This paper contains advice that has been prepared by the Tax Working Group Secretariat for consideration by the Tax Working Group.

The advice represents the preliminary views of the Secretariat and does not necessarily represent the views of the Group or the Government.
POLICY AND STRATEGY

Tax policy report: Estimating the underreporting of income in the self-employed sector

Date: 23 March 2018  Priority: Medium
Security level: In Confidence  Report no: IR2018/053

Action sought

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<td>Refer the report to the Minister of Finance and the Minister of Statistics.</td>
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Contact for telephone discussion (if required)

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<th>Name</th>
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<td>Keith Taylor</td>
<td>Manager, Policy and Strategy</td>
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23 March 2018

Minister of Revenue

Estimating the underreporting of income in the self-employed sector

Executive summary

1. As part of its transformation, Inland Revenue is organising its activities around customers and outcomes, rather than outputs, products and services. This will increase its focus on its customer segments (small business, families, individuals, and significant enterprises). This focus is grounded in Inland Revenue’s work to gain a better understanding of its customers—their environment, the drivers of their behaviour, including compliance, and their life events and needs. This wide-view approach to compliance builds on the ten-year strategy and work programme begun in 2010 to improve Inland Revenue’s ability to detect and address those taxpayers and businesses operating in the hidden economy.

2. As part of this work, Inland Revenue, in conjunction with Victoria University of Wellington have undertaken a study of the income underreporting by the self-employed. This paper informs you of the results of the study, and next steps.

3. The survey used in the research runs on a three yearly cycle, so the study analysed data from 2006/07, 2009/10 and 2012/13. Over this time period, the results of the analysis strongly suggest there was underreporting to Inland Revenue by the self-employed sector. The study estimated the self-employed sector on average underreported 20% of its income. This represents foregone revenue of around $850m per annum for those self-employed who are not incorporated (i.e., sole traders or those working through partnerships). This unincorporated group represents around 55% of the total self-employed income.

4. For those who are incorporated (i.e., working through companies or trusts) it is much more difficult to estimate the total level of underreporting due to the ability of those taxpayers to use tax-paid funds (such as loans or trust distributions) to support expenditure. These estimates also do not include any additional adjustments that may arise from goods and services tax or social policy obligations due to the underreporting.

5. Similar work has been undertaken globally although there is an important source of bias in international studies that the New Zealand research has been able to overcome. The international studies have estimated non-compliance by comparing the expenditures of households reported in
surveys with incomes reported in the same surveys. This is likely to be leading to an underestimate of underreporting in the international studies.

6. International studies which have estimated a level of underreporting by the self-employed have found a range of underreporting of 17-42%. The 20% result in the New Zealand research is at the lower end of that range. But to some extent this is comparing apples with oranges because our 20% result arises when we link survey expenditure with income actually reported to Inland Revenue rather than income declared in surveys. The authors of the survey find that if they compare survey expenditure with income reported in the survey, using the same methodology for New Zealand that has been used in other countries, the extent of the underreporting by the self-employed in New Zealand would be estimated at 12%. This suggests that New Zealand is relatively well placed relative to other countries. At the same time there is an important level of underreporting to address.

7. Inland Revenue commenced a ten-year strategy in 2010 for improving its ability to detect and address those taxpayers operating in the hidden economy. Additional funding was also received from the government in 2015 to help scale up and boost support for investigative activities in the hidden economy to maximise revenue recovery. Over that time Inland Revenue has achieved a rate of return of 5:1 each year since the programme’s inception. This work has included targeting specific industries, those outside the system as well as more general marketing and information programmes. This work may have significantly reduced the tax gap identified in the research.

8. Officials are continuing to work on other areas where we believe there is non-compliance and will report to you more fully on options to reduce non-compliance, including increased information reporting and potentially extending withholding taxes to cover the self-employed, in a separate report later in April 2018.

9. It is planned that Inland Revenue will release the findings of the research, in conjunction with Stats NZ and Victoria University of Wellington in the first week of April, 2018.

10. Officials believe that the release of this report could generate questions from the media directly to the tax working group, and therefore we recommend that the group also be briefed on the findings in the report prior to the release. The working group is also being briefed on the challenges the future of work provide us through more people moving to a self-employed environment more generally.

11. The Treasury has been consulted in the findings of the report.
**Recommended action**

We recommend you:

1. **Note** that Inland Revenue and Victoria University of Wellington have undertaken a study into the extent to which the self-employed sector is underreporting income.

**Noted**

2. **Note** that Inland Revenue and Victoria University of Wellington plan to release the study in the first week of April, 2018.

**Noted**

3. **Refer** a copy of this report to the Minister of Finance

**Referred**

4. **Refer** a copy of this report to the Minister of Statistics.

**Referred**

5. **Refer** a copy of the findings of the research to the tax working group

**Referred**

6. **Agree** to officials discussing the findings of the research with the tax working group

**Agreed**

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**Keith Taylor**  
Policy Manager  
Policy and Strategy

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**Hon Stuart Nash**  
Minister of Revenue  
/ /2018
Background

Background to Inland Revenue’s compliance work programme

12. The majority of New Zealand taxpayers pay the correct amount of tax. A minority seek to evade or avoid paying their fair share; some are non-compliant due to inadvertent error. The difference between the receipts Inland Revenue collects, and the amount of tax that should be collected if all taxpayers fully complied, is the ‘tax gap.’ In the majority, compliance is supported by third-party reporting (for example, from employers and banks) and the various withholding tax regimes within New Zealand, such as pay as you earn and resident withholding tax, and by making it easy to comply and hard not to which also reduces non-compliance due to error.

Compliance work programme to date

13. In 2010, Inland Revenue established a ten-year strategy for improving its ability to detect and address those taxpayers and businesses operating in the hidden economy. This work is showing a good return on investment through the programmes introduced. Since 2010 Inland Revenue has achieved a budgeted rate of return of 5:1 from the programmes. In 2015, Inland Revenue received additional funding to help scale-up and boost support for investigative activities in the hidden economy to maximise revenue recovery, this included programmes targeted at specific industries and those completely outside the tax system.

14. At this time, Inland Revenue also made a significant shift to becoming more customer-centric by introducing a new compliance model. The model guides Inland Revenue’s understanding of customers—their environment, the drivers of their behaviour, and their life events and needs—rather than focusing just on influencing their attitudes to compliance. The ability to positively influence customers’ personal and social norms and their trust in the revenue system is essential for achieving compliance. Inland Revenue continues to work to understand the drivers of customer behaviour, and the impacts of decisions on customers, through simple and complex research and evaluation.

15. Part of this shift has involved running targeted campaigns to improve compliance, grounded in the wide view to compliance Inland Revenue now has. The new analytics capabilities being developed as part of business transformation are aimed at generating improved compliance and additional payments. As Inland Revenue continues to implement its business transformation programme, it will continue to improve its ability to address compliance.

Future work on compliance and new research

16. As part of transformation, Inland Revenue is also beginning to organise its activities around customers and outcomes, rather than outputs, products and services. This focus on its customer segments will continue Inland Revenue’s work to gain a better understanding of its customers and this will help drive the compliance work going forward.
17. Over the last two years, Inland Revenue has been investigating options for reducing the compliance gap in one particular sector, self-employed workers. As part of this work, Inland Revenue engaged a fixed-term post-doctoral researcher who worked with Victoria University of Wellington on developing an evidence base of the non-compliance of the self-employed with a view to publishing the eventual results.

18. The research used a methodology which has been found to be informative for a number of other countries, such as the UK and the US. The key idea is to compare the incomes declared by the self-employed and by employees, who have similar levels of expenditure. Because of third party information reporting and withholding as well as the absence of personal deductions, employees typically have very little scope to underreport their incomes. If a self-employed person with a given level of expenditure is reporting much lower levels of income than an employee with the same level of expenditure, it is likely that this is because the self-employed person is underreporting their income. This is illustrated below in Figure 1. If there is a difference between the income and expenditure of the self-employed and employees, one can attempt to measure that difference and that should give an estimate of the underreporting of the self-employed.

![Figure 1](image.png)

**Fig.1** measuring a difference between the income and expenditure of the self-employed and employees

19. Inland Revenue itself does not hold comprehensive information on the expenditure of individuals. But expenditure information is available for a sample of individuals from the survey on household expenditure collected by Stats NZ (the Household Economic Survey or HES). The data being used in the study is from three triennial surveys in 2006/07, 2009/10 and 2012/13. The data from the survey is linked in the Integrated Data Infrastructure (the IDI) built by Stats NZ. The IDI links a number of datasets, including Inland Revenue tax data but only enables anonymous aggregate analysis, to maintain the privacy security and confidentiality of individuals and businesses.
Findings

20. The results of the analysis strongly suggest that there has been underreporting of income to Inland Revenue by the self-employed at the time of the study. For the period of the study, the analysis found that the self-employed sector on average underreported 20% of its taxable income. The analysis does not provide the shape of the distribution of underreporting across the sector, so it may be that the underreporting is clustered in a minority with high non-compliance, or more widespread by less substantial underreporting. The non-compliance uncovered by the analysis includes non-compliance due to error as well as intentional non-compliance.

21. The study has estimated non-compliance by comparing the incomes of households with their expenditures. For employees there is very little capacity to underreport income because of PAYE, whereas for the self-employed there is much more scope. The study compares the incomes of employees and the self-employed with similar levels of spending. To the extent that the self-employed have lower incomes for a given level of spending, this is taken as an indicator of underreporting.

22. The New Zealand research has been able to remove an important source of bias that arises in international studies of the same issue. Other countries have only been able to compare expenditure recorded in surveys similar to our HES with incomes reported in the same surveys. Of course, incomes reported in expenditure surveys may differ from income reported to tax authorities. In New Zealand there is a probabilistic linkage between tax records and the HES through the IDI. This has allowed expenditure recorded in the HES to be compared with income reported to Inland Revenue.

23. The study shows that, at least for New Zealand, this makes a big difference. The authors of the study find that if underreporting were estimated using HES data only, the estimate of underreporting by the self-employed on average would be much lower. The estimate would have been 12%.

24. Reported tax gaps from work done abroad using purely survey data found underreporting such as: United Kingdom (19%), Canada (17%), United States (25-35%) and Greece (42%), but given the methods they used, these are likely to be under-estimates. Arguably these overseas results would be better compared with the 12% figure that would be derived if the New Zealand estimate used survey data only.

25. However, when considering the research the estimate of 20% underreporting is the figure to focus on because this is matching information on expenditure with income actually being reported to Inland Revenue. If the self-employed sector on average underreported 20% of its income, this would represent foregone revenue of $850 million per annum for those self-employed people who are unincorporated. This group represents around 55% of the total self-employed income but to extend the estimate to those who work through incorporated entities is extremely difficult as this later group have access to tax paid funds that may account for expenditure (such as shareholder loans and trust distributions). Because of this we anticipate the gap would be lower for the incorporated than unincorporated self-employed. In addition, that figure does not include any consequential adjustments to goods and services tax or social policy obligations as a result of the underreporting.
Operational and Policy implications

Operational Implications

26. The results of this research indicate that New Zealand is situated at the lower end of the range of non-compliance internationally and given the age of the surveys used in the research the current programmes that Inland Revenue has been engaged in to reduce the tax gap from the hidden economy may have resulted in further reductions in the tax gap. These programmes have had good rates of return on investment to date. However, officials consider this is an ongoing issue where there may be further opportunities to provide policy solutions to this complex issue.

27. There is also a question as to whether this research provides a basis for increased investment in this sector. Whilst the research indicates a level of underreporting that will not necessarily equate to a case for increased resources in this area. Officials consider investment decisions should be based on what we expect to recover for any investment in the future. Since 2010 Inland Revenue has made good returns on investment from this sector but these should, in theory, decrease overtime as behaviours change.

Policy Implications

28. Officials have been considering a number of opportunities to tackle the tax gap in the self-employed sector, by improving the withholding tax regime, and have made some changes to the regime which, in the main, took effect from 1 April 2017. These include:

- Addition of those working through labour hire firms (whether through a company or individually) to the withholding tax regime – for most this would apply from 1 July 2017;

- Allowing those subject to the withholding tax rules to choose their own withholding rate down to a minimum of 10%; and

- Allowing those not subject to the current withholding tax regime to, with the agreement of the payer, enter the regime and have tax withheld from their payments.

29. Combined, these should increase the number subject to some form of withholding, provide more detailed information to Inland Revenue, and remove some from the current provisional tax regime

30. Two further options are currently being considered by officials: potentially extending withholding taxes to cover more self-employed workers, and improving the information Inland Revenue receives about the self-employed from third parties.

31. The latter option would help Inland Revenue address the tax gap due to non-compliance, for example, through ad-hoc collection of information in bulk from third parties who use digital platforms to facilitate trade between businesses or between business and customers, and using it as an independent check against the data Inland Revenue collects from taxpayers.

32. Other data source options are ad-hoc collection of bulk data from ‘electronic payment providers’ and ‘merchant acquirers’- those businesses that process credit and debit card transactions. Studies in the US suggest that information reporting alone, without withholding,
appears to be sufficient to motivate compliance for the vast majority of taxpayers. The US noncompliance rate for income subject to information reporting and withholding is around 1%, the rate for income that is subject to substantial information reporting, including from third party sources, is around 8%. Inland Revenue will report to you more fully on this work in a separate report in April 2018.

33. It is important to note that information gathering, or withholding taxes, will only address the suppression of income, not including the cash economy. The tax gap that is reflective of the inflation of expenses will also not be directly addressed by any work in this area.

34. Finally, as part of its “Right from the Start” approach, and digital work programme, Inland Revenue is working to ensure its systems and processes are as modern and easy to understand and use as possible, to reduce non-compliance due to error.

Releasing the research

35. It is planned to release the research to the public in the first week of April 2018. Victoria University of Wellington will publish the research on its research websites, and Inland Revenue proposes to post a story on the Inland Revenue website, and email-alert media and stakeholders with a link to the story. This is a standard approach to proactive releases.

36. We anticipate media interest in the research and so will prepare any material you may need, such as a media release and Q and A. Inland Revenue will have a spokesperson to address any media inquiries. Officials will liaise with your office on release.

37. StatsNZ will also need to provide the Minister of Statistics with a media package in relation to any queries regarding the IDI as they will be best placed to answer those questions.

38. As part of the expected media interest in the research officials expect the tax working group may be directly approached for comment and we recommend that the group be briefed on the research prior to the release.

Stats NZ comment

39. Stats NZ acknowledges that the research has provided greater insight on a key policy issue and demonstrates the value of the IDI. Stats NZ will look at the additional insight it brings to bear on measuring the NZ economy. As noted above IDI data cannot be used to identify any individuals or businesses, and cannot be used for measuring specific entity compliance. It is important to ensure that this is a key message in any communication around the release of this information to maintain public trust in the IDI.
IR2018/053: Estimating the underreporting of income in the self-employed sector

Report Check Sheet

May 2014

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SD&I Government Solutions team (Design Portfolio Lead) to co-ordinate on behalf of Policy and Strategy:

Which business units in Inland Revenue were consulted in the preparation of this report, and are there any unresolved issues?

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Policy Manager to complete:

It is OK for the report to be circulated within IR? (e.g.: it is not sensitive, commercial-

Policy Manager’s signature: ____________________________ Date: ____________________________