

# Scaling up the case study method

N=1 done many times

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## **Overview**

- Context
- Key features of the case study method
- How the case study method is used in the ATO
  - Why was the case study method used over other methods
  - How we adjusted/departed from the 'traditional' case study method
  - Broad outline of process
- Challenges and lessons learnt

Context



## **Context**

#### **Total Revenue Effects**

is a measure of the tax revenues collected as a direct result of ATO compliance strategies, including preventative compliance strategies, that aim to positively change the compliance behaviour of taxpayers, address non-compliance and disrupt or prevent evasion and fraud activities.

- We only estimate revenue effects where it is relevant and reasonable to do so
- TRE Principles explain the tenets for estimating TRE in a way that produces credible and evidence-based results
- There must be:
  - a reasonable explanation of how the action would lead to revenue effects
  - a mechanism for the action to change taxpayer behaviour
  - any potential revenue effects would be exclusively or almost exclusively attributable to the ATO action
- High evidentiary standard
  - Report to government

## **Context**

#### **Variety of interventions**

- Pre-lodgment engagements
- Audits and reviews
- Leveraged interventions
- Prompt/response (e.g. reminder SMS; nudge letters; etc)
- Public advice

#### Are we able to measure it?

The selection of measurement methods must take into account the:

- Nature of the intervention
- Data available for estimation
- Capability and availability of the estimator/analyst
- Availability of technologies
- Timeliness and cost-effectiveness
- Comprehensiveness (e.g. rich in detail or aggregated results)

## **Context**

### Different ways we measure revenue effects

- Case-study method
- Quasi experimental
  - Difference-in-difference models (some with synthetic controls)
  - Regression discontinuity design
  - Propensity score matching
- Bespoke methods (e.g. data modelling)

#### **Method Statement**

- Outlines the rationale for selecting this specific method
- Explains how the method (as implemented) satisfies the TRE Principles
- Describes the steps for estimating TRE
   (e.g. how the treated population is identified; how the counterfactual is constructed; how the treatment effects are calculated; etc)
- Describes the limitations of the method as implemented (e.g. ignores franking credits)

# Key features of the case study method



## Key features of the case study method

#### What is the case study method?

Assess results through in-depth coverage of single case/project

#### When is the case study method 'normally' used?

- Comprehensive or detailed observations, and examination of information
  - This requirement would likely make any large sample prohibitively expensive
  - Requires that the studied cases are a representative of the cases not studied
- · A critical case is dominant in some key characteristic such as a specific project received the majority of funding
- Identify why things happen as they did such as, some important factor was overlooked

How the case study method is used in the ATO



### Why was the case study method used over other methods

- Nature/purpose of intervention
  - Early engagements (i.e. pre-lodgment) to prevent non-compliance
  - Corrective engagements to correct non-compliance and <u>encourage</u> sustained compliance
- Unique population large, complex or high risk taxpayers
  - No comparison or control group possible
  - Relatively small population
- Data available for ex ante estimation (i.e. forecasting)
  - In essence, we ask the taxpayer for the counterfactual
- Comprehensiveness (e.g. rich in detail)
- Existing models at the time were inappropriate
  - No comparative control groups could be established
  - The data is unstructured (requiring qualitative analysis)
- Our largest taxpayers require higher confidence (due to additional scrutiny)
  - We need to know whether a specific taxpayer did or didn't produce a revenue effect,
     (quasi-experimental models 'average out' specific details)
  - The estimate of the effect size is more precise <u>and</u> accurate

## How we adjusted/departed from the 'traditional' case study method

#### In essence:

- The field officers write up the 'case study'
- The format of the 'case study' is standardised
- The scope of the 'case study' is limited to the measurement of a specific instance of an effect/impact
- The 'case study' is ex-ante
- An independent person assesses the 'case study'
- The 'case study' is updated based on observed behaviour
- The 'case study' provides useful real time information whilst the 'case study' is in progress
  - i.e. we don't have to wait until all the flow-on benefits have materialised to report it

OFFICIAL / EXTERNAL

## **Broad outline of process**

The case officers believes the taxpayer will be compliant in the future (i.e. sustained compliance)

The officer fills in a 'case study' template that requires them to:

- Describe the counterfactual, with supporting evidence
- Provide evidence that it was their actions that will cause the change in behaviour
- Estimate the duration of the effect (i.e. how many years into the future)
- Estimate the size of the effect (i.e. forecast the future revenue effect) for each year, where possible

Support is provided to help the officer build their 'argument' for the revenue effect

- Self-service SharePoint with case studies, FAQ, Webinars and 'snippets'
- Network of revenue effects 'power users' in the first instance
- Validation team

#### An independent (validation) team:

- Validates the rationale for whether there is a revenue effect
- Validates the rationale for the attribution of the revenue effect to the intervention
- · Checks for any 'mathematical' errors in the estimation of the effect size
- Validates the rationale for the duration of the effect
- · High risk or precedential estimates are escalated for additional ratification

## **Broad outline of process (continue)**

We wait to observe the change in behaviour (i.e. we wait until the future return is lodged)

- The validation team checks for all outstanding TRE estimates/lodgments
- The validation team reminds officers to do the follow-up confirmation

When the (future) return is lodged then the

- · Case officer confirms the compliant behaviour and adjusts the estimate based on the actual behaviour
- Confirmation and adjustments are independently assured by the verification team

Checking for lodgment and confirmation is repeated for the duration of the effect (i.e. multiple years into the future)

Only 'Collected' revenue effects are reported publicly and to the government.

- · 'Collected' revenue effects are effects that have been confirmed (i.e. based on actual behaviour post intervention)
- Forecasted revenue effects are only used internally

| INCOME TAX CORRECTION REVENUE EFFECTS   |   |   |  |                           |      |
|---|---|---|--|---------------------------|------|
| Reporting your correction activities  |   |   |  |                           |      |
| Has a lodged income tax return been corrected due to our activities?  |   |   |  | ☑ Yes □ No                |      |
| Will this lead to additional tax collected (audit yield) or reduced tax losses (notional tax)?  |   |   |  | ☐ Yes ☐ No                |      |
| Is the correction likely to have future year revenue effects?   |   |   |  | ✓ Yes □ No                |      |
| Do these revenue effects relate to a one-to-many strategy?  |   |   |  | ☐ Yes ☑ No                |      |
| If you have a large or complex case outcome or settlement please contact PGlestimatedrevenueeffect@ato.gov.au and we will help you to complete this quest   |   |   |  |                           | 1.   |
| Note: Please enter monetary figures manually, DO NOT copy and paste.  |   |   |  |                           |      |
| INCOME TAX YEAR   | INCOME TAX YEAR FUTURE TAX VALUE ACCOUNT RELATED TO? IS THIS VA |   |  | LUE AN ESTIMATE OR ACTUAL |      |
| 2015-16   | 1000  | ` |  | Add Cand                  | el . |
| Detail how any future year revenue effects have been estimated. You must include the value of underlying transactions and any formulae used.  |   |   |  |                           |      |
| Note: You can attach a document with your workings or a more detailed explanation at the bottom of this form.  Is the taxpayer likely to lodge an objection to the assessment issued?  Will this activity lead to other additional taxes being collected or assured (PRRT, FBT etc.)? |   |   |  | Yes No Unsure             |      |
| INCOME TAX PREVENTION REVENUE EFFECTS   |   |   |  |                           |      |
| Reporting your prevention activities  |   |   |  |                           |      |
| Did we prevent the taxpayer from reporting incorrectly due to a pre-lodgment intervention?  |   |   |  | ☑ Yes □ No                |      |
| Do these revenue effects relate to a one-to-many strategy?  |   |   |  | ☑ Yes □ No                |      |
| If you have a large or complex case outcome or settlement please contact PGlestimatedrevenueeffect@ato.gov.au and we will help you to complete this question.   |   |   |  |                           |      |
| Detail supporting evidence that confirms the taxpayer's position changed due to this intervention.  |   |   |  |                           |      |
| 3   |   | - |  |                           |      |

## **Lessons learnt**



## **Lessons learnt**

#### Staff resistance - more 'paperwork'

- · The focus of the additional 'paper work' is in establishing causality and quantifying the impact
  - Different information than what is in a 'position paper'

#### Staff resistance - is the effort worth it?

- High evidentiary bar
- Follow-up verification post intervention
- Places the 'measurement' burden on to frontline staff
- Cultural change audit yield has traditionally been their focus

#### **Evolution of the measure**

- New precedence (e.g. longer duration; reduction in tax shields; different taxes; etc)
  - Requires a process to resolve these issues
- Systems and guidance needs to keep pace

#### Constant reinforcement required (via training and support)

- Different program requirements confuses officers
- Staff turnover

## **Lessons learnt**

#### Be practical

- No need to confirm small amounts
- Try to 'automate' as much as possible (e.g. checking for lodgment, etc)

#### Start the conversation from 'medium' confidence

- The estimate will sit on a spectrum low confidence to high confidence
  - TRE requires high confidence
- The estimate of the revenue impact can be useful information even if you don't have high confidence

#### Not all benefits relate to revenue

- Cost savings improved efficiency reduced cost of administration
- Reduced cost of compliance for the taxpayer
- Non-financial benefits improved relationship, etc

## **Questions?**

