# Chapter 10

## Insights from innovations in tax debt management

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Tax administrations focus on achieving a high level of tax compliance on the premise that prevention is better than cure. This is especially the case when it comes to tax debt and the minimisation of arrears and write-offs. Traditionally debt management has focussed on approaches that produce better debt recovery performance. *Increasingly tax administrations are investing in research to enable them to develop* policy approaches that help avoid tax debt being incurred in the first place or avoid tax debt increasing through supportive interactions with taxpayers.

This chapter provides an overview of some of the innovative approaches and strategies of tax administrations in this regard where the common theme has been around tailoring interventions more closely to the specific circumstances of the taxpayer.

#### Innovation in tax debt management

In the past innovation has in the main focused on better ways to collect tax debt once incurred, for example by sequestering bank accounts, increasing penalties or court processes and insolvency proceedings. With advances in technology and the range of "data tools" now at the disposal of tax administrations, there is an increasing trend towards the development of policy or administrative approaches that help to avoid tax debt being incurred, or enable more taxpayer specific interventions to be made when they do incur tax debt. These "tools" have led to a new wave of innovation, based around experimentation, segmentation and campaign approaches as administrations seek not only to collect what is outstanding but to change behaviours, including as regards future compliance.

In its publication on *Working Smarter in Tax Debt Management* (OECD, 2014) the OECD provided an overview of the modern tax debt collection function. This chapter will explore some recent examples of innovation in debt management using the major themes set out in that publication.

## Use of advanced data analysis in tax debt management

Risk in the context of debt management is generally defined as the "exposure to non-payment". While debt risk analysis in many administrations is still under development, many countries are now able to point to evidence and research to highlight its effectiveness.

Within debt management analytical techniques are increasingly being used to enable the streamlining of operational processes and improvements in compliance, including through innovative campaigns. Predictive modelling uses a wide range of techniques which, through a process of pattern "fitting" and systematic trial-and-error, aim to discover regularities in historical data. In the debt management context, traditional modelling and experimentation was focussed towards identification of high risk debt cases. However, substantial gains have been made in the use of predictive modelling to identify those who are most likely to respond to an intervention. Oftentimes there is overlap between these two groups, but the differences have given tax administrations a better understanding of taxpayer behaviours, highlighting cases where traditional intervention is not likely to yield results and identifying new more productive approaches, including as regards early interventions. For example the Australian Tax Office (ATO) developed a predictive model which led to a range of interventions, including the use of SMS nudges. This has been highly successful in improving on time payments.

#### Box 10.1. **Debt risk modelling**

In *Australia* the ATO uses a payment compliance analytical model identifies when a client's bill is "unlikely to be paid"; an SMS may then be issued to nudge prompt payment. In 2015-16 this approach resulted in just under AUD 1 billion being paid on time by clients who had a previous pattern of not paying or paying late. For the ATO, risk-based analytical models are increasingly driving client interactions. The Next Best Action model, currently under development, will determine a customised treatment path that increases the likelihood of debt prevention/resolution. Purposeful First Action, which has been implemented as the first component of this model, focuses on improving the timeliness and outcomes of our initial interactions with clients once they're in debt.

#### Box 10.1. **Debt risk modelling** (continued)

In Sweden the Swedish Tax Agency's involvement with risk modelling in debt commenced in 2007 when it used data mining combined with the insight of experienced tax collection area managers to build a risk model. This model, which was piloted before being rolled out in January 2010, is still the basis for its debt modelling work today. The system does not provide a risk-score for non-payment to the case handler, but does provide them with information on why the case assigned has been identified for action. Case handlers are encouraged to use their entire debt collection "toolbox" (from withdrawal of the certificate of tax compliance through to filing for bankruptcy). The predictive model uses the signal to identify work items for the case handler, who can make informed decisions on what measures to take. The model has been subject to on-going improvement. The latest enhancement will signal to staff whether there is a significant payment risk before an audit commences. These measures have helped Sweden maintain a very low payment loss rate – currently 0.22 % of the total tax debt.

Source: Australia – Australian Tax Office, Sweden – Swedish Tax Agency (2017).

#### Segmentation

As part of the increased use of data analytics, a number of tax administrations have experimented with "unsupervised segmentation". These techniques, which fall under the broad heading of "cluster analysis", seek to identify groups of taxpayers who are similar to each other in some significant respects, and dissimilar to the other groups identified. These projects have often provided interesting general insight into the taxpayer population, but have typically not shown a strong practical impact as the segments identified have not had obvious business applications.

An alternative approach, looks to group taxpayers based largely on their predicted response-to-intervention. If all taxpayers respond in the same way to a given intervention, then there is little practical value in segmentation; where there are large and consistent differences in response-to-intervention, then segmentation is worthwhile, and should follow the observed differences in response. This approach is likely to create multiple segmentations – ultimately, each type of intervention may require a different segmentation of the taxpayer base. A further alternative approach taken by the ATO which has segmented taxpavers into two categories: propensity to pay and capacity to pay.

#### Box 10.2. **Segmentation**

In *Ireland* between 2006 and 2009, the tax debt available for collection rose by 82% due to the economic downturn; in 2006, debt available for collection in Ireland amounted to EUR 792 million rising to EUR 1 443 million in 2009. To prevent further escalation of the debt, the Irish Office of the Revenue Commissioners ("Revenue") established a risk model where customers were segmented into one of five tiers based on the risk exposure to Revenue. The tiers were based on liabilities of the tax returns filed with a threshold level for each tier with the highest potential liability segmented to tier 1 with the lowest to tier 5. This provided for the identification of high risk customers and the establishment of a more focussed approach towards customers. Also, Revenue invested heavily in new information technology infrastructure called "Arrears Case Analysis Tool" to examine and prioritise debt available for

#### Box 10.2. **Segmentation** (continued)

collection primarily by reference to case size age of debt collection stage and risk rating. This segmentation of cases and use of data analytics attributed to a significant reduction of the debt available for collection. Between 2009 and 2015, the debt available for collection fell by 43%.

In late 2016, the authority is revising their segmentation process for debt management by categorising the customers by "Value to Revenue" (VTR). A VTR, assigned to each customer, is calculated by using a range of data sets (returns, estimates, payments etc.) over the previous 2 to 4 years to produce an annualised value of the customers' liability to Revenue. This annualised value is segmented into VTR thresholds values.

Source: Ireland - Office of the Revenue Commissioners (2017).

## Behavioural approaches

Innovative behavioural approaches building on a better understanding the behaviour of tax payers who default and use that understanding to build appropriate interventions, which may be multi-faceted even in the case of a single taxpayer. Education and communication are cited most commonly in respect of strategies for influencing behaviour, however other approaches focussed around building trust and positive perceptions of tax administrations are also considered strong influencers.

The Belgian tax administration has recently conducted field experiments with randomised controlled trials to test different methods of lifting tax compliance. The project was run in consultation with the Oxford University and London School of Economics in the United Kingdom. A large trial with a population of 250 000 debt cases was used involving nine different types of letters. The control group received a simplified standard letter while the other eight groups received the same letter with different additional phrases giving a specific nudge, including: an explicit penalty message and a public good message aimed at raising the "moral costs" of non-compliance. All the letters were structured to communicate simply, with a clear and strict tone, but in a way which supported positive behaviours.

Strong results were achieved with an average increase of 18.2% in payments within 14 days. It was found that the most effective letter in this experiment was the one that used an explicit penalty nudge. This letter realised an increase of 21%. Overall the project concluded that behavioural nudging works well in raising tax compliance, and is very effective in achieving more timely payments.

## Campaign based activities

## **Outbound calling**

In the private sector innovations focussed towards changing behaviours have been targeted through established and dedicated call centres. This has led many countries to establish similar centres for tax collection activities, with calling campaigns featuring in the core operations of many tax debt management areas. For instance, Sweden uses outbound calls to target new "high risk debtors"; this approach has resulted in more than 80% of debtor's contacted making payment. In New Zealand, early interventions by

outbound call centre agents had resulted in an increase in immediate payments and timeto-pay arrangements, resulting in earlier collection of tax debts.

#### Box 10.3. Outbound call campaign

In *Canada* the Canada Revenue Agency (CRA) runs a focussed outbound calling campaign which includes use of its debt call centre and automated dialling. Its annual campaign is run in October each year, with bi-annual campaigns also run in May and November. The focus of these campaigns is those individuals on instalment payment programmes who were charged interest in the last year and have also missed an instalment payment in the current year. Individuals for the campaign are selected by a data mining tool, which assigns a score of 0 to 100 predicting the likeliness of the taxpayer making a payment. Those with a score of 10 to 80 (individuals most likely to respond to a nudge) are likely to get a call.

Over the last few years, results of these campaigns have shown that taxpayers contacted (otherwise expected to be non-compliant) made instalment payments for a value of CAD 80-112 million. Compared to control groups, a higher percentage of taxpayers paid their taxes during the taxation year when they were called by the CRA. The campaigns also showed positive results but sensitivity regarding the timing of campaigns was identified. It was noted that in the May campaign, more payments were received than the November campaign. This was mainly attributed to the fact that by November, taxpayers focus is mainly on outstanding balances rather than current liabilities. Another factor acknowledged is the closeness of the May campaign to the holiday season.

In the *United Kingdom*, staff dealing with phone calls have direct access to real-time queue and service level statistics. This helps them identify quieter times when it would be best to carry out tasks other than handling calls (e.g. improvement and training activities). The central resource and workflow team also monitor real-time statistics to respond to the busier periods by employing call routing to bring in more people to meet demand so Her Majesty's Revenue and Customs (HMRC) can provide the best customer service. Every call outcome is recorded and classified allowing managers to discuss resolution rates, the quality achieved, and the outcome of the call. A range of call and outcome information is displayed on each team's performance board for discussion. Staff are empowered, and take satisfaction, in carrying out continuous improvement activity, aiming to resolve a case at the first point of contact but also educate and support customers to be compliant and willing to engage with HMRC in the future.

Source: Canada - Canada Revenue Agency; United Kingdom - HM Revenue and Customs (2017).

#### Non-filers and outbound calls

In 2015, Tax Norway carried out a phone campaign aimed at increasing filing. It was organised as a randomised controlled trial among entities which were around three months late in submitting their return and which had already received a reminder letter. The primary finding was that personal phone calls influenced many non-filers to file. Calls to selfemployed taxpayers resulted in 9% submitting outstanding returns, with 6% of corporations also filing after receipt of the call. There were also very useful supplementary findings as to the reasons why taxpayers had failed to file, as illustrated in Figures 10.1 and 10.2. The findings confirm that a one-size-fits-all compliance strategy is very unlikely to be the best use of resources. For example, taxpayers reporting that they did not think they needed to file as a reason for non-compliance will be unresponsive to any type of compliance campaign.

Figure 10.1. Phone campaign results – self employed, Norway

Self-employed: Why have I not yet filed?

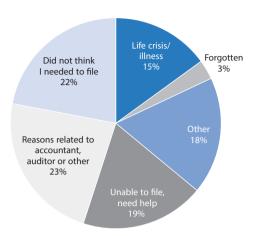
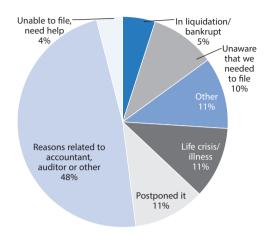


Figure 10.2. Phone campaign results – limited companies, Norway

Limited companies: Why have we not yet filed?



StatLink and http://dx.doi.org/10.1787/888933546887

StatLink | http://dx.doi.org/10.1787/888933546906

Source: Norway - Norwegian Tax Administration (2017). Source: Norway - Norwegian Tax Administration (2017).

## Reminder calling

Results from a phone campaign conducted by the Federal Public Service in Belgium in 2016 also indicated that phone reminders do influence taxpayers to pay sooner. This campaign was designed specifically to: improve taxpayer's compliance both for current and future debts by influencing their payment behaviour; quickly recover the unpaid taxes; and increase tax recovery with restricted staff resources. Specifically it was found that while the payments made after a phone reminder would on average have been paid anyway, this would have occurred only following other actions which would incur costs. The added value of the service, comparing the proportion of the debts paid with intervention, to the proportion of the debts paid for a control group, was recorded at EUR 23 million corporate income tax and EUR 13 million in value added tax.

#### Next steps

Effectively managing the collection of tax debt is one of the major tasks undertaken by administrations. Since the publication of the report Working Smarter in Tax Debt Management (OECD, 2014) many tax administrations have begun using advanced analytics, tailoring treatment strategies for prevention and enforcement, using outbound calling to support debt collection and prevention campaigns, examining their organisational and operational models, and working together to address debtors resident in other jurisdictions.

The range of performances described in the Collections part of Chapter 6 clearly illustrate that there is a lot more administrations can learn by continuing to share their experiences and practices. There are also tangible gains to be made as well through increasing the co-operation between administrations to use tax treaty powers or other agreements between countries to work together in the collection of "cross border debt."

With total debt levels still approximating EUR 1.8 trillion (see Figure 2.1) administrations will need to continue to search for innovative approaches using risk management techniques to prevent debt arising and to collect tax arrears for efficiently.

# References

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#### From:

# **Tax Administration 2017**

Comparative Information on OECD and Other Advanced and Emerging Economies

## Access the complete publication at:

https://doi.org/10.1787/tax\_admin-2017-en

## Please cite this chapter as:

OECD (2017), "Insights from innovations in tax debt management", in *Tax Administration 2017: Comparative Information on OECD and Other Advanced and Emerging Economies*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/tax\_admin-2017-15-en

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