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Assessing the effects of rental property schedules: A comparison between self-prepared tax returns lodged via paper and e-tax



THE AUSTRALIAN NATIONAL UNIVERSITY

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ASSESSING THE EFFECTS OF RENTAL PROPERTY SCHEDULES: A COMPARISON BETWEEN SELF-PREPARED TAX RETURNS LODGED VIA PAPER AND E-TAX

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The Centre for Tax System Integrity (CTSI) is a specialized research unit set up as a partnership between the Australian National University (ANU) and the Australian Taxation Office (Tax Office) to extend our understanding of how and why cooperation and contestation occur within the tax system.

This series of working papers is designed to bring the research of the Centre for Tax System Integrity to as wide an audience as possible and to promote discussion among researchers, academics and practitioners both nationally and internationally on taxation compliance.

The working papers are selected with three criteria in mind: (1) to share knowledge, experience and preliminary findings from research projects; (2) to provide an outlet for policy focused research and discussion papers; and (3) to give ready access to previews of papers destined for publication in academic journals, edited collections, or research monographs.

Abstract

As a follow-up to the study reported in the Centre for Tax System Integrity's Working Paper No. 11 (Taylor & Wenzel, 2001), the study reported in this paper investigated rental income declared and rental deductions claimed by taxpayers who were required to complete a *Rental Property Schedule (a schedule)*. Rental income, rental deductions and net rent were compared between self-preparers using e-tax to lodge their tax return electronically (who completed a schedule as part of their electronic return), paper lodgers (who were sent a schedule by the Australian Taxation Office (Tax Office) and required to return it) and a control group (who did not complete a schedule). The goal of this investigation was to assess whether the effect of the schedule on paper lodgers (significantly less rental deductions claimed) was due to being personally targeted by the Tax Office is watching me'). If the effect was not due to being personally targeted (deterrence effect) but perhaps due to greater informational assistance, the schedule (and similar schedules in other tax-related domains) could perhaps be included in *TaxPack* as a cheap and convenient alternative to sending out individual schedules.

The results showed that rental property owners who lodged on paper and were asked to return a completed schedule declared significantly more gross rental income, claimed significantly less rental deductions and declared significantly more net rent than did rental property owners who lodged electronically via e-tax and completed a schedule by default; however, the electronic lodgers did not differ from the control group on these variables. These results suggest that the effect of the schedule is due to being personally targeted, indicating that the inclusion of the schedule in *TaxPack* may not achieve the same results as sending it out individually to taxpayers. However, because the electronic lodgers in this study were not randomly selected from the same population as the paper lodgers, it is possible that a number of confounding variables may have led to the differences found between these two groups of lodgers. E-tax (electronic) lodgers (they were younger, lodged earlier and had higher taxable incomes). Further, it is suggested in the discussion that lodging electronically (in and of itself) may result in perceptions of decreased accountability which do not exist for paper lodgers and that, for this reason, electronic lodgments should be further investigated.

Assessing the effects of rental property schedules: A comparison between selfprepared tax returns lodged via paper and e-tax

Natalie Taylor¹ and Michael Wenzel²

Introduction

This paper details findings from a follow-up investigation of reported rental income and rental deduction claims. An earlier study (Taylor & Wenzel, 2001) investigated the effects of different letter styles on reported rental income and rental deductions claimed. It found that rental property owners who were sent a *Rental Property Schedule* (a schedule) with minimal information to complete and return to the Australian Taxation Office (Tax Office) claimed significantly less rental deductions and declared significantly more net rent than (a) those who received an information letter only about claiming correctly, (b) those who did not have to return the schedule to the Tax Office, and (c) a control group. These results imply that receiving and having to return a schedule to the Tax Office is an important factor in reducing deductions claimed and increasing net rent declared.

Given the relative effectiveness of the schedule, one possibility is that it could perhaps be included in *TaxPack* as an effective and cheap means of reducing rental deductions. However, the issues of surveillance and accountability need to be resolved before considering such a suggestion. Although completing and returning the schedule was found to be effective, the letter and accompanying schedule were personally addressed to individual taxpayers. That is, taxpayers who received the letter and schedule were explicitly advised that they had been selected by the Tax Office to participate, that they were required to complete and return the schedule to the Tax Office, and that other rental property owners may not have been sent a schedule to complete. This means that taxpayers in this condition were very likely aware that their completed schedule would be closely monitored ('I have been sent this schedule specially so the Tax Office is watching me'). It is quite possible that the effect of the schedule was due to this increased sense of personal

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² The research reported here is part of an ongoing research project into rental income and deductions, in collaboration with Tony Goddard, Geoff Whyte, Daniel Heavey, Daryll D'Mello, Leanne Bleakley and Fiona Zani of the Australian Taxation Office. The authors particularly wish to thank Daniel Heavey and Daryll D'Mello for providing them with the additional data for this study.

accountability. Including the schedule in *TaxPack*, however, changes the situation from personalised accountability (taxpayer is personally targeted) to one of routine accountability (taxpayer is not personally targeted). For the schedule to be effective if included in *TaxPack*, it would need to be demonstrated that the effect of the schedule is not due to personalised accountability.

Why might the schedule be effective in *TaxPack*?

It is possible that one reason for the effectiveness of the schedule is that it provides assistance and information for taxpayers that are not provided in *TaxPack*. The schedule itemises rental income and deductions and this could help taxpayers understand what can and cannot be claimed as rental deductions. It may also prompt a more thorough assessment of the legitimate costs associated with rental property. If the schedule is informative and provides assistance, and its effectiveness is not due to surveillance and deterrence, then it could also be useful and effective if included in *TaxPack*.

In the previous study reported in Taylor & Wenzel (2001, see Appendix A for a description of the study), taxpayers who were sent the schedule (with an information booklet) to return did not claim significantly less deductions than the control group.³ It is possible that the schedule was less effective in this condition because the accompanying information booklet provided an information overload. Another condition where taxpayers received the schedule but did not have to return it to the Tax Office resulted in no significant differences from the control group. In this condition, it is possible that taxpayers did not look at the schedule once they realised they did not need to return it.⁴ Hence, although there were other conditions in the previous study in which taxpayers received the schedule to complete (ostensibly meaning that if the schedule is informational it should be effective in all conditions), other factors existed in those conditions that made it difficult to ascertain whether or not the effect of the schedule was due to information/assistance.

³ Sending out the schedule with an information booklet did produce significantly less deductions than for the control group for the previously touched sample, but not for the previously untouched sample.

⁴ The effect of having to return the schedule versus not having to return it is being further investigated in a second rental study currently in progress.

Electronic lodgers

All rental property owners included in the previous study were selected on the basis that they were paper lodgers and had not lodged electronically before (of course, some of those included in the sample did lodge electronically in 2000 but this number was relatively small). This is because lodging electronically automatically requires completion of a schedule. To be mailed a schedule in these circumstances was unlikely to have the intended effect because the intervention would have been regarded as redundant. While electronic lodgers in the previous study were hence excluded, electronic lodgment data may help address the issue of personalised versus non-personalised surveillance. Since electronic lodgers are required to complete the schedule as a matter of course, personalised accountability does not apply ('Everyone who lodges electronically has to complete a schedule'). Comparing electronic versus paper lodgers, then, may give us some insight into whether or not the effect of the schedule is due to being personally targeted by the Tax Office. If being personally targeted drives the effect of the schedule, paper lodgers should declare more net rent and claim less rental deductions than electronic lodgers. If the effect is not due to being personally targeted, there should be little or no differences between paper and electronic lodgers. Comparing electronic lodgers with non-electronic lodgers provided us with a preliminary means of investigating whether or not the effect of the schedule was due to being personally targeted (deterrence effect).

A secondary outcome of this comparison gives us insight into electronic lodgments more generally. Lodging electronically is becoming increasingly popular and is actively encouraged by the Tax Office. Specifically, the present study focuses on self-preparing taxpayers (not registered with a tax professional) who use the Tax Office's *e-tax* product to lodge their tax returns electronically. In the financial year relevant to this study (1999/2000), 4.83 percent of self-preparers lodged their returns via e-tax. However, the number of e-tax lodgers more than doubled in the following financial year, indicating a strong trend toward greater use of this lodgment facility. While there are clearly benefits to the Tax Office when returns are lodged electronically (for example, less paperwork, less data to be entered by Tax Office staff), it remains to be seen whether there are any other differences between electronic and paper lodgers in terms of what is declared in returns.

Such an investigation is important precisely because lodging electronically is being encouraged as a more efficient tax administration procedure. It should be noted, however, that the present study does not make any statements about other users of electronic lodgment facilities, such as tax agents using the Electronic Lodgment Service (ELS).

Making electronic and paper lodgers comparable

In our previous study we included two different samples: those who had previously been sent a schedule to complete and return to the Tax Office (touched sample) and those who had not (untouched sample). To ensure direct comparisons in the present study, and to facilitate data extraction, the present study focused only on those rental property owners who had not completed a schedule before 2000. We used the data from the (untouched) paper lodgers who had been sent a schedule and minimal information, and asked to complete and return the schedule (paper lodger condition, n = 719) and the untouched control condition (n = 358) from the previous study, and compared them with the data from 400 randomly selected rental property owners who were not registered with a tax agent and lodged electronically via e-tax in 2000.⁵ These electronic lodgers were selected on the basis that they lodged electronically in 2000 but had lodged on paper in 1999,⁶ and had not been sent a schedule to complete before. This meant that they had completed a schedule only once (in the same year as the paper lodgers), making them comparable on this dimension with the untouched paper lodgers.

Limitations in comparing electronic and paper lodgers

While at first glance it might appear reasonably straightforward to compare rental data between electronic lodgments and paper lodgments, there are reasons why such a comparison is problematic. The first and foremost problem concerns the issue of random sampling. The previous study identified a population of untouched paper lodgers. From this population, random samples of taxpayers were extracted and randomly allocated to the

⁵ We chose to compare electronic lodgers with those who had been asked to complete and return a schedule in the untouched condition of the previous study because it was only this condition that differed from the others.

⁶ While it is possible that a taxpayer may have lodged on paper in 1999 but lodged electronically in previous years, we assume that it is unlikely that a taxpayer will return to paper lodging after lodging electronically.

experimental and control conditions. Randomly sampling from the same population *before* randomly allocating to conditions means that (a) any differences that might exist between taxpayers will be evenly distributed across all conditions, and (b) every taxpayer in the population of identified paper lodgers had exactly the same chance of being selected in the sample as any other taxpayer in that population. These two points are important because they mean that any differences in rental income and deductions found between conditions will be due to the effect of the condition, and not due to other differences between taxpayers. Secondly, by ensuring that all taxpayers in the paper lodger population have an equal chance of being included in the sample, we can be confident that the results are representative of, and can be extrapolated to, all paper lodger taxpayers. Because the experimental and control groups in the previous study were randomly selected from the same population and randomly allocated to conditions, we can be sure that the above caveats hold, making valid comparisons between groups possible.

In the present study, however, we are comparing a self-selected set of e-tax (electronic) lodgers with paper lodgers. The taxpayers included in this study, then, were not randomly sampled from the same population, nor were taxpayers randomly allocated to the three groups (electronic, paper and control). Indeed, there are two populations: electronic lodgers and paper lodgers. It is possible that there are inherent characteristic differences between these two populations of taxpayers, and so any differences found may be attributable to those population differences, rather than to whether or not a schedule has been personally sent to the taxpayer. In comparing electronic and paper lodgers in this study, we are mindful that the comparison is not a straightforward one. We are using it simply as a first step in the process of investigating our question, and we will address any problematic issues as they arise.

Procedure

Data extraction and de-identification

Four hundred rental property owners who lodged a schedule electronically via e-tax in 2000 were randomly selected. These taxpayers were selected on the basis that they:

- had lodged electronically in 2000, but had lodged on paper in 1999
- had not previously been sent a rental schedule by the Tax Office
- had rental income in both 1999 and 2000
- were not from risk groups,⁷ and
- lodged individually (that is, not through a tax agent).

The Tax Office provided the authors with de-identified anonymous data for these lodgers on the following variables: age, sex, lodgment week in 2000, taxable income for 2000 and 1999 (excluding net rent), gross rental income for 2000 and 1999, net rent for 2000 and 1999, and rental deductions claimed in 2000 and 1999.

Data screening

- Due to the huge variability in both gross rental income and taxable income reported, and the heavily positively skewed distributions, square root transformations were applied in an attempt to normalise the distributions. Those cases with square root transformed gross rental income greater than 3.5 standard deviations from the mean (n = 6) were excluded from analysis on the basis that they were outliers. This left 1471 cases for analysis.
- All variables (both dependent and covariate) to be included in the analyses were assessed for normality of distribution. Gross rental income 2000, gross rental income 1999, total rental deductions 2000, total rental deductions 1999 and taxable income 2000 were all positively skewed. A square root transformation was applied to these variables, resulting in much better distributions. Net rent 2000 and net rent 1999 were reasonably distributed and remained in raw form. In the present results, all statistical analyses will use the transformed variables, while tables and figures (for purposes of illustration) will refer to dollars based on raw data.

Results

Descriptive statistics for electronic lodgers, paper lodgers and control group

Forty-eight percent of the taxpayers included in this study were female, while fifty-two percent were male. Males and females were equally represented across each of the three conditions, $\chi^2(2) = 1.59$, <u>p</u> = 0.45. Ages ranged from 21 to 86 years, and the median age of respondents was 45 years (mean = 45, SD = 11).

	Ν	Min	Max	Median	Mean	SD
Gross rent		\$	\$	\$	\$	\$
Electronic lodgers	398	0	31 983	4 789	6 009	4 634
Paper lodgers	716	0	28 807	4 680	5 828	4 455
Control	357	0	26 918	4 207	5 510	4 293
Rental deductions						
Electronic lodgers	398	2	53 984	5 858	7 375	6 505
Paper lodgers	716	0	53 392	4 252	5 765	5 597
Control	357	0	44 288	3 979	5 931	6 400
Net rent						
Electronic lodgers	398	-22 001	15 555	-880	-1 365	4 098
Paper lodgers	716	-37 042	19 789	141	63	4 257
Control	357	-24 217	17 409	-63	-421	4 283

Table 1: Descriptive statistics (raw data) pertaining to gross rent, rental deductions and net rent for 2000, as a function of condition

Table 1 details descriptive statistics (raw data) relating to gross rental income, rental deductions and net rent reported in 2000 for each of the three conditions. As the electronic data were sampled from a different population from that in which the paper lodgers and control group were sampled, we investigated whether the three groups differed on any particular characteristic. As already noted, males and females were equally distributed across the three conditions. Electronic lodgers (mean age = 42, median = 41, mode = 34) were, on average, younger than both paper lodgers (p < 0.001) and the control group (p < 0.001), but age was similar for paper lodgers and the control group (combined mean age = 47, median = 47, mode = 48). Electronic lodgers also lodged earlier than both paper

⁷ Those in the untouched sample in the previous study were not from risk groups.

lodgers (p < 0.001) and the control group (p < 0.001), while lodgment week did not differ between paper lodgers and the control group. Rental deductions in 2000 overall were higher for electronic lodgers than for the other two conditions (p < 0.001), while net rent was lower than for the other two conditions (p < 0.003). It is noteworthy, however, that absolute gross rental income did not differ significantly between any of the conditions (p > 0.10). Electronic lodgers (M = \$43 647) were also likely to have higher taxable incomes than both paper lodgers (M = \$37 848, p < 0.001) and the control group (M = \$36 238, p < 0.004), while the latter two conditions did not differ in taxable income. It can be seen, then, that there were some characteristics on which the electronic and nonelectronic lodgment groups differed, apart from the intervention. In order to control for these differences in our analyses so that we could more closely assess the effects of condition, we included them as covariates.

Gross rental income

Our previous analyses (Taylor & Wenzel, 2001) found no differences in gross rental income declared between the paper lodger and control conditions, after controlling for covariates. To investigate whether any differences existed between these conditions and the electronic lodger condition, a one-way analysis of covariance was conducted on gross rental income 2000, controlling for relevant covariates. A significant effect was found for condition, <u>E</u> (2, 1461) = 3.01, <u>p</u> = 0.050. Simple comparisons revealed the electronic lodger condition (<u>M</u> transformed = 69.80, <u>M</u> raw data = \$5658) yielded significantly *less* gross rental income than the paper lodger condition (<u>M</u> = 72.08 transformed, <u>M</u> = \$5915 raw data), (<u>p</u> < 0.030). The control condition (<u>M</u> = 70.80 transformed, <u>M</u> = \$5729 raw data) did not differ from either the electronic or paper lodger conditions. These mean data are illustrated in Figure 1.



Figure 1: Mean gross rent declared in 2000 (in Australian dollars) for electronic lodgers, paper lodgers and control group, controlling for age, sex, whether a rental schedule had been lodged, lodgment week, gross rent 1999, taxable income 2000 and rental deductions 2000

Rental deductions

Rental deduction claims 2000 were submitted to a one-way analysis of covariance, controlling for relevant covariates. Rental deduction claims varied significantly as a function of condition, <u>F</u> (2, 1461) = 6.52, <u>p</u> < 0.003. As can be seen from Figure 2, paper lodgers (<u>M</u> = 69.77 transformed, <u>M</u> = \$5964 raw data) claimed significantly less deductions than both electronic lodgers (<u>M</u> = 73.09 transformed, <u>M</u> = \$6487 raw data), <u>p</u> < 0.004, and the control condition (<u>M</u> = 73.01 transformed, <u>M</u> = \$6521 raw data), <u>p</u> < 0.015.

Net rent

Net rent is gross rental income minus rental deductions. A one-way analysis of covariance, again controlling for covariates, revealed net rent to differ between conditions, <u>F</u> (2, 1461) = 6.43, <u>p</u> < 0.003. The study found the same pattern as for rental deductions claimed. Net rent was significantly higher for paper lodgers (<u>M</u> = -\$186) than for either the

electronic ($\underline{M} = -\$683$) or control ($\underline{M} = -\683) conditions, \underline{p} 's < 0.004 and 0.014 respectively. These results are illustrated in Figure 3.



Figure 2: Mean rental deductions claimed in 2000 (in Australian dollars) for electronic lodgers, paper lodgers and control group, controlling for age, sex, whether a rental schedule had been lodged, lodgment week, gross rent 1999, taxable income 2000 and rental deductions 2000



Figure 3: Mean net rent declared in 2000 (in Australian dollars) for electronic lodgers, paper lodgers and control group, controlling for age, sex, whether a rental schedule had been lodged, lodgment week, gross rent 1999, taxable income 2000 and rental deductions 2000

Discussion

Implications for personalised accountability

It is clear from the results presented that paper lodgers who were sent a schedule and required to return it to the Tax Office declared, on average, significantly higher gross rental income than e-tax (electronic) lodgers and claimed significantly lower rental deductions than both e-tax lodgers and the control group. Indeed, e-tax lodgers did not differ from the control group in terms of rental deductions claimed and net rent declared, after other covarying differences were taken into consideration. These results seem to suggest that being personally targeted by the Tax Office to complete and return the schedule drives the effect of the schedules. Paper lodgers who received a personally addressed schedule from the Tax Office might have felt that the Tax Office watches them; they might have felt deterred from making wrongful claims. In contrast, e-tax lodgers who complete similar schedules to provide the same kind of information do so as part of their lodgment routine; as a consequence they might not have felt a heightened degree of surveillance (similar to paper lodgers who did not receive a schedule). That is, the results would suggest that rental schedules are effective through a deterring effect on taxpayers. If personal targeting with the implication of special surveillance is the key to obtaining higher gross rental income reported and lower rental deduction claims, including the schedules in TaxPack is not likely to produce the desired outcome. While this may be so, a note of caution is warranted.

Differences between e-tax (electronic) lodgers and paper lodgers

As mentioned earlier, e-tax (electronic) lodgers and paper lodgers were sampled from two *different* populations of taxpayers, meaning that taxpayers in the three conditions in this study were not randomly allocated to conditions. This means that other differences that may exist between e-tax lodgers and paper lodgers could account for the results in the e-tax lodger condition. It was found that the e-tax lodger sample differed from the non-e-tax lodger sample in several ways. On average, e-tax lodgers were younger, had higher taxable incomes and lodged their returns earlier than paper lodgers (for both the paper lodgers asked to return a schedule and the control group). No differences were found on these variables between paper lodgers asked to return a schedule and the control group.

indicating that e-tax lodgers do have significantly different characteristics from paper lodgers. In fact, there are likely to be other systematic differences between e-tax users and paper lodgers; for instance, a greater proportion of e-tax users may belong to white-collar occupations (partly reflected in the income difference), have a higher level of education, own and be familiar with computers, and be at an earlier stage of the investment lifecycle (partly correlated with younger age), thus have more recent investments and more outstanding debt.

Further, e-tax lodgers presumably have access to more information about rental property (via the Tax Office website), or know how to get it, than do paper lodgers. Of course, the implications would be ambiguous, because e-tax lodgers could use this knowledge to their own advantage or they might be better equipped to comply with the tax system. In fact, it could also be the case that taxpayers who lodge on paper generally under claim rental deductions, as they may be insufficiently informed or do not keep the necessary documents. On the other hand, there is anecdotal evidence that individuals do not want to lodge electronically because they assume the Tax Office would be able to track them down. Thus, taxpayers who deliberately want to cheat and exploit the system might be represented to a greater extent among paper lodgers.

In any case, these other differences between the samples mean that a direct comparison between e-tax and paper lodgers on the effectiveness of completing a Schedule is not a straightforward matter. That is, the differences in rental deduction claims found in this study may not simply be due to whether taxpayers are personally targeted by the Tax Office, but could also be attributable to other, as yet unmeasured, factors. While this study was a first step in investigating whether the effect of the schedule is due to being personally targeted, the results indicate that further research focusing on paper lodgers would be worthwhile to provide a more definitive answer to our question.

Moreover, there may be another process at work when lodging electronically via e-tax which does not exist when lodging on paper. This process relates to perceptions of accountability. It is possible that lodging electronically via e-tax leads to a sense of *less* accountability than when lodging on paper. In making the above comparisons between e-

tax and paper lodgers, the assumption was that the differences in perceived accountability would be due to whether taxpayers perceived themselves as being personally targeted by the Tax Office when completing the schedule. That is, it was assumed that the only difference between the two samples was the degree to which completing the schedule was an individualised or routine task, and was not due to e-tax (electronic) or paper lodgment per se.

However, it is possible that lodging electronically via e-tax (in and of itself) has consequences which paper lodgment does not. For example, electronic lodgment via e-tax may be perceived as needing to wade through one screen after another, having to choose the right buttons to click for the appropriate information to appear, with the information not necessarily following the same pattern as appears in the paper version of TaxPack. Some individuals may prefer to flick backwards and forwards through the paper version of TaxPack to find and review information and their own declarations in a relatively quick, comprehensive and orderly fashion, which may not necessarily be their perception should these individuals choose electronic lodgment via e-tax. Only a limited amount of information is available on a single screen, it may not always be clear which button should be pressed to get to the appropriate page, it may be perceived as more difficult to retrace your steps and to obtain an overall picture of what you have (or have not) entered, particularly for those individuals accustomed to sequential information provided on paper rather than information provided on a computer screen. It is possible to miss a relevant page (if it's not selected it does not appear), and this could lead both to inadvertent mistakes and a reduced sense of responsibility ('If the appropriate question did not appear, that's not my fault'). Further, as the information is entered onto computer, it could be assumed that 'if I make a mistake, the Tax Office will find it'. These factors together could lead to a reduction in perceptions of accountability, independent from whether 'I' have to do it, or 'everyone' has to do it.

Implications for electronic lodgment and e-tax

The possibility that lodging electronically via e-tax could lead to a decreased sense of accountability is suggested by research showing that computer-mediated communication

can often lead to a reduction in accountability (see Walther, Anderson & Park, 1994). It has been suggested that one reason for this reduced sense of accountability may be that people become 'deindividuated' – their sense of self-awareness is reduced and the constraints that would ordinarily apply to their behaviour dissipate. This can be due to reduced interpersonal cues, and a more impersonal and task-oriented attentional focus (Kiesler, Siegel & McGuire, 1984). Further, it has been shown that when social identity is salient ('us' versus 'them'), computer-mediated behaviour becomes more aligned with ingroup norms and differentiated from outgroup norms (Postmes, Spears & Lea, 1998). Taken together, this computer-mediated communication research suggests that further investigation is warranted into the possibility that lodging electronically via e-tax may not only reduce perceptions of accountability, due to a more impersonal, entirely computerised setting and the ability to miss relevant questions. A reduced perception of accountability may also lead to lower compliance than might otherwise occur, particularly if taxpayers are completing their returns in a context in which they feel hostile towards the Tax Office.

In terms of the present study, this suggestion is speculative as it was not tested explicitly. However, the findings that (a) e-tax (electronic) lodgers declared less gross rental income, less net rent and more rental deductions than the paper lodgers who were personally asked to return a schedule, after covariates were taken into account, (b) e-tax lodgers did not differ from the control group (paper lodgers who were not asked to return a schedule) after covariates were taken into account, and (c) e-tax lodgers claimed higher rental deductions (in absolute terms) than both paper lodgers and the control group, *even though* gross rental income (in absolute terms) did not differ from paper lodgers and the control group, indicate that further research concerning the processes associated with electronic lodgment via e-tax would help to enable effective management of taxpayer behaviour by the Tax Office for those taxpayers who choose to use the different lodgment channels now available. This is particularly so given the Tax Office's success in encouraging increasing numbers of taxpayers to lodge electronically via e-tax and the Tax Office's encouragement of electronic lodgment in general.

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Appendix A

Appendix A presents the design of the study presented in the Centre for Tax System Integrity's Working Paper No. 11.

Nine thousand taxpayers who were recorded as owning rental property were randomly selected by the Tax Office for the study. All taxpayers included in the study lodged paper (rather than electronic) tax returns. While the majority of those who lodged their returns were self-preparers, some tax agent returns were also included.⁸ Samples were drawn randomly from two distinct populations of rental property owners: those previously untouched by the Tax Office and those previously touched by the Tax Office. Those who were defined as 'previously untouched' had not previously been sent a schedule to complete. Those who were defined as 'previously touched' had been sent a schedule to complete and return to the Tax Office in previous years and, on the basis that the Tax Office had sent out schedules only to taxpayers with certain risk characteristics, those taxpayers in the previously touched population belonged to a 'risk' group. These risk groups comprised any of the following: taxpayers who claimed rental deductions and

- 1. those whose gross rental income was \$0
- 2. those whose gross rental income was more than \$35 000
- 3. those whose net rental income was less than \$8000 and whose taxable income was more than \$5400
- 4. those whose gross rental income was between \$5000 and \$35 000, and whose taxable income was more than \$20 700.

For the untouched sample, participants were between 17 and 71 years of age (median age of 48), with 48 percent female and 52 percent male. For the touched sample, participants were between 22 and 71 years of age (median age of 49), with 39 percent female and 61 percent male.

⁸ Only paper returns lodged by agents were included. The data consisted of 942 returns lodged by agents for the touched sample, and 1200 for the untouched sample.

Design

Five hundred taxpayers from each of the touched and untouched samples were randomly allocated to eight experimental conditions which comprised a mixture of tone of letter (soft or hard) and letter content (information only, schedule only, schedule and booklet, no return of schedule). The letters for the eight experimental conditions are provided in the Appendix to Working Paper No. 11. The experimental conditions comprised the following:

- 1. information only with soft tone
- 2. information only with hard tone
- 3. schedule only with soft tone
- 4. schedule only with hard tone
- 5. schedule and booklet with soft tone
- 6. schedule and booklet with hard tone
- 7. no return of schedule with soft tone
- 8. no return of schedule with hard tone.

Those allocated to the untouched and touched control groups received no letter or intervention of any kind. This yielded 18 conditions in total.

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