

**TAX001**

**The Effect on Tax compliance of Outcome Favourability with Procedural and Distributive Fairness**

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### Abstract

The purpose of this paper is to study how outcome favourability impacts the association between fairness and taxpayer compliance. Outcome favourability is whether taxpayers have a balance owing or refundable. We develop a model of tax compliance based on an integration of fairness heuristic theory (Lind 2001) with Rutte & Messick's (1995) Model of Perceived Unfairness. Based on our model, we posit that taxpayers in a favourable tax payment position are more likely to comply with tax authorities than those in an unfavourable tax payment position, and perceptions of distributive and procedural fairness jointly impact taxpayer compliance. Distributive fairness is whether taxpayers have paid their fair share of taxes, and procedural fairness is the even-handedness in procedures used to collect taxes. We conduct an experiment on 228 taxpayers. We find significant support for outcome favourability: compliance is significantly higher in favourable as compared to unfavourable tax positions. We also find that compliance is significantly higher under procedural fairness. In addition, we find that distributive fairness increases compliance only when outcomes are favourable. Implications for practice and research are discussed.

**Keywords:** tax compliance, fairness, distributive, procedural, outcome favourability

### 1. Introduction

In Canada in 2011-12, personal taxes comprised about 76% of income tax revenues, representing the largest single source of government revenues, more than triple the next largest revenue source. Although the Canada Revenue Agency (CRA), the primary tax collector for the Government of Canada, reported that taxpayers usually comply with their tax obligations, the dollar value of non-compliance is significant. The CRA identified \$14.1 billion in non-compliance in 2011-12 (CRA 2012).

The tax compliance literature reveals many factors associated with tax compliance, including sanctions, tax filing position, detection, and taxpayers' perceptions of fairness (Slemrod 2007; Slemrod & Yitzhaki 2002; Alm 1999; Andreoni et al. 1998; Cuccia 1994; Fischer et al. 1992; Jackson & Milliron 1986).<sup>58</sup> Although effective, sanctions and detections are costly means to improve taxpayer compliance. For example, in Canada in 2011-12, the CRA spent approximately \$1.8 billion on sanctions and on the detection of non-compliance (CRA 2012). It follows that there is a significant benefit for the CRA and other national governments if they are able to find ways to encourage taxpayer voluntary compliance. Thus, developing an understanding of the

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<sup>58</sup> Although what taxpayers intend to do and what they actually do may differ (Blanthorne & Kaplan 2008), tax researchers tend to focus on tax compliance intentions because they are a proxy for behaviour (Bobek & Hatfield 2003). Accordingly, the term "tax compliance" throughout this paper refers to tax compliance intentions.

conditions under which taxpayers are more likely to voluntarily pay their taxes has practical and theoretical benefits.

Existing research demonstrates that tax compliance is influenced by perceptions of fairness and outcome favourability (Hartner et al. 2011; Verboon & van Dijke 2007). Fairness is a comparative assessment of the justness and equity of a decision (Van den Bos et al. 2006; Folger & Cropanzano 1998, 2001). The justice literature identifies many different aspects of fairness, of which two have been identified to be associated with tax compliance: distributive fairness and procedural fairness. Distributive fairness refers to taxpayers' assessments of whether they pay their "fair" share of taxes (for example, Verboon & Goslinga 2009; Kim et al. 2005; Moser et al. 1995). Procedural fairness is the even-handedness in procedures used in arriving at the determination of tax assessments (for example, Murphy 2004, 2005). However, prior tax research has not investigated the joint impact of distributive and procedural fairness on tax compliance.

Outcome favourability is the extent to which taxpayers are in a favourable or unfavourable tax payment position, and in the tax context applies specifically to assessments where taxpayers receive tax refunds or are required to pay additional monies to tax authorities after filing their tax returns. Several studies have found an association between outcome favourability and tax compliance, such that favourable outcomes (refunds received this year) are positively associated with compliance and unfavourable outcomes (additional tax owed this year) are associated with non-compliance in subsequent tax payment periods (Verboon & van Dijke 2007; Murphy 2004, 2005; Copeland & Cuccia 2002; Wenzel 2002; Schepanski & Shearer 1995; Dusenbury 1994; White et al. 1993).

In order to gain a more comprehensive understanding of how to achieve effective voluntary compliance, tax researchers have started to investigate how different types of fairness combine with outcome favourability to affect taxpayers' compliance (Hartner et al. 2011; Verboon & van Dijke 2007; Murphy 2004). For example, Hartner et al. (2011) and Verboon & van Dijke (2007) found a joint effect of distributive fairness and outcome favourability on compliance. In addition, Murphy (2004) found a joint impact of procedural fairness and outcome favourability on compliance. However, no studies of which we are aware have considered the

combined impact of distributive fairness, procedural fairness, and outcome favourability, on tax compliance. An understanding of how distributive fairness, procedural fairness and outcome favourability simultaneously affect tax compliance is necessary to understand whether there are complementary or offsetting impacts that influence voluntary tax compliance.

Thus, we build a model of tax compliance that considers outcome favourability as well as distributive and procedural fairness by integrating Rutte and Messick's (1995) Model of Perceived Unfairness with fairness heuristic theory (Lind 2001). The Model of Perceived Unfairness (Rutte & Messick 1995) specifically considers the moderating role of fairness on behaviour when individuals experience adverse (unfavourable) outcomes. Fairness heuristic theory (Lind 2001) suggests that people use procedural and distributive fairness as a heuristic substitute in their assessment of trustworthiness of an authority, resulting in a significant interactive effect of the two different types of fairness on cooperation with authorities. An integrated application of these two models to the tax context suggests that taxpayer compliance is highest when outcomes are favourable and distributive and/or procedural fairness is present.

Our research makes several contributions to the literature. First, our research examines the effects of both distributive and procedural fairness in the tax context, thereby making it a more comprehensive examination of the combined effect of the two fairness orientations on compliance. Secondly, to the best of our knowledge, it is the first study to investigate how distributive fairness, procedural fairness, and outcome favourability combine to impact tax compliance.

The remainder of the paper is organized as follows. In the next section, we integrate fairness heuristic theory (Lind 2001) with the Model of Perceived Unfairness (Rutte & Messick 1995) in the tax compliance context, and use it as a basis for our predictions. Section three describes our experiment, and section four reports our results. We conclude with a discussion of the implications of our findings.

## **2. Model of Tax Compliance**

### **2.1 The combined effect of outcome favourability and fairness on tax compliance**

To consider the combined effect of outcome favourability and fairness on tax compliance we apply Rutte and Messick's (1995) "Integrated Model of Perceived Unfairness" to the tax context. The Model of Perceived Unfairness posits that perceptions of unfairness lead to negative behaviours, such as non-compliance. It draws on Kahneman and Tversky's (1979) work that suggests that judgment of fairness and unfairness is not strictly rational but involves heuristics and biases. The model involves three aspects: 1) the outcome evaluation process, 2) fairness evaluation, and 3) behaviour. First, an individual will experience a favourable or unfavourable outcome. Unfavourable outcomes tend to result in feelings of resentment, as compared to favourable outcomes that tend to result in feelings of satisfaction. In the tax context, tax assessments are outcomes arbitrated by the CRA and imposed on individuals. For instance, a favourable outcome is a tax refund, and leads to satisfaction. In contrast, an unfavourable outcome in the tax context is additional tax owed, and leads to resentment.

Secondly, the responses associated with outcome are moderated by individuals' fairness evaluation (Rutte and Messick, 1995). Fairness evaluations are a comparative assessment of the justness and equity of the decision (Van den Bos et al. 2006; Folger & Cropanzano 1998, 2001). For example, an unfavourable outcome accompanied by perceptions of fairness may cause dissatisfaction, but not resentment (Rutte and Messick, 1995). On the other hand, favourable outcomes accompanied by perceptions of unfairness may result in lower levels of satisfaction. In the tax context, this suggests that fairness moderates the impact of tax assessment (tax refund or amount owing) on individuals' response.

The final step in Rutte and Messick's (1995) model is that individuals will engage in reactive behaviour based upon their emotional response. Individuals who experience negative emotional reactions, including resentment and dissatisfaction are more likely to engage in hostile behavioural tendencies, such as failure to cooperate and comply with requests. On the other hand, individuals who experience positive emotional reactions, including acceptance and satisfaction, are more likely to engage in receptive behavioural tendencies, such as cooperation and compliance. In the tax context, noncompliance would be considered to be a hostile behaviour and compliance a positive behaviour.

By applying Rutte and Messick's model (1995) to the tax context, we suggest that tax compliance is associated with tax payment positions: negative tax positions will result in less compliance than positive tax positions. Furthermore, individuals' perceptions of tax fairness will moderate the impact of outcomes on taxpayers' intentions to comply. This, in turn, suggests that taxpayers will intend to comply less with unfavourable outcomes than favourable outcomes, and that fairness will moderate the impact of unfavourable outcomes on tax compliance intentions (Brockner 2002). Our first two hypotheses are as follows:

*H1: Outcome favourability is positively associated with tax compliance intentions.*

*H2: Fairness will moderate the impact of outcome favourability on tax compliance intentions.*

### **2.2 The Substitutability of Procedural and Distributive Fairness**

Fairness heuristic theory (Lind 2001) considers how different types of fairness combine to impact perceptions and behaviours. Fairness heuristic theory suggests that people are more likely to intend to comply with authorities if they perceive that they have been fairly treated (Lind 2001; Tyler & Smith 1997; Tyler & Lind 1992), even in the face of adverse outcomes.

Fairness heuristic theory (Lind 2001) suggests that people use procedural and distributive fairness as a heuristic substitute in their assessment of the trustworthiness of an authority, resulting in a significant interactive effect of the two different types of fairness on cooperation with authorities. Empirical findings in the organizational behaviour and psychology literatures reveal a robust empirical association for the joint impact of procedural and distributive fairness on cooperation, and suggest the substitutability of their impact (Libby, 2001; Tyler 1994; Van den Bos et al. 1998, Van den Bos et al. 1997a). Brockner & Wiesenfeld (1996) review 45 studies in the organizational behaviour and psychology literatures and found a distributive fairness by procedural fairness interaction on cooperation.<sup>59</sup> In the tax context, this suggests the importance of both distributive and procedural fairness for taxpayer compliance, and indicates that taxpayers intend to comply

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<sup>59</sup> Lind (2001) emphasizes that the substitutability between distributive and procedural fairness does not work between fairness and favourability information (Van den Bos et al. 1998). Outcome assessments cannot be replaced by fairness assessments (Brockner and Wiesenfeld 1996).

least when they experience both unfair distributions and unfair procedures. This leads to our third hypothesis, that distributive and procedural fairness will jointly influence taxpayers' assessment of fairness.

*H3: There is a joint impact of procedural and distributive fairness on tax compliance intentions.*

### 3. Experiment

We conduct a 2 (outcome favourability: favourable, unfavourable) x 2 (procedural fairness: fair, unfair) x 2 (distributive fairness: fair, unfair) between-subjects experiment. The dependent variable is tax compliance intentions.

#### 3.1 Subjects

Subjects are Canadian taxpayers.<sup>60</sup> Subjects were recruited from a consumer research firm, and received an invitation from the firm to participate in a questionnaire about income taxes. They were randomly assigned to experimental conditions. Subjects read introductory information about a taxpayer who operated a landscaping business with an associate. Subjects then read the experimental scenario, and completed some follow-up questions, which included manipulation checks and demographic questions.<sup>61</sup> A copy of the experimental instrument is contained in the Appendix. A total of 228 subjects completed an experimental questionnaire and correctly answered post-experimental questions, indicating they understood the manipulations. Forty-eight percent of these subjects were male; the average age was 46.7; and the average years of full-time work experience was 22.1. Cell sizes ranged from 25 to 35.

#### 3.2 Manipulations

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<sup>60</sup> All were from Ontario.

<sup>61</sup> To check for demand effects, subjects were asked an open-ended question about the purpose of the study at the end of the experimental instrument. Approximately 10% (23 of 228) of respondents mentioned something about fairness in response to this question; however, there was not a biased distribution of the respondents across the cell in the experiment. These findings provide some assurance that demand effects were not problematic.

The dependent variable is tax compliance intentions, which was measured using two items with a Cronbach alpha of 0.78.<sup>62</sup> The independent variables were outcome favourability, procedural fairness and distributive fairness. In the tax context, outcome favourability is whether taxpayers have a balance owing or refundable. Outcome favourability was operationalized as an unexpected refund (favourable outcome) or payment (unfavourable outcome).<sup>63</sup>

In the tax context, procedural fairness is when tax authority's procedures are perceived as fair. In our experiment, procedural fairness is operationalized as having the tax authority correcting their error and lack of procedural fairness is when the tax authority does not correct their error. More specifically, subjects are told that the tax authority had identified an error in the way a deduction was calculated. In the fair condition, the tax authority agreed to correct the error. In the unfair condition, the tax authority did not correct the error. This manipulation is consistent with Barclay & Harland (1995).<sup>64</sup>

In the tax context, distributive fairness is the perception that taxpayers have paid their fair share of taxes. In our experiment, we have taxpayers consider whether they have paid a "fair" amount of tax compared to others. More specifically, we operationalize distributive fairness through the use of relative tax rates, consistent with Trivedi et al. (2003) and Moser et al. (1995). Subjects were informed that they paid the same tax rate as a similar associate in the fair condition, and were informed that they paid a higher tax rate in the unfair condition.<sup>65</sup>

## 4. Results

### 4.1 Hypothesis testing

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<sup>62</sup> The questions were as follows: 1) In the future, Jason would pretend ignorance and not declare all the cash to the CRA [tax authority]; and 2) In the future, Jason would be tempted not to declare all the cash on his tax return.

<sup>63</sup> Initially, the taxpayer in the scenario filed a tax return with no balance owing or refund.

<sup>64</sup> In the tax context, no studies of which we are aware have operationalized procedural fairness with error correctability, which is identified by Leventhal (1980) as a key aspect of procedural fairness. We used error correctability due to its applicability to the tax context and the strength of its impact in pre-testing.

<sup>65</sup> We used 50% and 50% tax rates in the fair condition, and 50% and 20% in the unfair condition based on pretest results that indicated that the differential between 50% and 20% was most unfair (relative to differentials of 45%/15% and 40%/10%), and 50/50 was perceived as fair.



We used ANCOVA to test the hypotheses. ANCOVA results are reported below in Table 1. Results indicate significant main effects for outcome favourability ( $F=13.41$ ,  $p<0.001$ ) and procedural fairness ( $F=6.05$ ,  $p=0.02$ ), and a significant two-way interaction effect for outcome favourability and distributive fairness ( $F=4.165$ ,  $p=0.042$ ). Compliance scores for each cell are reported in Table 2. As expected, compliance was highest in the cell with a favourable outcome, procedural fairness, and distributive fairness, and lowest in the cell with an unfavourable outcome, procedural unfairness, and distributive unfairness. Statistically significant covariates were gender and detection.<sup>66</sup>

[Insert Table 1 about here]

[Insert Table 2 about here]

H1 posited that outcome favourability is positively associated with tax compliance intentions.

H1 is supported as there is a significant main effect of outcome favourability on compliance. Therefore, compliance was higher when outcomes were favourable, and positively associated with tax compliance intentions.

H2 posited that fairness will moderate the impact of outcome favourability on tax compliance intentions. Our results provide partial support for H2, since fairness moderated the impact of outcome favourability on compliance, but only for distributive fairness, as indicated by the significant two-way interaction between outcome favourability and distributive fairness. Surprisingly, procedural fairness had a direct impact on tax compliance, as demonstrated by the significant main effect of procedural fairness, and as a result, H2 was not supported for procedural fairness.

We explored further the significant outcome favourability x distributive fairness interaction, as presented in Figure 1. Figure 1 shows that when taxpayers receive tax refunds, compliance intentions increased significantly when taxpayers perceive that distributions were fair. However, this does not hold when

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<sup>66</sup> Detection was measured with the average score of several questions, similar to compliance intentions. The Cronbach alpha was 0.76.

taxpayers receive unfavourable tax assessments. Our results suggest that compliance can be improved by increasing perceptions of distributive fairness for taxpayers that receive tax refunds.

[Insert Figure 1 about here]

H3 posited a joint impact of procedural and distributive fairness on tax compliance intentions. H3 was not supported due to the direct impact of procedural fairness on tax compliance.

#### **4.2 Self-interest bias**

We also performed supplementary testing to ensure that self-interest bias did not excessively contaminate our findings, as there is considerable evidence from the psychology literature of a self-interest bias in judgments of fairness (see Babcock et al. 1995 for a review), and from the economics literature that individuals interpret information in a self-serving manner, such that outcomes can bias fairness perceptions, for both distributive fairness (Bolton & Ockenfelds 2000) and procedural fairness (Bolton et al. 2005). Similar to prior research, we checked for evidence of self-interest bias by performing an ANCOVA using the manipulation checks for both distributive fairness and procedural fairness as dependent variables, and levels of distributive fairness, procedural fairness, and outcome favourability as independent variables.

Our results show a significant effect of the distributive fairness manipulation on distributive fairness perceptions ( $F=17.85$ ,  $p<0.001$ ), and a significant effect of outcome favourability ( $F=8.98$ ,  $p<0.001$ ), which suggested that perceptions of distributive fairness were higher for favourable outcomes than unfavourable (mean of 4.72 versus 4.03). Importantly, the distributive fairness manipulation had significant effects on perceptions of distributive fairness for both favourable ( $F=15.18$ ,  $p<0.001$ ) and unfavourable outcomes ( $F=7.09$ ,  $p<0.001$ ). Thus, distributive fairness was effectively manipulated for both favourable and unfavourable outcomes, which suggests that a self-interest bias does not excessively contaminate our analysis.

In addition to the main effect of the procedural fairness manipulation on procedural fairness perceptions ( $F=73.49$ ,  $p<0.001$ ), there was also a significant main effect of outcome favourability ( $F=25.34$ ,  $p<0.001$ ),

which suggested that perceptions of procedural fairness were higher for favourable outcomes than unfavourable (mean of 4.94 vs. 3.90). Importantly, the procedural fairness manipulation had significant effects on perceptions of procedural fairness for both favourable ( $F=3.92$ ,  $p<0.05$ ) and unfavourable outcomes ( $F=121.43$ ,  $p<0.001$ ). Thus, procedural fairness was effectively manipulated for both favourable and unfavourable outcomes, which suggests that a self-interest bias does not excessively contaminate our analysis.

### **5. Implications and Conclusion**

Our empirical findings reinforce the important role of outcome favourability and procedural fairness, as well as the impact of distributive fairness on tax compliance. Our study provides causal evidence of the importance of outcome favourability in the fairness-compliance association, and that depending upon the type of fairness, fairness influences compliance directly in the case of procedural fairness and indirectly in the case of distributive fairness. Most importantly, we find that taxpayers who have received a refund and/or that perceive that tax procedures are fair are more compliant than taxpayers who were assessed additional taxes or that perceive tax procedures were unfair. We also find that distributive fairness increases compliance for taxpayers that were in refund positions.

We develop a model of tax compliance that integrates the impact of outcome favourability and both procedural and distributive fairness. Our model of tax compliance shows the importance of the direct impact of outcome favourability and procedural fairness on tax compliance, and a moderating role of distributive fairness on tax compliance. Our model of tax compliance is depicted in Figure 2.

[Insert Figure 2 about here]

Figure 2 shows the main impacts of outcome favourability and procedural fairness on tax compliance, and the moderating impact of distributive fairness on outcome favourability. Our model suggests that voluntary tax compliance can be improved in three ways: 1) by increasing the incidence of tax refunds, 2) by ensuring

taxpayers perceive that tax procedures are fair, and 3) by increasing perceptions of distributive fairness for taxpayers that receive tax refunds.

Previous tax research has examined how procedural and distributive fairness and outcome favourability each influence compliance, but much remains to be learned about how these factors jointly influence compliance. Pragmatically, when attempting to increase voluntary tax compliance, fairness should be considered in tandem with outcome favourability: outcome favourability and procedural fairness both have direct impacts on compliance. In addition, distributive fairness moderates the impact of positive outcomes to impact tax compliance.

There are several limitations in this study. First, the results from this research are applicable for the Canadian context rather than other national contexts. Second, since we measured tax compliance intentions rather than actual tax compliance reporting behaviour, any attempt to translate the results of this research into policy objectives about actual behaviour should be done with caution.

Our empirical findings failed to comply with fairness heuristic theory (Lind 2001) that suggests that people use procedural and distributive fairness as heuristic substitutes in determination of whether to cooperate with tax authorities in their compliance decision. We did not find the joint impact we posited based on fairness heuristic theory. Instead, our findings showed a main effect of procedural fairness in the tax context, which occurred regardless of the distributive fairness or outcome condition. Future research is needed to establish whether and to what extent fairness heuristic theory applies to a context involving compliance to a tax authority.

A key strength of Rutte & Messick's model (1995) is that it distinguishes between fairness and outcome favourability.<sup>67</sup> Based upon our application of this model to the tax context, we find that Rutte and Messick's (1995) model was valuable in depicting the association between distributive fairness and outcome

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<sup>67</sup> In a meta-analysis, Skitka et al. (2003) found that in particular, prior research has often confounded the constructs of distributive fairness and outcome favourability, and identified that these constructs are distinguishable although they are frequently and erroneously used interchangeably.

favourability; however, Rutte and Messick's (1995) model did not apply to the association between procedural fairness and outcome favourability. Thus, our empirical findings suggest that Rutte and Messick's (1995) model may be limited to depicting the role of distributive fairness on negative outcomes. Further research is needed to establish the validity of this supposition.

One obvious implication of our findings is the importance of outcome, and in particular, tax refunds for subsequent compliance. Tax authorities could increase the incidence of tax refunds in several ways: 1) Increase employer income tax withholdings at source; 2) Decrease the instalment threshold for individuals, which would in turn increase the amount of instalments; and 3) Introduce a withholding tax on domestic interest and dividends (Li 1995). Any of these tactical changes would increase the amount of income taxes collected by or on behalf of taxpayers and increase the tendency of taxpayers being in a tax refund position, which would increase tax compliance.

Another implication for tax authorities of our research is that it suggests that procedural fairness can improve compliance, irrespective of outcomes. Thus, it is important for taxpayers to perceive that tax authorities are even-handed in their application of tax procedures, and it follows that it is critical for tax authorities to ensure that taxpayers perceive that tax procedures are fair. Additional research on the ways and means to increase procedural fairness in the tax context may have practical implications that can be translated into increased tax compliance.

Our findings also show that distributive fairness can also increase compliance, when taxpayers have been in refund positions. This in turn reinforces the importance of positive outcome as a voluntary tax compliance strategy for tax authorities, and suggests that in conjunction, tax authorities could also use distributive fairness information. For example, in Canada, personal tax rates have declined marginally over time at both the federal and provincial levels, so tax authorities could remind taxpayers of this fact directly on a tax form (where taxpayers receive an outcome), thereby activating taxpayers' ability to make referent comparisons.



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**Table 1 – ANCOVA**

Tests of Between-Subjects Effects					
Dependent Variable: Compliance Intentions					
OF = Outcome Favorability; PF = Procedural Fairness; DF = Distributive Fairness					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	133.394 <sup>a</sup>	9	14.822	5.343	0.000
Intercept	40.215	1	40.215	14.498	0.000
Gender	19.011	1	19.011	6.854	0.009
Detection	40.297	1	40.297	14.527	0.000
OF	37.19	1	37.19	13.407	0.000
PF	16.769	1	16.769	6.045	0.015
DF	7.893	1	7.893	2.846	0.093
OF * PF	2.931	1	2.931	1.057	0.305
OF * DF	11.553	1	11.553	4.165	0.042
PF * DF	0.417	1	0.417	0.15	0.698
OF * PF * DF	2.491	1	2.491	0.898	0.344
Error	596.388	215	2.774		
Total	3535.25	225			
Corrected Total	729.782	224			
<sup>a</sup> R Squared = .183 (Adjusted R Squared = .149)					

**Table 2 – Cell means for experimental conditions**

FAVOURABLE OUTCOME		Distributive Fairness	
		Fair	Unfair
Procedural fairness	Fair	4.52 (1.92)	3.81 (1.14)
	Unfair	4.03 (2.13)	3.53 (1.66)

UNFAVOURABLE OUTCOME		Distributive Fairness	
		Fair	Unfair
Procedural fairness	Fair	3.39 (1.61)	3.48 (2.05)
	Unfair	2.83 (1.88)	2.75 (1.53)

Figure 1 – Graph of two-way interaction between Outcome Favourability and Distributive Fairness

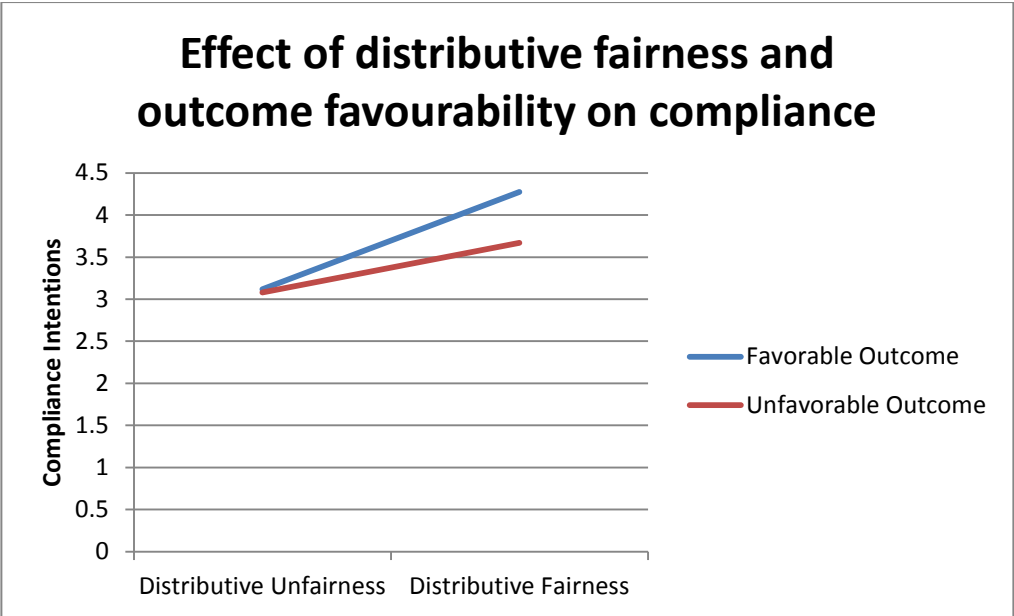
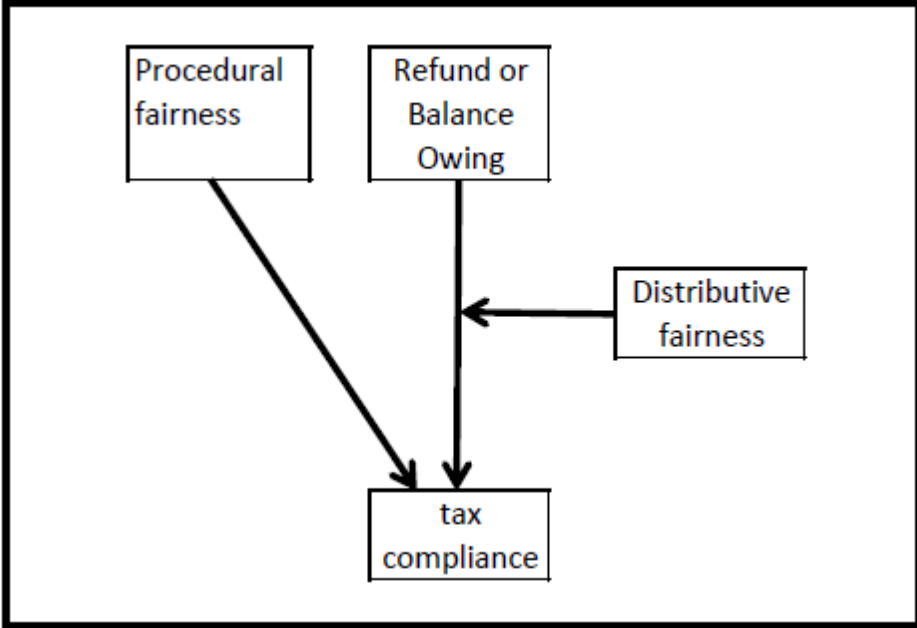


Figure 2 –The Effect of Outcome Favourability with Procedural and Distributive Fairness on Tax Compliance



### Appendix 1 – Experimental Instrument

*Please read the following scenario carefully and answer some follow-up questions. Imagine that you are Jason.*

Jason and his associate Skylar were partners in a landscaping business. In 2011, they were both paid the same salary.

On his 2011 tax return, Jason reported his salary income, and had an RRSP deduction. He prepared his tax return using tax software and filed his 2011 tax return on time. His calculations showed he had no balance owing or refund.

#### OUTCOME MANIPULATION

**FAVOURABLE** - After filing his tax return, Jason received his “Notice of Assessment” from the Canada Revenue Agency (CRA). The Notice of Assessment is a form that the CRA sends to all taxpayers after processing their returns. To Jason’s surprise, the CRA had refunded him \$800.

**UNFAVOURABLE** – After filing his tax return, Jason received his “Notice of Assessment” from the Canada Revenue Agency (CRA). The Notice of Assessment is a form that the CRA sends to all taxpayers after processing their returns. To Jason’s surprise, the CRA required him to pay \$800.

#### PROCEDURE MANIPULATION

**FAIR** – The CRA identified that there was an error in the way the RRSP deduction was calculated. Upon further examination, Jason realized that the CRA had made a mistake. Upon phoning the CRA and explaining the situation, Jason was told to send in a brief note to the CRA outlining their error, and the mistake would be corrected.

**UNFAIR** – The CRA identified that there was an error in the way the RRSP deduction was calculated. Upon further examination, Jason realized that the CRA had made a mistake. Upon phoning the CRA and explaining the situation, Jason was told that there was nothing that could be done at this time.

#### DISTRIBUTIVE MANIPULATION

**FAIR** - Jason and Skylar were identical in every respect for tax purposes. Both paid taxes at 50%.

**UNFAIR** – Jason and Skylar were identical in every respect for tax purposes. However, Jason paid taxes at 50%, and Skylar paid taxes at 20%.

### **Dependent Variable – compliance**

#### COMPLIANCE

1. In the future, Jason would pretend ignorance and not declare all the cash to the CRA.
2. In the future, Jason would be tempted not to declare all the cash on his tax return.

### **Alternate measure for compliance**

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1. In the following tax year (2012), Jason again withdrew the same salary as Skylar, but also earned additional cash payments totaling \$4,200 for work he did on the side. How much of the \$4,200 in cash do you think Jason would report? (circle the amount)

\$0 \$700 \$1,400 \$2,100 \$2,800 \$3,500 \$4,200

2. If you were Jason in 2012, how much of the \$4,200 in cash would you report?  
Write amount here: \_\_\_\_\_

*Part 2. Please read the following statements and indicate your level of agreement by circling the appropriate number. [note: 7-point Likert scale; 1=Strongly Agree; 7=Strongly Disagree]*

### **MANIPULATION CHECKS**

1. Which of the following happened to Jason?
  - a) Jason received a refund from the CRA.
  - b) Jason owed money to the CRA.
2. Which of the following happened to Jason?
  - a) The CRA corrected their error.
  - b) The CRA did not correct their error.
3. Which of the following statements is most accurate?
  - a) Jason paid the same rate of tax as Skylar.
  - b) Jason paid a much higher rate of tax compared to Skylar.

### **MANIPULATION EFFECTIVENESS CHECKS**

#### OUTCOME FAVORABILITY

1. Jason was happy with the outcome presented on the "Notice of Assessment".
2. The CRA's assessment was favorable to Jason.
3. Jason would have been pleased with the result of the CRA's assessment.

#### HORIZONTAL EQUITY

1. Jason paid a fair amount of income tax compared to Skylar.
2. Jason's share of income tax was fair when compared with Skylar.
3. Compared to Skylar, Jason paid a fair amount of tax.

#### PROCEDURAL FAIRNESS

1. The CRA's approach in handling Jason's situation was fair.
2. The methods followed in handling Jason's situation were effective in ensuring that he was treated fairly.
3. Looking back, the procedures used to handle Jason's situation were fair.
4. The procedures followed by the CRA were fair.

### **OTHER QUESTIONS**



TRUST (from Murphy 2004)

1. Generally, taxpayers trust the CRA.
2. Generally, the CRA is trustworthy.
3. The CRA is trusted to administer the tax system properly.

DETECTION

1. Generally, the CRA cannot detect cash transactions.
2. Unreported cash transactions are not likely to be detected by the CRA.

NORMS (from Bobek et al 2007)

1. It is socially acceptable to avoid paying taxes by whatever means possible.
2. It is ethical for taxpayers to do anything they can get away with to avoid paying taxes.
3. Most people who are important to me would think it is OK to avoid paying taxes.

**COMPREHENSION & DEMOGRAPHIC QUESTIONS**

*Please answer the following demographic questions.*

- 1) Your gender (circle one):    male=1                  female=2
- 2) Have you ever had dealings with the CRA? (circle one)    yes=1    no=2
- 3) Your present age: \_\_\_\_\_ years
- 4) The number of months of your full-time work experience: \_\_\_\_\_
- 5) For approximately how many years have you filed an income tax return? \_\_\_\_\_
- 6) Who usually prepares your tax return? (circle one)                  I do    my spouse    paid preparer    other
- 7) Please indicate your highest level of education completed by circling the appropriate category:  
                High School    Community College    Undergraduate degree    Master's degree                  Doctorate  
Other
- 8) Please indicate your approximate annual income for 2012 by circling the appropriate category:  
  
less than \$25,000  
  
between \$25,000 and \$50,000  
  
between \$50,001 and \$75,000  
  
between \$75,001 and \$100,000  
  
≥ \$100,000  
  
Prefer not to answer