Building our evidence base on effective interventions through trials

Field trials of interventions within HMRC

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In 2012-13, We collected taxes, national insurance contributions and duties of £475.6bn, while paying out the tax credits £43 billion in benefits and tax credits

We have six strategic objectives:

1. Maximise revenue to close the tax gap
2. Improve customer experience
3. Cost management and efficiency
4. People and leadership
5. Professionalism and integrity
6. High quality IT delivery
Analytical work in HMRC

• Around 300 analysts in the central directorate (Knowledge, Analysis & Intelligence) supporting the HMRC business delivering analysis, research and evaluation including supporting trials. Additionally we have some analysts embedded in the department.

• Behaviour Change Team focused on development of behavioural insight interventions and trials staffed by economists, researchers, policy and tax experts, and communication specialists.

• HMRC has strong links with the Behavioural Insight Team (led by David Halpern) and work jointly on a range of projects.
Our approach to trials and behavioural insight

• We have a wide range of ongoing discussions with the academic community working on tax – e.g. Tax Administration Research Centre (TARC). Also liaise with academics doing behavioural work outside the tax context.

• Continuously work to improve these links and host a monthly lecture series in the Department.

• Strong links with OECD and European revenue bodies; colleagues working on intervention design and evaluation as well as their academic partners.
Our approach to trials and behavioural insight

• Focused on delivering outcomes and solving business problems (e.g. compliance, costs to us or customers) using behavioural insights and trials to find what works.

• We do not trial interventions solely to test insights in themselves or confirm validity of lab experiments.

• Considerable operational challenges in delivering field trials.

• Use a wide range of evaluation techniques, not just experimental designs, and evaluate most of our major operational changes.
### Examples of cross cutting behavioural insights for tax compliance:

<table>
<thead>
<tr>
<th><strong>Fairness / agency</strong></th>
<th><strong>Data use</strong></th>
<th><strong>Deterrence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural &amp; administrative fairness (e.g. Gangl et al 2013)</td>
<td>Risking behaviour</td>
<td>Perceived probability of intervention, effectiveness and sanction</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>Third party data use (e.g. Kleven et al 2011)</td>
<td>Loss aversion and reference points (e.g. Dhami et al 2010)</td>
</tr>
<tr>
<td>Authority and reputation</td>
<td>Pre-population, defaults and commission of information</td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Prompt honesty at key moments</strong></th>
<th><strong>Making it easy</strong></th>
<th><strong>Norms / moral</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral reminders / prompts (e.g. Shu et al 2012)</td>
<td>(e.g. Thaler and Sunstein, 2008)</td>
<td>(e.g. Wenzel 2005, Blumenthal et al 2001)</td>
</tr>
<tr>
<td>Accountability threats / commission information</td>
<td>Well designed systems</td>
<td>Personal Norm, perceived social norms, national identity</td>
</tr>
<tr>
<td>Communication of penalties at point of decision</td>
<td>Expecting errors and prompting customers</td>
<td>Communicating influences behaviours</td>
</tr>
<tr>
<td></td>
<td>Providing certainty</td>
<td>Risk of crowding out</td>
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Audit, penalties and enforcement strategy and communications (e.g. Alm, 2012)
Avoidance Behaviour Change (2012)

We are committed to challenging aggressive tax avoidance, and we will do so through the courts where appropriate. If we do this then it will lead to years of uncertainty about your tax affairs, and mean considerable additional cost to you. We are already challenging similar schemes and we have a very successful track record in the courts with schemes of this type.

Your decision to use a scheme such as this means that we will treat you as a higher risk customer. Therefore we will monitor more closely your tax affairs in the future.

…….

Paying your taxes in full is the right thing to do. Not paying tax reduces our public finances. We all lose out on essential public services such as roads, the nhs and schools.

Enhancing honesty trial: Investigating the of use upfront honesty declarations in tax returns

Building on findings from Shu et al (including positive results in the insurance industry), we tested the idea:
- Place declaration close to high risk info
- Need for closure at the end of the return
- Use language that is simple and unambiguous
- Avoid knock on effects e.g. call centre scripts.

Outcomes:
- declared tax liability?
- the level of precision used?
- the number of sources of income declared?

Sample:
- ~70,000 paper SA customers (2012/13 return)
- Unrepresented customers with self-employment income (SA103S)
- Treatment group: randomly selected, 10% of population.

This is one possible lever within a declaration - many other possibilities.
High-volume interventions: industrialised approach to understanding impacts

In an initial trial starting in 2011 a range of different messages were tested in letters sent to 140,000 taxpayers with overdue payments. Residents received either a control letter or one of a number of different social norm messages.

**Trial 1: Using social norms to increase tax debt payments**

<table>
<thead>
<tr>
<th>Control group</th>
<th>Social norm nationally (Insight 5)</th>
<th>Social norm in your postcode (Insights 5 and 3)</th>
<th>Social norm in your town (Insights 5 and 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67.5%</td>
<td>72.5%</td>
<td>79.0%</td>
<td>83.0%</td>
</tr>
</tbody>
</table>

HMRC one-to-many campaigns have **raised £850m in additional tax revenues** as taxpayers put right their own affairs.

**Future**: large numbers of small focused campaigns

**Source**: Applying behavioural insights to reduce fraud, error and debt; Cabinet Office
Randomisation in evaluations of compliance operations

Random Enquiry Programmes: each year we select a few thousand cases for enquiries randomly across the main tax regimes.

Single Compliance Process: this is our framework for deciding whether an small and medium enterprise (SME) business compliance enquiry should be by correspondence (desk-based) or include a visit to the business premises.

Business Record Checks: a light-touch face-to-face intervention to improve the record keeping of SMEs.

Evasion Publicity: campaign to help reduce tax evasion, reassure the compliant that HMRC is acting against the non-compliant and ultimately to increase voluntary compliance among the non-compliant.

Increasingly HMRC’s operational compliance teams are willing to test their new interventions using evaluations with some element of randomisation.
Online / digital services – a simple trial using emails to businesses

• HMRC’s support for small and medium sized enterprises is now primarily digital – web guidance, YouTube, e-learning, etc. HMRC use outbound emails to drive uptake of these services.

• HMRC theory of change is that use of support is positively related to compliance and customer experience

• We trialled different versions of emails (with some including non-tax support links). We tracked the popularity of each link in emails and also the activity of each recipient.

<table>
<thead>
<tr>
<th>#</th>
<th>Recipients</th>
<th>Total sample</th>
<th>Variants</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Newly VAT registered</td>
<td>15k (original) / 17k (repeat)</td>
<td>6</td>
<td>Aug / Sept 2013</td>
</tr>
<tr>
<td>2</td>
<td>Newly VAT registered</td>
<td>14k</td>
<td>6</td>
<td>Sept 2013</td>
</tr>
<tr>
<td>3</td>
<td>Employer for &gt;1 year</td>
<td>30k</td>
<td>7</td>
<td>Sept 2013</td>
</tr>
</tbody>
</table>
Example - Simplification of the control email to increase salience:

Hello Subscriber,

Self-service tax advice on VAT

This is the first in a series of emails you will receive now you have registered with HMRC for VAT.

We offer several ways of making tax easier to tackle quickly, online and on time.

It is worth checking now to make sure you have completed everything you need. Avoid some of the common pitfalls we see from customers and concentrate instead on the growth of your business.

Join in a couple of webinars (online seminars), such as our “VAT now you are registered” webinar. Find out how to access them at [HM Revenue & Customs: Value Added Tax (VAT) webinars](#).

Or see our one minute YouTube video ‘What is VAT’.

You will also find more help about VAT for businesses and what records you need to keep for VAT on the GOV.UK website. See: [Businesses and charging VAT - GOV.UK](#) and [VAT record keeping - GOV.UK](#).

As your business grows you will be able to see ‘at a glance’ what your tax position is. Our online service - Business Tax Dashboard can help you to do this.

Once you have set up a dashboard it will give you an overview of your tax position, including any payments you have made and amounts you owe. You can also use this online service to make changes to your business contact details.

To find out more about what the Business Tax Dashboard can do for you, use this link: [Setting up and using a Business Tax Dashboard](#).

Colin Ford
Head of SME Education
Trial results - very successful in increasing response to offers of support in emails

[Graph showing the number of clicks as a percentage of viewed emails for Employer trial and VAT trial, comparing simplified and original versions.]
Interesting results: In VAT trial, the growth scheme social norm message didn’t have a significant effect.

The variable applicability of behavioural insights in different contexts is not a cause of concern for us – underlines the importance of test and learn.

**Reminder** - norm messages in letters brought forward around **£210m of debt payments** to HMRC in 2012-13.
Interesting results: A financial benefit message had the strongest effect for promoting a growth scheme for employers.

![Graph showing number of clicks as a percentage of viewed emails for Youth Contract with different strategies: Social norm, Financial lever, Social Norm + financial lever. The Financial lever strategy has the highest percentage of clicks.]
New online / digital services – opportunities?

• Key area of development to make things easier for citizens (link with procedural and administrative fairness)

• Opens up potential behavioural levers to address the big tax compliance challenges – e.g. software/data/portal fixes for long time between when income received and reported

• Closer integration of lab experiment design and ‘real world’ design of services/trials?

Most importantly there is a huge range of applications of behavioural insight to be considered for future trials…..
Example online government service (portal for declaring info) – one illustrative cut of example insights

1. Reporting and payment cycles

2. Prompting honesty in declarations

3. Agency and information

4. Outbound communications that work in digital

5. Making it easier for customers to interact with the tax system, avoid error and comply (fairness)
Summary

• Our focus:
  • Tax compliance but also work on other outcomes/issues (e.g. customer costs, staff engagement)
  • Outcomes and problems.
  • Distilling range of evidence/insights to solve specific problems.

• HMRC has had success using experimental approaches to deliver improved interventions including incorporating behavioural insights.

• The expansion of digital services is a natural opportunity for developing new insight led interventions and testing these within trials.
Final thoughts: working with the academic community

• Interchange with academia of ideas and approaches is vital to our work – within the study of tax and beyond.

• Setting up trials in tax services can be more challenging than it appears from the outside.

• Consideration of how and when we publish our results from our behavioural insight trials.

• Please let us know how you think we should develop our work and relationships with the academic community

Thank you for the opportunity today to discuss our work and some of the results.
References: Compliance Interventions

BBC; (2012) “Tax avoiders to get warning shot from HMRC”
http://www.bbc.co.uk/news/business-20466304

Behavioural Insights Team and Cabinet Office (2012) “Applying behavioural insights to reduce fraud, error and debt”, Cabinet Office

http://www.nber.org/papers/w20007

Hasseldine, John; Peggy A. Hite; Simon James; Marika Toumi; (2005) “Carrots, Sticks, Sole Proprietors, and Tax Accountants”, IRS Research Conference


HMRC Business Record Checks: http://www.hmrc.gov.uk/businessrecordscheck/


HMRC Tax Gap Methodology (for details of our Random Enquiry Programmes):
Selected bibliography for behavioural insights

• Alm, J. (2012) Measuring, explaining, and controlling tax evasion: lessons from theory, experiments, and field studies,
• Hasseldine et al (2005) Carrots, Sticks, Sole Proprietors and Tax Accountants
• Shu, Lisa L., Nina Mazar, Francesca Gino, Dan Ariely, and Max H. Bazerman (2012), Signing at the beginning makes ethics salient and decreases dishonest self-reports in comparison to signing at the end, Proceedings of the National Academy of Sciences, 109 (38), 15197-15200.
• Kurz, T., Thomas, W. and Fonseca, M.A. (forthcoming) study of compensatory vs. retributive frames, and private vs. public context to the use of fines)