economics and Policymaking: Learning from the Early Adopters’ in *The Economic and Social Review* Vol. 42, No. 3, Autumn, 2012., p426

<i>Bias & influences</i>	<i>Description</i>	<i>Examples/Implications for policy</i>
Loss aversion	Losses are felt more keenly than gains, even when they may be equal.	Loss aversion has implications for tax collection, actively paying a tax creates more resentment than payment at source.
Norms	Other people's behaviour influences our behaviour. By unconsciously learning from the behaviour of other people social norms are established.	Positive norm - Smoking is now less socially acceptable. Following the introduction of the smoking ban in Ireland, the 'social proof' was reduced, and now people are less likely to smoke in other people's houses even though there is no legislation against this. Negative norms - social attitudes towards alcohol may encourage excessive drinking.
Anchoring	An arbitrary reference point can influence people's beliefs.	The minimum payment on credit card bills leads people to pay less than they would otherwise.

2.1 Nudges - an application of behavioural economics

Perhaps the most well-known application of behavioural economics in recent times is the 'nudge'. Nudges are distinct types of interventions that seek to influence choices through the design and delivery of policy. Their simplicity is compelling and appealing for policymakers.

Many policy interventions impose restrictions through regulation or influence choices through taxes and charges; but nudges focus on the design and delivery of policy to influence choices. The 'choice architecture' is designed to encourage people, or 'nudge' them, to opt for what policymakers deem to be the better choice.² The use of nudges are often low-cost to implement and can lead to reduced public expenditure through better outcomes. Nudges can increase revenue collection and improve compliance, and in this way can be important to limit spending on compliance processes.

² Ibid., p434 & Dolan, P et al 'Influencing behaviour: the Mindspace Way' in *Journal of Economic Psychology* 33 (2012) p273

Applications of behavioural economics through nudges, as well as through regulatory design, tend to centre on simplicity, convenience and salience³, which are important for all areas of policy development:

*Simplicity: Mandating credit card companies to show when a credit card bill will be paid off when only minimum payments are made makes it easier for people to understand the full cost.*⁴

*Convenience: Requiring people to opt-out of organ donation, not opt-in, improves the level of organ donation.*⁵

*Salience (striking, attention grabbing): Energy efficiency ratings of electrical goods.*⁶

3. Behavioural Economics – Role in Public Services and Policymaking

Public policy is, among other things, concerned with influencing people's decisions to ensure better outcomes, and as such there has been growing interest in behavioural economics and its applications for policy. The context or situation in which decisions are made impacts on our behaviour and choices, and this ultimately impacts on outcomes. Incorporating behavioural concerns in policy and service delivery can improve the effectiveness and efficiency of public services. Many of the applications to date in other countries have been in the areas of consumer protection regulation and in pension policy.

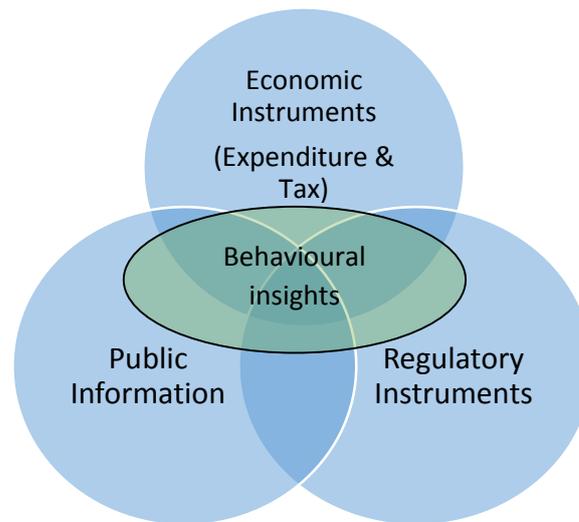
³ Lunn, P. (2014) *Regulatory Policy and Behavioural Economics* OECD Publishing., p10

⁴ Ibid., p27

⁵ Lunn, P. (2012) op.cit., p429

⁶ Kahneman and Thaler (2006) in Dolan P et al. p269

Figure 1 Behavioural economic insights can add to the policy intervention toolkit



Most policies try to influence behaviour to some degree. By recognising how behavioural biases impede desired policy outcomes policymakers can identify ways to overcome behavioural barriers. Typical policy interventions range from bans and regulatory limitations to economic instruments such as taxes and public expenditure and to the provision of information and advice. Behavioural economics can improve new policy development and it can also be used to enhance the delivery of existing policy and interventions. Unintended outcomes can also be avoided.

3.1 Improving outcomes

As with all policy, the behavioural focus should be on the desired outcome. For example, obesity levels are strongly associated with a myriad of poor health outcomes. Ultimately, preventative measures are vital and reducing obesity levels will improve health outcomes. Standard economics indicates that information campaigns to inform people of the benefits of healthy eating and of the measures to reduce weight helps overcome information gaps. Some jurisdictions are also implementing taxes on fat and sugar to help reduce obesity levels, and other regulatory instruments may be used. Behavioural economics points to a number of other issues that could help improve the effectiveness of healthy eating campaigns. Social norms about food have been heavily distorted by the marketing campaigns of food companies. People overly discount future impacts in favour of immediate concerns, and underestimate health risks in the future.⁷ Being cognisant of behavioural biases and influences that lead to

⁷ Lunn, P. (2012) op.cit., p435

poor outcomes can help to improve outcomes by developing policies that take account of these biases.

In the area of public health, food and drinks companies employ extensive resources for marketing and brand activity to exploit consumer behaviour and to understand their target market. Every aspect of the product, communication and delivery channel is examined to maximise sales. Why shouldn't the State respond in kind and get to know and understand its 'customer', the citizen, better?

3.2 Improving process

Behavioural considerations can also be incorporated into the process aspects of the State's interactions with citizens, businesses and organisations to help make compliance easier and to improve administrative practices generally.

For example, enforcement authorities in Ireland are increasingly employing risk-based enforcement techniques to target enforcement resources more efficiently. Complementing risk-based enforcement with behavioural considerations can help reduce non-compliance and also mitigate the impact of non-compliance. Making it easier to comply with regulations is central to risk-based enforcement, and of course improving compliance processes and outcomes reduces administration costs and increases revenue. Furthermore, by reducing the likelihood and impact of non-compliance the State's exposure to costs resulting from regulatory failures is reduced, e.g. health costs from food safety breaches or environmental clean-up costs from water contamination.

The Revenue Commissioners have implemented a number of projects to assess the potential of behavioural insights to improve taxpayer compliance and increase tax collection. These have included running randomised controlled trials on day-to-day Revenue operational tasks to examine the practical impacts of behaviourally influenced changes. As demonstrated by the examples from the Revenue Commissioners in Sections 4.2 and 4.3 below, behavioural economics has a clear role in improving compliance outcomes. Examples include testing the impact of varying letters to taxpayers who are late in filing their tax returns, highlighting social norms, or examining the potential to improve customer service to taxpayers by pre-populating tax returns.

3.3 Trialling and testing behavioural insights

A lot of research is available to draw on that identifies behavioural biases that should be considered in policy development and delivery. A key pillar of behavioural economics is to test the application of identified, potential biases. Trialling takes account of the social context and any nuances in the policy area concerned. Increasingly, the policy development process requires that policies are underpinned by evidence, and behavioural economics is one avenue by which empirical evidence can be gathered. Behavioural economics has the potential to contribute to the evidence base. The principle of proportionality should apply, and the level of testing and applied research should be linked to the size of the behavioural intervention. Small changes and tweaks to communications, such as letter styles, require limited additional resources; larger programmes, such as energy efficiency schemes should employ more rigorous testing techniques to establish value for money.

3.4 Mental accounting and labelling – potential impacts for cash payments

In standard economic theory, all the money a person possesses is interchangeable. However, in reality people often engage in mental accounting and allocate their money to different mental 'pots' or labels. For example, money may be put aside for a rainy day, for Christmas savings, for household bills or annual insurance payments. This is relevant for design of transfer payments from government, which are often given labels related to the consumption they are intended to support. Economic theory assumes that money is interchangeable, and that a label should have no bearing on an individual's expenditure pattern, but research on the Winter Fuel Payment in the UK indicates that labelling impacts on how money is spent.⁸

A study by the UK-based Institute for Fiscal Studies (IFS) showed that unlabelled welfare increases led to a 3 percent increase in spending on fuel; but labelling a welfare payment as a Winter Fuel Payment led to a 41 percent increase on fuel-related expenditure. A review by the IFS of the literature suggests there is mixed evidence on the labelling effect of child benefit. The concept of 'mental accounting' may explain why labelling transfers may impact to some degree on outcome. Labelling and its associated impacts are important for expenditure policy, as it may impact on the intended outcome, and may also influence perceptions about entitlement that may make adjustments to a scheme more difficult.

⁸ Institute for Fiscal Studies (2011) Cash by Any Other Name? – Evidence on Labelling from the UK Winter Fuel Payment pp1-2

3.5 Health screening

Medical screening is an important tool for the early detection of cancers, yet high levels of non-attendance for first screens are evident in the BreastCheck programme, with just under 60 percent of the target population attending first screens in 2012. These first screens resulted in 262 cancers being detected. Rates of attendance for subsequent screens are higher, at 86 percent, indicating that it is easier to get those who have attended previously to attend subsequently.⁹ Non-attendance at screening appointments reduces the numbers of early detections and results in spare, underused capacity at screening locations. Later detections for cancer may require more invasive procedures and may result in poorer outcomes for the patient. Behavioural economic considerations could be used to improve the attendance rates for first screens.

Some UK studies have examined the efficacy of offering vouchers or conducting lotteries with cash prizes to encourage the attendance at screenings, finding that a £5 voucher increased screening by over 21 percentage points.¹⁰ Whether the health service should be paying people to attend free health checks is another matter, but it can be effective and if the net effect is to reduce waste then some form of financial reward – e.g. donation to a charity – may be worth exploring. So too are other interventions: highlighting the financial cost to the State (and the tax payer) of non-attendance, or highlighting the impact of early cancer detection levels on survival.

The key lesson is that by testing different approaches attendance levels may be improved, and with concomitant early detection rates, can help achieve better use of resources and reduce health expenditure at a later point. As well as cancer screening, reducing no-shows could improve throughput and outcomes in a number of health areas, such as primary care centres and local health centre services such as baby clinics etc. Across all outpatient hospital appointments over 400,000 patients failed to show up for hospital appointments in 2013¹¹. There is also scope beyond the health sector for improving attendance at appointments.

⁹ BreastCheck - Programme Report 2012-2013, pp13-14

¹⁰ Niza, C., Rusidell, C, and Dolan, P (2013) 'Vouchers versus lotteries: What works best in Promoting Chlamydia Screening? A Cluster Randomized Control Trial'

¹¹ HSE Monthly Management Data reports

<http://www.hse.ie/eng/services/Publications/corporate/performanceassurancereports/2013par.html>

3.6 Educational progression and attainment

Educational attainment has huge implications for outcomes in later life. Behavioural economics may have insights to offer in ensuring completion of second level education, as well as progression and completion of further education. Other educational issues such as the selection of science, technology, engineering, and mathematics courses may be influenced by behavioural biases. Research in the UK highlighted a number of biases in school-going teenagers, such as present bias and projection bias, whereby they do not fully anticipate the impact of current decisions on later choices. Furthermore, social norms may influence decisions about completing school and also about progressing to third level education.¹² There may also be a strong interaction with socio-economic status and discount rates.

In the US, a number of colleges and enterprises have been engaging in behavioural economic research and the development of tools employing behavioural insights to assist students in attending college, making course choices, and completing qualifications successfully. Simple text messages to remind prospective students of deadlines, or more complex messaging services that require students to respond with a commitment to complete a particular assignment by a set time are having some successes. Messages to assist enrolment have had the most impact for those groups that are most distant physically from colleges, and also those from lower socio-economic backgrounds.¹³

Behavioural economic techniques in the education sector could increase efficiency in education in the short term by reducing and drop-out rates; while in the longer term could impact on individuals' outcomes, as well as the wider benefits of education such as skill supply for the economy.

3.7 Justice

What other people do - social norms - plays an important role in influencing our behaviour. Highlighting positive social norms can improve outcomes, as shown in the example relating to the renewal of licences from the Revenue Commissioners in Section 4.2 below. Negative social norms need to be overcome. No smoking campaigns and campaigns to reduce drink driving have been effective in changing the social norms of these behaviours. Social norms are most

¹² Institute for Fiscal Studies (2011) *Subject and course choices at ages 14 and 16 amongst young people in England: insights from behavioural economics* pp4-5, and 34

¹³ Wildavsky, B. (2003) *Nudge Nation: a new way to prod students into and through college* Educationsector.org

evident in the justice system, which essentially legislates for what society deems appropriate behaviour. But can custodial sentences expose offenders to altered social norms? ¹⁴ Commitment devices are also used in the Justice area. Clients of the Probation Service sign contracts when they begin their probation – how might these contracts be amended to ensure greater commitment?

4 Potential areas for further behavioural consideration in Irish policy

Strong behavioural impacts are likely in areas where there is risk and where the outcomes occur over long time periods.¹⁵ Much of the literature and applications of behavioural insights to date in other countries have focused on financial products, pension policy and consumer protection. A number of examples of behavioural economics in an Irish context that are ongoing are explored below. There is scope for embracing of opportunities to apply new methods that have been proven in other jurisdictions and within a small number of areas of the Irish Public Service.

4.1 Applying behavioural insights to pensions and retirement savings

Pensions policy in a number of countries has looked to behavioural economics to identify ways to encourage saving for retirement. The framework of conventional economics indicates that people should consider their income and choices over their entire life cycle, but in practice people tend to underprovide for their own retirement. There are two reasons why people save less than they should for retirement. Firstly, many people prefer to consume now rather than the future; and secondly, financial products are confusing so people often procrastinate and put off making a decision until a later date. Individuals must opt-in to personal pension schemes, and this requires effort.¹⁶ The default option has proven to be a powerful tool for policymakers to encourage the desired outcome. Changing the default so that people are automatically enrolled in pensions results in a much higher uptake in pension schemes.

¹⁴ UK Cabinet Office & Institute for Government (2010) *MINDSPACE: Influencing behaviour through public policy* p35

¹⁵ Lunn, P. (2012) op.cit., p430

¹⁶ John McHale (2006) 'Perspectives on Retirement Savings Policies in Ireland' in ESRI *Budget Perspectives 2006*

The United States and the United Kingdom are countries where auto-enrolment systems have been implemented. People have the choice to opt-out, but the default option is enrolment. In the US, employers have the authority to enrol employees in pension schemes. An examination of a Fortune 500 company shows that auto-enrolment more than doubled the numbers of new employees that joined pension schemes.¹⁷ In the UK, a national auto-enrolment policy is being phased-in, with larger employers implementing it first. Preliminary data from the UK for the first phases of the roll-out have shown that by the third month only 11 percent of employees have opted out of the schemes.¹⁸

In Ireland, the Department of Social Protection is currently examining the design of a supplementary occupational pension scheme with the aim of encouraging people to save more for their retirement. As part of the deliberations the issue of auto-enrolment is on the agenda, which would replicate the approach in the UK. This opens the door for detailed consideration of how behavioural insights might be applied. For example, behavioural economic insights may be able to inform the overall simplicity of the policy design, for example the number of choices, and the default level of contributions. Lessons from elsewhere suggest, for example, that default levels provide strong anchoring points that people may not alter. If default payments are set too low then people may not opt to save more; if they are set too high they may opt out of the scheme entirely.

4.2 Communicating social norms to increase tax compliance

In rational choice theory, deterrence is considered the main rationale for tax compliance: individuals pay to avoid penalties. Yet, research into the reasons for taxpayers' compliance shows that behavioural considerations such as norms, fairness, and simplicity also influence compliance rates.

Behavioural economic research by the Office of the Revenue Commissioners used a randomised control trial to test the impact of altering renewal letters for Publican Licences to include a message about the social norms of publicans in complying with licence renewal. The revised letter simplified the wording and included information to show that most publicans renewed their licence on time – that is, paying on time is the norm. In the

¹⁷ Madrain and Shea (2000) in Cormac O'Dea 'Auto-Enrolment Into Pensions: An Option For Ireland?' March 2014 <http://www.publicpolicy.ie/auto-enrolment-pensions-option-ireland/>

¹⁸ Cormac O'Dea 'Auto-Enrolment Into Pensions: An Option For Ireland?' March 2014 <http://www.publicpolicy.ie/auto-enrolment-pensions-option-ireland/>

treatment/intervention group, 400 publicans received the revised letter. In the control group 7,800 received the standard renewal letter. In the trial, by a certain date, renewal rates from the treatment group were 6 percentage points higher than renewal rates from the control group on. By simplifying and changing the renewal letter to reflect the positive social norms among the target group there was a statistically significant increase in renewal rates. Full-scale implementation was adopted the following year, and all publicans received the revised renewal letters. Renewals rates for full scale roll-out were over 8 percent higher than the previous year. This is a good example of a 'nudge.' It is also simple and low-cost to implement (based on the existing issue of a letter), but yields measurably better outcomes. Using low cost but high impact techniques to increase compliance rates reduces enforcement costs and increases Exchequer revenue.

A number of other projects have been implemented with similarly positive results. One project assessed the effects of changing the tone of letters about tax debt outstanding. Different treatment groups received letters with 'soft' and 'hard' wording. The results show that, in the case of VAT, both treatment letters led to an uplift of about 30 percent in outcomes¹⁹ compared to the control group that did not receive a letter. For Income Tax cases, the uplift in outcomes progresses from the control group (36 percent) to the soft letter (50 percent) to the hard letter (65 percent). The project emphasises that the type of letter sent to taxpayers is important and can impact on their subsequent behaviour. But of perhaps equal importance, the projects also demonstrates the impact of communicating at all.

4.3 The impact of personalisation on survey response rates - 'Post-it® notes'

As part of a regular Revenue survey of small and medium sized enterprises (SMEs), a randomised experiment was conducted to examine the role of personalisation on survey responses. From a sample of 2,000 SME taxpayers, 15 percent were randomly assigned to receive a personalised handwritten Post-it® note attached to the survey requesting completion of the survey (treatment group), while the remaining 85 percent received surveys only with no personalised note (control group). The results show that, after the first 15 days, the response rate was 36 percent in the treatment group compared with 19.2 percent in the

¹⁹ Outcomes refers to engagement with Revenue that includes payment, part payment, instalment agreements, or the liability is reduces.

control group. The central finding from the experiment is that response rates to survey questionnaires are significantly higher, and received more quickly, if a personalised note is attached.²⁰

The results from Revenue's analysis of behavioural insights and their application to date have lessons for areas beyond tax administration. For example, the personalised note experiment may have more general application if extended to other areas of Government's work – personalisation appears to have a substantial influence on behaviour.

The Revenue experience also shows the benefits from international cooperation with others working on similar issues. Revenue has learned from the experience in HM Revenue and Customs in the UK and this is reciprocal – Revenue research has been cited internationally.

4.4 'Opt-In' – an Integrated Offender Management Pilot Programme

'Opt-In', a multi-agency Integrated Offender Management pilot project is due to commence later this year. The programme targets those offenders with extensive offending histories, who are most likely to reoffend and that are likely to cause most harm. Prior to release, and then when on probation, offenders will engage with a multi-disciplinary team through a single point of contact. This brings information together making it easier for offenders to access information. It may also assist with commitment as clearly identified and established personal relationships make commitment more likely. From a delivery perspective an integrated model brings shared information and action focus together, which helps prioritise and deliver services. The project involves the Probation Service, An Garda Síochána, Irish Prison Service, Local Authorities, HSE/addiction services, the Department of Social Protection, and the community and voluntary sectors.

Timing is an important aspect to behavioural economics as people are most receptive to behavioural influences at particular points of time. Given that reoffending is most likely at an early stage of community sanction or shortly after release from prison, a focus on these crucial times reduces the risk of reoffending and is a targeted, effective use of resources.

Another aspect of the pilot that can be viewed as a behavioural economics device is the 'swift action' that will follow after a re-offence. Since offenders may underweight the future

²⁰ SME Survey (2013), Revenue: <http://www.revenue.ie/en/about/publications/business-survey-2013.pdf>

consequences of present action then by making consequences more immediate it will help overcome this form of present bias.

4.5 Debt Management Project and Alternative Delivery Models

The Department of Public Expenditure and Reform has completed a review of the debts owed to five public service bodies: Department of Agriculture, Food and the Marine; Department of Social Protection; the Health Service Executive (HSE); the Courts Service; and Local Government.

Ninety-eight percent of debts to these organisations fall into the following categories:

- the €100 accident and emergency charge in hospitals,
- €75 in-patient charge in public hospitals;
- overpayments of welfare and recovery of fraudulent welfare claims in the Department of Social Protection;
- overpayments of the single farm payments and Rural Environment Protection Scheme (REPS) payments in the Department of Agriculture, Food & the Marine;
- criminal fines in the Courts Service; and
- commercial rates, social housing loans and social housing rents in the Local Government sector.

For the debts listed above, excluding the Local Government Sector, approximately €56 million is uncollected annually. Uncollected debt to Local Government in commercial rates and social housing loans and rents had accumulated arrears of €407 million at the end of 2011.

The processes involved in recovering debt can range from issuing reminders (by phone, email, letter, visit etc.) to entering into debt repayment agreements to issuing legal proceedings and enforcing judgement against bad debts. As demonstrated by the examples from the Revenue Commissioners above, variations in the nature and tone of communications can have significant impacts on yields. Many behavioural insights could be drawn on in the development of debt payment agreement such as commitment devices, norms, and defaults. Legal proceedings are a very expensive method of debt collection and may result in collections that take place over long time horizons. Improving yields from communication methods and from agreements will be more cost-effective.

Making it easier to pay by using clear steps and language; using personal language and reminding people about norms helps increase revenue collection. Rewarding desired behaviour can also be used to improve compliance, for example a number of London Boroughs held prize draws to encourage people to pay by Direct Debit.²¹ Reminder text messages for fines owed to the Court Service in the UK sent 10 days before bailiffs intervene have doubled the value of payments made before further intervention is required.²²

Employing Alternative Delivery Models (ADM) is among the major priorities in the Public Service Reform Plan. The commitments set out under the Public Service Reform Plan have parallels with behavioural economic considerations: the focus on outcomes and impacts; alternative channels for delivery such as joint ventures and social enterprises, and ensuring service-user involvement.

4.6 Potential application of behavioural insights

The table below sets out potential applications of behavioural insights across a number of sectors.

Table 2 Selection of potential applications of behavioural economics across a number of sectors

<i>Social Protection</i>	<p>Intreo Centres, the new service from the Department of Social Protection that provide a single point of contact for all employment and income supports, helps jobseekers access information. Using social media may help jobseekers access information easily and quickly also, and may be particularly effective to target young people.</p> <p>Personalisation of communication, for example through personalised notes on letters, improves response rates.</p> <p>Asking respondents to sign at the top of forms instead of the bottom has been shown to elicit more honest responses.²³</p>
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²¹ Behavioural Insights Team/Cabinet Office (2012) *Applying Behavioural Insights to Reduce Fraud, Error, and Debt*

²² Behavioural Insights Team (2014) *EAST: Four simple ways to apply behavioural insights* p6

²³ Behavioural Insights Team/Cabinet Office (2012) op.cit., p14

Health

Commitment devices could be used to help overcome people's natural 'present bias' that makes it harder to lose weight, stop smoking or get fit. Examples of commitment devices include participants losing cash deposits if they do not meet weight loss targets or fail smoking tests.

Attendance at screening appointments can be improved through lotteries or similar incentives. Conversely, people could be billed for non-attendance without cancellation.

Education

School attendance, completion of second level, or progression to third level could all be improved through behavioural insights. Behavioural economics has shown that people significantly undervalue future impacts and that what other people do influences our choices. This undervaluing is even more pronounced in teenagers. Examples from the US show that simple text message reminders help college students apply for courses or complete assignments on time, similar methods could be used in Ireland to target at risk students.

Classes and schools compete for the "Green Boot" as part of the Green Schools Travel Programme to encourage a shift away from car transport. Similar competitions within and across schools could encourage other desired social outcomes.

Justice

Text message reminders can improve attendance rates for meetings and Court appearances.

Altering contracts that offenders sign with the Probation Service may help getting greater commitments.

Improving the collection of payments

Making it easier to pay, for example through deductions at source or setting up Direct Debits, using personal language, and reminding people about norms help increase collection rates of payments to the State.

In the UK, local authorities in London pooled resources to set up a prize to get people to encourage people to sign up to Direct Debit.

Other Civil Service Departments

Any communication between the State and citizens/organisations should be easy to understand.

State bodies should take into account the power that default settings can have on desired outcomes.

When implementing new payment schemes, loss aversion can make it very difficult to change schemes after implementation. Setting up-front sunset clauses signals to people that schemes will not be permanent.

5 Embedding Behavioural Economics in Irish Policy Making

This paper proposes that behavioural considerations should be included in policy design and delivery to improve effectiveness and to provide low-cost ways of enhancing existing policies.

Having examined the approach in the UK, which is recognised internationally as having established a track record in this area, it is clear that incorporating behavioural concerns in policy begins by identifying the types of behavioural influences and biases that may impact on the desired outcome of a policy. This leads onto an examination of ways to overcome the biases and behavioural influences, and then the use of a pilot approach to test the efficacy of different responses to behavioural biases.²⁴ The UK Government’s Behavioural Insights Team developed the following EAST analytical framework for adapting behavioural techniques to public policy.

Table 3 UK EAST Model

<i>Easy</i>	Use defaults	Defaults acts as signals that something is the recommended or most popular behaviour.
	Make it easy to adopt	Simplifying processes increases uptake and compliance.
	Give simple messages	Clarity also increase uptake and compliance.
<i>Attractive</i>	Attract attention	More likely to do something when it attracts attention.
	Incentives	Rewards and sanctions should be designed to take account of behavioural impacts.
<i>Social</i>	Show that the desired behaviour is the norm	Illustrating that most people behave in the desired way encourages better outcomes.

²⁴ Behavioural Insights Team (2014) *EAST: Four simple ways to apply behavioural insights*

	Use networks	Involving people and encouraging mutual support helps in reaching better outcomes.
	Encourage commitment	Commitment devices such as social contracts can help people maintain desired behaviours.
<i>Timely</i>	Encourage behaviour change when people are most receptive	Good habits are easily formed at the beginning of new phases in life.
	Consider the immediate costs and benefits	How can immediate costs and benefits be captured.
	Help people plan responses	Help people to identify the barriers to change.

SOURCE: ADAPTED FROM BEHAVIOURAL INSIGHTS TEAM (2014) EAST: FOUR SIMPLE WAYS TO APPLY BEHAVIOURAL INSIGHTS

Behavioural economics can contribute to targeting policies and services more efficiently and effectively. Much of public policy today is about incremental improvements to existing policies; there are few, if any, easy policy targets. Many behavioural insights and applications can be described as 'common sense'²⁵, but this does not always mean that such insights are taken into account or that sufficient thought is given to unintended outcomes. Using a framework and empirical methodologies to inform policymakers' beliefs on behaviour ensures some consistency in approach, and clarifies the scale and scope of changes, if any, that should be employed.

It is a truism to say that making a government website easier to use will help people comply with a particular regulation or tax. However, what elements of a website make it easier to use? What sort of language is most effective? By making it easier to comply could there be adverse consequences that counter the purpose of the regulation? In implementing policies, behavioural economics can also play a role in identifying potential adverse, or unforeseen, consequences. Of course policymakers will need to know what to test.

It is already a requirement of the Public Spending Code that pilots of new current expenditure proposals are conducted before full implementation. Draft guidelines on conducting pilots and

²⁵ Babcock, L., Congdon, W.J., Katz, L.F., and Mullainathan, S. (2010) 'Notes on Behavioural Economics and Labor Market Policy' p2

trials are currently being developed as part of the Public Spending Code, and there will be formal consultation on these guidelines before they are finalised. One of the principles of the new guidelines will be that there should be a proper evaluation of the pilot and that it is not simply a precursor to full-scale rollout. Greater discussion and detail on the use of randomised control trials will be contained in the guidelines, including discussion of various biases including selection, publication and information biases.

6 Conclusions

The focus of behavioural economics is on people's actions that consistently deviate from standard economic theory. Behavioural influences and biases suggest factors why policy outcomes are not optimal and, through the testing of applications of behavioural insights, can identify ways to modify interventions to enhance their impact. Biases stem from our intuitive processes resulting in systematic errors in decision making. Marketing and brand executives have exploited the concepts of behavioural biases for decades. By recognising how behavioural biases impede policy outcomes policymakers can identify ways to overcome behavioural barriers. Applying behavioural economic frameworks and tools to policies and government services helps the State know and understand its 'customer' better. These are key elements of policy development and the Public Sector Reform Plan, and underpins the themes of the Comprehensive Review of Expenditure by providing opportunities to improve efficiencies, get better outcomes with limited resources, and improve compliance and revenue collection.

Nudges have been the most visible application of behavioural economics in policy development. They are just one element of behavioural economics that apply the findings observed in behavioural economics experiments by influencing choices through the design and delivery of policy, without constraining choice. Applications of behavioural economics through nudges tend to centre on simplicity, convenience and salience, which are important for all areas of policy development. However, there are times when more than a nudge is needed to elicit the desired behaviour.

Behavioural considerations can be incorporated into the process aspects of the State's interactions with citizens, businesses and organisations to help make compliance easier and by improving administrative practices. While the application of behavioural economics is not a panacea to public expenditure challenges nor necessarily a substantial source of cashable

savings, it does provide the potential to help the system manage demand pressures and increase throughput e.g. avoidance of drop out/cancelled appointments for social services. The implementation of Alternative Delivery Models as part of the Public Service Reform Plan may provide opportunities to use behavioural economic techniques. Conducting behavioural economic experiments may necessitate the use of additional expertise, particularly where behavioural impacts are not fully identified or discernible. Expertise in behavioural science and statistical analysis may be needed to identify behavioural considerations and to design and implement trials.

Complementing risk-based enforcement with behavioural considerations can help reduce non-compliance and also mitigate the impact of non-compliance. Improving compliance processes and outcomes reduces administration costs and can also increase revenue collection from administrative charges/appropriations-in-aid. Further, by reducing the likelihood and impact of non-compliance the State's exposure to costs resulting from regulatory failures is reduced.

Behavioural considerations should be explicitly included in policy design and delivery, through a 'behaviour check' framework and testing, to increase the effectiveness of a given policy and to provide low-cost ways to enhance existing policies and to increase efficiencies. Employing behavioural insights to policy and process can help contribute to public sector reform and the innovation of service delivery, improving efficiency, value for money, and resulting in better outcomes.

ⁱ Duke, C (August 2013) 'Using behavioural and experimental economics to understand consumer behaviour' Presentation to Copenhagen University Summer Course on Behavioural Economics londecon.co.uk
Walsh, K. (2012) 'Understanding Taxpayer Behaviour - New Opportunities for Tax Administration' in *The Economic and Social Review*, Vol. 43, No. 3, Autumn 2012, pp451-475
Lunn, P. (2012) 'Behavioural Economics and Policymaking: Learning from the Early Adopters' in *The Economic and Social Review* Vol. 42, No. 3, Autumn, 2012
Report to DG Health and Consumers (2010) 'Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective'
New Economics Foundation (2005) *Behavioural economics: seven principles for policy-makers*
Financial Conduct Authority (2013) Occasional Paper 'Applying behavioural economics at the Financial Conduct Authority'
Lunn, P. (2014) *Regulatory Policy and Behavioural Economics* OECD Publishing
Donal, P. et al, (2012) , 'Influencing behaviour: the Mindspace Way' in *Journal of Economic Psychology* 33 pp264-277
Government Social Research (2008) *Practical Guide: An Overview of Behaviour Change Models and their Uses*