The Company You Keep: The Influence of Peer Groups on Tax Compliance

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ABSTRACT

As judged by the size of the gap between the income taxes that should be paid and those that are paid, tax compliance will continue to be an important topic for the accounting literature. Although many believe that peer groups can influence the intention to pay taxes, the effect has been inadequately demonstrated. Using data created by an experimental tax task, this study shows a pervasive peer group influence. This result is not limited to family members, not stronger for different income types, and not compromised by taxpayer belief in the morality of tax paying. Implications for research and practice are offered.

Key words: tax compliance, peer influence, tax morality, income types

Data Availability: Data are available from the first author upon request

INTRODUCTION

Income tax compliance represents a topic of enduring consequence for government, accounting practitioners and the academy. Forces of the current day, including declining voluntary participation (IRS 2016), growing distrust of the national government (Zeleny and Thee-Brenan 2011) and a reduced governmental ability to audit returns (IRS 2018; Rubin 2019) combine to heighten our interest in this topic. Trending the most recent estimate of the unpaid taxes up from the last estimate (IRS 2016) suggests that this is a half-trillion-dollar problem.

The study of tax compliance began a half century ago by couching the issue in economic terms. A literature that assumed attempted utility maximization suggested variables such as penalty magnitude, audit rate and marginal tax rates should be considered (Allingham and Sandmo 1972; Becker 1968). As the limitations of pure economic reasoning were more broadly recognized (Alm and Torgler 2011), this literature began to reconfigure tax compliance as a social-psychological phenomenon. This called attention to variables such as perceived fairness

(Collins, Milliron, and Toy 1992; Wartick 1994), moral obligation (Hanno and Violette 1996; Bobek and Hatfield 2003) and social norms (Wenzel 2004; Bobek, Hageman, and Kelliher 2013).

This study continues the social-psychological line of inquiry with a primary interest in the role of peer groups. Whereas many studies suggest that the attitude and actions of similarly situated others may be a consequential influence on taxpayers (e.g., Jackson and Milliron 1986; Onu and Oats 2016; Alm, Clark, and Leibel 2016b), convincing empirical confirmation of this effect has not been produced. Part of the problem has been in specifying who is meant as the source of this interpersonal influence. That some people might exert a more powerful influence than others on tax compliance behavior needs to be evaluated.

When considering any external influence upon taxpayers, researchers should not discount the fact that the fulfillment of obligations is a moral decision. Even if the law did not specify specific penalties for deviance, or if the probabilities of being detected were not large, some people would feel obliged to "do the right thing," which in this instance would be to support and honor the legitimate claims of government. If taxes are the price of a civilized society, whether a person feels the need to pay their fair share may be a consequential part of this decision.

This paper produces results that suggest that peer influence can distinctly lead to more non-compliance. Peer influence is sufficiently powerful to be consequential whether it comes from family or non-family sources. It also is undiminished by moral beliefs and by psychological variations attributable to how income has been produced.

The balance of this paper is organized into four subsequent sections. The first provides a literature review that culminates in testable hypotheses. The second section details the methods

by which these hypotheses were tested. The next section summarizes the results of these tests. The final section discusses the results with consideration of implications for theory and practice, and limitations of this work.

LITERATURE REVIEW

The decision whether to comply fully with the tax law, resulting in higher payments to the taxing authority, involves many factors. Efforts to do justice to this terrain have consumed book length treatments (e.g., Dubin 2012) as well as comprehensive reviews of many years of academic work (e.g., Fischer, Wartick and Mark 1992). In this section, we aspire to provide the slice of this work that pertains to peer influences and the major reasons that such influences might not be salient.

Peer Influence on Tax Compliance

Sociological analysis is predicated upon the existence of norms for collective behavior. Societies exist and draw strength from common behaviors that represent the furtherance of collective interests. Individuals in a group are expected to make sacrifices in terms of freedom or the unilateral use of resources in order to acquire value that could not be done on an individual basis. In the most nominal sense, societies encourage sacrifices from all to invest in the dedicated projects chosen by leadership. Since the sacrifices of some would be undermined by the refusal to sacrifice by others, some mechanisms of enforcement become necessary. This process involves both formal and informal elements, all of which are aimed at maximizing the realization of shared objectives. The formal side involves the construction and maintenance of legal codes and penal/financial sanctions that remind people that non-cooperation is likely to be costly,

disagreeable and therefore to be avoided. For these purposes, deterrence theory has organized how people react to the costs and benefits of violations.

On the informal side, the harsh consequences of the law and those that enforce it tend to be held in abeyance perhaps by reducing the gravity of the behavior in question or by discounting the probabilities that the full weight of enforcement will be brought to bear. Into such a space, referent theory can be deployed. Here we expect that one person's behavior can be predicted by what that person observes and learns from the behavior of similarly situated others. In other words, people are influenced by emergent standards for action that they glean from well-positioned others. This model suggests that deviance from official rules will become more likely if others are seen to deviate. Oppositely, conformity to rules requires some assurance that such acquiescence is being done by others. A person refers to manifested standards rather than to espoused-in-theory templates, in part because they create the impression that standards that appear obligatory are in fact optional, at least as testified by people who apparently do not suffer for their purposeful deviance. This amounts to a referent theory, wherein individuals use the behavior and advice of others as signals for their own actions.

Referent theory and deterrence theory present some degree of overlap. Since referent theory is solidly grounded in communication and actual observation, it includes the transmission of a subjective variant of the formal deterrence information. If people do not have access to valid information about the consequences of deviance, they depend upon what others do and say about projected costs and benefits. Thus, we would suspect that peers would be a powerful influence whether or not they actually knew more about something of importance to the person who observed them.

The income tax obligations of US citizens and residents serves as ideal application of these theories. People subject to the tax face a bevy of costs which include fines and penalties that increase their total obligation in proportion to the magnitude of their underpayment, the temporal delay since the payment deadline, and the circumstances that would suggest their motive (intentionality, knowledge). In certain circumstances, criminal sanctions are appropriate. The benefits of non-compliance are obvious in that a person is able to retain a larger amount of the resources that they currently possess. This consequence may have the strong justification of having been earned by an individual, and that confiscation should always be resisted. The weighing and costs and benefits are made more complex by the general inability to estimate the profitability of detection. The US income tax system largely depends upon the self-reporting of transactions that trigger tax liability. In some instances, the government's ability to discern a non-reported event varies from small to non-existent (IRS 2020). Society is rife with misconceptions about the income tax and the collection process (Turbotax 2019). This situation would seem to empower role models, especially those who professed great subject matter knowledge and seem to be successful in the pursuit of their own communicated beliefs.

The first and most intuitive approach to the study of peer influences on tax paying behavior was to survey taxpayers. People report that what other people do and say about their tax paying matters (Jackson and Milliron 1986). People are less compliant when they believed that non-compliance in their community was higher (Vogel 1974; Witte and Woodbury 1985).

The attempt to further such a relationship with tighter research controls led to experimental designs aimed at the peer question. Early experiments such as Hite (1988) offered no support for the influence of peer compliance, but may have been the result of a weak experimental manipulation (Trivedi, Shehata, and Lynn 2003). More recent studies, using

stronger peer suggestions have found support for peer effects (Trivedi et al. 2003; Alm et al. 2016a).

One of the advantages of the experimental method is closer approximation of the tax payment decision. Whereas surveys content themselves with questions involving estimates about what most people do (e.g., Maroney and Rupert 2001), experiments vest participants with hypothetical income and ask for intended reporting behavior attributable to it. The peer effect becomes possible when participants also are given information about what similarly situated others are doing. Apparent design choices in such work include those pertaining to who the peer is described to be, how much money is involved, and the circumstances under which the income has been generated.

Knowledge about what other people are doing will vary in importance to more specific detail about the relationship of these people to the taxpayer, as well as their representativeness of other taxpayers. Hite's (1988) manipulation involved information about "a close friend." Alm et al. (2016a) provided information about the reporting behavior of "neighbors." Trivedi et al. (2003) did not specify who the other taxpayers were, but did indicate that it was a large group.

The amount involved in transactions in experiments matters for at least two reasons. Smaller amounts might be perceived by experimental participants as less detectable by the taxing authorities, and therefore more susceptible to non-compliance. However, larger amounts present a larger potential benefit to a non-complier. Hite (1988) suggested a $1,000 item, which is so small that it might not have offered participants enough motivation to violate social norms. Other experiments bypassed the question of how-much-is-enough. Trivedi et al. (2003) denominated the transaction in a foreign currency without providing exchange rates. With amounts ranging up to 10,000 Lira, we suspect most participants assumed this was less than 10,000 US dollars, but

considerably more than Hite's $1,000. When Alm et al. (2016a) told participants that other people often did not even file tax returns, this necessarily translates into much larger evasion sums than the other studies.

The tax law is highly nuanced in that it aspires to consider the countlessly different ways that people in a free enterprise economy might be made to have more command over goods and services. The tax code also contemplates whether taxpayer expenditures of a near infinite variety should be properly considered as offsets against their tax liability, either in pursuit of substantive fairness or action incentives. Estimates of four million words of primary tax authority (Tax Foundation 2014), now nearly a decade old, should be no surprise. This strongly suggests that the panoply of contextual variation should not be ignored. The simplest and most often used research strategy is to describe a cash inflow that is unlikely to involve other documentation or tax consequence. For example, the hypothetical taxpayer might be asked to perform services for cash by another person where the latter would not have a tax deduction. This was done by Hite (1988) and then followed by many others. Such a choice conveniently allows for peer and other influences because a cash transaction exists as a coded message that diminishes concern over chances of detection and the incurrence of other significant non-compliance costs.

However intuitive peer effects might be as a metric of actually enacted social norms, researchers have shown that other factors might be involved. Notably, Hanno and Violette (1996) combine peer effects with participant attitude toward tax compliance. Attitudes usually are thought of as personal beliefs are not experimentally manipulated, but are instead elicited from participants, usually by using established scales of measurement. As found by Bobek et al. (2013), these beliefs can have a strong impact on tax paying behavior, and should not be ignored.

The incorporation of both social norms and personal beliefs could be seen as a test of external or internal directedness. The former taps into a wide literature wherein people follow what the group does or does not do (Ajzen 1991; Jones 1991; Brass et al. 1998). This result is believed more likely if the participant strongly identifies with the focal group (Kekes 1983; Westerman et al. 2007). Taxpayers who are less influenced by others might be exhibiting an ethical position in that their belief in what is considered correct behavior achieves more importance. Although ethics has tended to be neglected in the empirical tax compliance literature (Alm and Torgler 2011), its role has long since been suspected (Song and Yarbrough 1978).

The ethical dimension of tax compliance poses some difficulties, most due to the unique nature of tax obligations. People who might otherwise be considered ethical citizens do not necessarily support tax compliance as an absolute behavioral dictate. For example, people who had a higher Protestant Work Ethic tend to be opposed to taxation (Furnham 1983) presumably because taxation mitigates the expression of what they have earned and should therefore be entitled to enjoy. Although most would conclude that religious people are ethical people, all religions are not equal in their tax compliance tendencies (Boone Khurana, and Raman 2013). Furthermore, communities marked by religious homogeneity may even be less compliant (Alm et al. 2016b). Thus, it appears as if tax paying beliefs might require a specific measure rather than be subsumed by the expression of a more general ethical type.

Work toward a tax morality concept has discovered considerable national differences (Alm and Torgler 2006) which mostly relate to attitudes about how governments might use the tax revenue. In order to accomplish legitimate objectives, people might have to develop counter-norms and re-define what is considered correct in some countries (Torgler and Schneider 2007). Potential recursive causality might also exist between tax beliefs and more comprehensive

systems of ethicality (Wenzel 2004) and moral obligation (Reckers Sanders and Roark 1994). Bokek and Hatfield (2003) also show a considerable degree of autonomy between tax beliefs and moral obligation.

Hypothesis Development

Although strong support has existed for many years that people are influenced by other individuals and groups (Merton 1957), the exact specification of this effect is much less clear. People are not autonomous but tend to be networked by biological relationships and the proximities created by common pursuits. That social norms are transmitted through these channels is quite believable. However, the ties between people vary in their strength and their redundancy (Granovetter 1983). The family is a primary vehicle of socialization for most people (Maccoby 1994). The differentiation between right and wrong in general terms is very important socialization content (Waldron et al. 2014). Although discussions of the tax code and the relevant compliance behaviors that should occur are much less likely, the generic authority of family members, especially those of parents over their children, is likely to be strong.

The first objective of this research is to confirm the existence of peer effects on tax compliance. However, instead of a mere replication of most past studies that would have only contrasted peer influence with the absence of peers with tax messaging, we extend this with a treatment of expectations centering around types of peers in a second part. For the peer effect to be a pure peer effect, it should not matter who constitutes the other. The mere fact that influence is exerted needs to be the central point, and it should not vary across relationships with the taxpyayer.

> **H$_{1a}$: Taxpayers with a non-compliant peer influence will comply less with the tax law than taxpayers without a non-compliant peer influence.**

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H$_{1b}$: Taxpayers with a non-compliant family member providing influence will not comply with the tax law more or less than a taxpayer with a non-compliant non-family member providing influence.

The second hypothesis returns to the differentiation of peer effects in accordance with the nature of the opportunity to not comply with the tax law. While there is no shortage of different ways to earn money and not report it as income, they tend to introduce other dimensions to the compliance decision. For example, subtle types of income may be difficult for participants to understand. Other forms of less common income may engage fairness feelings which have been connected to voluntary compliance (Sheffrin 2013).

For these reasons, we distance ourselves from tax scenarios that vary in terms of their visibility to the taxing authorities. The vehicle of tax evasion is the anonymity of the cash form, following the tradition of this literature. Instead, our manipulation pertains to the potential psychological meaningfulness of different forms of income. For this purpose, we leverage an important type bifurcation in the Internal Revenue Code. Income can be earned or unearned depending upon whether or not the time and effort of the taxpayer produced it. In many instances, unearned income is given less desirable tax treatments (see Murphy Higgins and Skalberg 2020). However, the actual divergent tax treatment is not the point. Instead, we focus on the possible psychological meaning difference between income that was produced by personal effort (earned) and that which came to the taxpayer in a more passive manner (unearned). Although this distinction has not appeared in the literature, its advantage is that it does not require participants to possess knowledge of the tax code or the tax collection and enforcement process. The distinction made might trigger disparate fairness considerations, with not being able to retain all of the money that was more difficult to obtain being seen as more unjust. On a more basic level, introducing different types of income tests whether income tax compliance is a

function of the peculiarities of the income tax rules. If types of income do not matter, the decision-making devolves to the more generic advantages of retaining money in the face of norms that make such behavior problematic.

The literature on tax compliance has included the consideration of varying tax triggering events. Taxpayer surveys have long since documented varying attitudes about not accurately reporting different types of income (e.g., Yankelovich and White. 1985). Public perceptions about differential degrees of fairness in tax treatments may be the fundamental reason for behavioral differences (Roberts 1994). Experimental work has also documented the sensitivity of non-compliance to the specific scenario that has been presented. However, little explanation exists for such variation. In the context of this study, peer influence may be more salient in some contexts than in others. However, the literature has not progressed to the point where a specific direction can be expected. We also cannot predict how the advice from different types of peers will interact with different types of tax triggering economic events. In order to evidence a strong peer effect, income type should not matter.

> **H2: Taxpayers with non-compliant peer influences will comply less regardless of the type of income received.**

The last hypothesis revives the ethical component of tax compliance, whose importance has been stressed by many writers (e.g., Henderson and Kaplan 2005; Cohen, Manzon and Zamora 2015). Morality may be grounded in formal religious thought or may be a secular understanding of how best to pursue collective or societal interests. Morality may require an individual to scrupulously follow all laws of a legitimate government, or may transcend such laws toward a more personalized separation of right and wrong. While these matters are difficult

to disentangle, present purposes merely need to suggest that morality should be individually determined, and therefore offer some degree of resistance to peer influence.

Ethical obligation or moral sense has been a favorite construct in the tax compliance literature, perhaps as a reflection of the unambiguous legal compulsion of tax paying and the wishes of researchers to assist with the process. Research has debated the proper way to conceptualize and measure morality, but overwhelmingly agrees with the proposition that higher levels of morality are associated with lower degrees of tax non-compliance (Gordon 1989; Reckers et al. 1994; Orviska and Hudson 2003). Paying taxes should not be viewed as an amoral lottery or game that one plays against the state. Only with some difficulty can purposefully inaccurate tax compliance be seen as ethically neutral.

Our interest in morality/ethicality pertains to its consequence for peer influence on tax compliance. Based on the previous work that morality constitutes a sense for the appropriateness and necessity of behavior (Schwartz 1977), we suspect that a well-developed sense of such would make one less susceptible to peer influence. Strongly moral people should have an unwavering compass that guides them to right behavior, and therefore should be little influenced by what others think or are doing. On the other hand, people who have not committed to an *a priori* moral position may be more cognizant of public opinion. Such people may be more susceptible to following the advice or example of a well-positioned peer.

The impact of morality on peer influence for tax compliance purposes is made less certain by the range of a person's moral sense. The otherwise righteous have been known to evade taxes, in part by looking at tax compliance as other than moral activity (Reckers et al. 1994; Bobek and Hatfield 2003). Cohen et al. (2015) adds that people tend to take an issue-

specific approach to forming attitudes about the tax law, again suggesting the generalized moral

positions may not be able to predict specific tax treatments (see also Roberts 1994).

Consequently, a tax specific morality measure may be at play On the other side, many reasons

other than morality exist to adequately comply with tax regimes. Some of these involve how a

person manages their identity with others (Grasmick and Bursik 1990). Nevertheless, the

following hypothesis involving morality is proposed:

> **H3: Taxpayers with a higher or lower tax morality will be affected to the
> same extent by peer influence in their tax compliance decisions.**

In sum, three hypotheses structure this research. The first establishes peer effects and

their source nuance. The second two consider whether peer effects can persist in a world marked

by variable tax situations and by different types of taxpayers.

METHOD

Following the trajectory of the literature, an experimental approach was taken to test the

hypotheses. This called for the manipulation of two variables and the collection of information

about a third. To focus the study on peer influence, this variable required the most elaboration.

Therefore, three levels, including no peer influence, family peer influence and coworker (friend)

peer influence, were used. Peer influence was invariably non-compliant in advocated direction,

with the hypothetical other party suggesting the non-necessity of reporting income. Participants

were randomly assigned to one of these three peer conditions, constituting the experiment's main

manipulation. These types of peer influence were chosen based on survey evidence showing that

discussion of tax matters with family was highly likely, and that such discussions with non-

relative coworkers were not unusual (Stalans et. al 1991).

The second experimental manipulation involved the assignment of participants to different income-receiving scenarios. People were vested with the receipt of $10,000 cash for work performed on a one-time casual basis, or $10,000 cash received for the rental of property. While both represent unequivocal taxable income, the first is earned income requiring taxpayer effort while the second is unearned income that involves no incremental taxpayer effort. Whether participants react to the advice they receive about the tax scenario that they see is the substance of the second hypothesis.

The experiment and associated questions were administered through Qualtrics, the online survey platform commonly used for academic research of this type (Sauermann and Roach 2013). Qualtrics controlled the flow of information to participants, maintaining its non-recursivity and helped ensure adequate response from participants.

Subjects for the experiment were recruited with Amazon MTurk, a crowdsourcing online platform increasingly used by researchers for many purposes (Buchheit et al. 2018). MTurk assembles individuals willing to do online tasks for relatively small monetary payments. MTurk-sourced individuals were appropriate for this research since this source is likely to deliver a broad cross-section of the US population similar to the taxpaying population (Goodman, Cryder, and Cheema 2013; Mason and Suri 2012). The eligibility criteria imposed for this study was minimal, consisting of US citizenship, adult age (>18yrs) and fluency in the English language. The first two of these criteria are consistent with our wish that participants have at least a modest degree of familiarity with the obligation imposed by US taxation.

Participants were presented with a tax situation facing a hypothetical person named Anne. Anne, having received money in the last tax year, pondered whether to report its receipt

and pay taxes upon it. Anne has received no official correspondence on her hypothetical

transaction and has reason to believe that no other documents exist that would reveal the nature

of the transaction to the IRS. Some participants receive information about the advice given to

Anne by others wherein Anne is encouraged not to include the cash inflow as an item of income.

Other participants receive no peer opinions.

With participants asked to imagine themselves as Anne, they needed only to report

whether or not Anne will include this specific inflow as taxable income. This response was

coded 1 (report) or 0 (do not report). In order to make this choice more robust, participants also

were asked to quantify the amount Anne would report, assuming she did not report the full

amount. This variant created a continuous variable and accommodated participants who might

prefer compromise positions, since it enabled answers between 0 and $9,999.

Following participant response to the experimental situation, the protocol required

participants to answer some questions, most of which are designed by Likert-scale responses.

Most importantly, some of these questions are designed to measure their tax morality, a variable

needed to test Hypothesis 3. Principal components analysis of the data produced by these

questions yielded evidence supporting an interpretable single factor solution. Also included were

manipulation check questions, and those designed to capture standard demographic information.

For the most part, variables were measured in an intuitive categorical manner. Peer

influence was coded as a 0, 1 or 2 depending upon participant assignment to no peer, family peer

or coworker peer conditions. Income type was differentiated as a 0 for the earned income and 1

for unearned income. Tax morality was measured as the average of four Likert-scale questions

designed to fit within the four-component model of morality from Rest and Narvaez (1995) and

Bebeau (2002). A principal components analysis performed on the four Likert-scale questions revealed a single component explaining 72.82% of the total variance. This indicates the appropriateness of a combined measure that averaged the responses to the four Likert-scale questions. Component loadings and communalities of the rotated solution are presented in Table 1.

[Table 1 here]

Several control variables were included in the analysis, all drawn from questions answered by the participants. Social desirability was measured with two questions whose answers were averaged and whose substance was unrelated to tax compliance from Paulhus (1991). Fairness has been associated with income tax behavior in prior research (Collins et al. 1992, Wartick 1994; Torgler 2007) and was incorporated in this study with two measures. Specifically, overall system fairness was measured consistent with Milliron (1985). Additionally, a self-designed question was incorporated to measure the importance of fairness of the tax system, a factor suggested to influence tax-reporting behavior (Kim 2002). General tax norm compliance was measured with two questions adapted from Milliron (1985). Perceived detection risk (Fischer et al. 1992; Carnes and Englebrecht (1995) used three separate measures. Consistent with Bobek (2013), two questions evaluate perceived general audit rates and the participant's expected likelihood of being audited. A third measure, consistent with Carnes and Englebrecht (1995) captures perceived likelihood of detection in an audit if income of the specific scenario were not reported.   Participants were asked about past non-compliance behavior (one binary choice question) and past tax audit experience (one binary choice question). Because social desirability is a general reliability threat, it merited special attention in the analysis.

The data collection took participants a little less than its budgeted 20-minute time, and resulted in an average pay of $3.00 to participants. Since this rate of pay exceeded the US minimum wage of this time, we have reasonable assurance that participants felt properly incentivized.

Two manipulation checks were used to determine if participants devoted sufficient attention to the hypothetical scenarios. Whereas no participant failed to identify the correct source or absence of peer influence, eight (2.9%) failed to classify the non-compliance direction of that advice. These observations were removed from the analyzed data.

RESULTS

The data collection yielded 267 valid participants. These came from 37 states and were not geographically clustered. The majority of participants represented taxpayers who had income between $25,000 and $100,000 in the last tax year. Seventy-five percent of participants reported their age between 35 and 55. These people verified that they regularly consulted with family, coworkers and friends regarding income tax matters.

Table 2 Panel C shows the distribution of the participants across the six cells (three peer conditions x two income types) of the experiment. The random assignment of people was successful, as shown by the small variation in participant numbers from a low of 42 (coworker, wages) to a high of 48 (no peer, wages).

[Table 2 here]

The mean values of the two dependent variable versions are summarized in Table 2 Panels A and B. With reporting the transaction configured as a binary variable, Panel A values

that are closer to 1.0 indicate more participant support for reporting the income item. The second dependent variable version (dollars reported), as shown in Panel B, tell a consistent story. This time, numbers closer to 0 indicate more non-compliance for the $10,000 item. In both Panels, the presence of peer influence aligns with a lower reporting likelihood or amount and less dispersion of assertions of intended behavior.

The examination of variable correlations (Table 2 Panel D) supported the design intention that the two dependent variable versions are not that distinct. Their correlation of 0.74 suggest that the binary and continuous versions both measure tax compliance, rather than other phenomena. The review of correlations also sustained the need for some of the control variables that produced significant correlations with the variables involved in the hypotheses. Notably, six of the controls are significantly ($p<0.001$) correlated with tax morality.

Tests of Hypothesis 1

Binomial logistic regression, using the binary version of the dependent variable, was performed to determine the role of peer influence. The model was significant at the $p < .001$ level, explaining 16% of the variance and correctly classifying 68.5% of the cases. The PeerInfo predictor variable is significant, indicating a 4.6 times greater odds of the income not being reported. Table 3 Panel A expands on these results.

[Table 3 here]

Table 3 Panel A also contains the results when covariate control variables are added to the model. The PeerInfo variable retains its significance at $p < .001$. Variance explained

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increases to nearly 30%, and case classification rises to 74.5% with a very similar odds multiple (4.76).

The other version of the dependent variable could be tested with OLS regression. This was done two ways – one only with the social desirability control variable and the other with all control variables. Table 3 Panel B shows these results. The first equation supports the conclusion that peer influence increases non-compliant behavior ($F(2, 264) = 11.96$, $p < .001$). In dollar terms, non-compliant peer influence translates into $1,900 less reported income.

The incorporation of the large set of control variables fails to alter this conclusion. The F statistic of the model is still significant at $p < .001$ ($F = 4.10$). The reported income dollar difference is only slightly less ($1,708).

In sum, all tests create evidence that supports the first part of the first hypothesis. Having non-compliant peers who express their opinion is associated with less taxpayer compliance. H_{1a} is supported.

The second part of the first hypothesis requires the separation of the influence of family and coworkers as they might relate to tax compliance. Again we consider both versions of the dependent variable. Logistic binomial regression regarding the decision to report the income or not resulted in a significant model at the $p < .001$ level. Here, the no-peer influence group served as the referent group, allowing for comparison to both family influences and those of a coworker. The family peer group exerts more influence on the compliance decision than does the coworker peer group. However, the difference is not statistically significant. In the absence of covariates, those with family influence and coworker influence produce 82% and 75%, respectively, less

total compliance. These results are replicated when the tested model includes all covariates. Table 4 Panel A provides the full results of these tests.

[Table 4 here]

The dependent variable expressed in dollars of possible partial reporting was again approached with OLS regression. Mirroring the approach taken for H_{1a}, two model versions are used. Both regressions achieve overall significance, with F statistics of 8.28 and 3.81. Although the regression with full covariate set shows, using unstandardized coefficients, significant differences between family and coworker peer influence, such is not confirmed based on the ANCOVA and post-hoc tests. Panels B and C of Table 4 provides the details on these tests.

In sum, the balance of the evidence on the difference between peer groups supports H_{1b}. We cannot say that family exerts stronger influence than coworkers on tax reporting behavior. Thus, peer influence is a more generalized phenomenon.

Tests of Hypothesis 2

The second hypothesis introduced the possible influence of the substantive tax situation upon compliance. Essentially, this expectation anticipated no variation between those being influenced by peers in how they processed the prospects of not reporting income derived in two quite different ways. To see if earned income differed from unearned income, t-tests were performed for both versions of the dependent variable, tax compliance. In line with expectations, participants in the rental situation were more likely to fully report the $10,000 that was received than were participants who received the same amount for services rendered. However, the difference was not significant (t[170] = -0.268, p > .10). The same result was produced when

considering the dollar amount of partial reporting ($t[170] = -.326$, $p > .10$). These results were also confirmed with logistic and OLS regression, respectively. The basic conclusion is that the way that peer influence affects tax compliance is not influenced by this specific tax scenario seen by participants. Whereas the noncompliant peer reduces tax compliance by 75% for earned income (69% when all covariates are included), this increase in noncompliance is only slightly more for unearned income at 82% and 87%. Table 5 Panel A contains these results.

[Table 5 here]

Reverting to OLS regression for the second version of the dependent variable, the separation of results by tax scenario did not alter our general understanding about the importance of peer influence. Peer influence is significant in both rent and wage scenarios, although its level is reduced in the wage situation to $p < .01$ from the $p < .001$ level in the rent one. Those that saw the wage and rent scenarios reported income that was $1,567 and $2,228 respectively, and $1,157 and $2,112 respectively with all covariates in the presence of non-compliant peers. Table 5 Panel B reports these results.

In sum, the results are consistent with Hypothesis 2. Peer influence on tax compliance is not affected by the variation in tax situation when both earned and unearned income are considered.

Tests of Hypothesis 3

The final hypothesis introduces the influence of a personal tax morality as a potential moderator of peer influence. Specifically, we expected that those with high morality would be no less susceptible to peer influence even though its direction would encourage actions inconsistent

with that moral position. Testing this hypothesis was accomplished by adding a tax morality variable to the equations used to test Hypothesis 1a, and an interaction term involving both peer influence and tax morality. The same permutations were involved with the two different versions of the dependent variable, and the absence/presence of full covariate sets. Table 6 contains these results.

[Table 6 here]

In order to properly determine the relative influence of peers and decision makers, we first look at the significance of these variables with and without the interaction term, and then in the context of the large set of covariates. Table 6 Panel A contains this information for the binary version of tax compliance. Both the peer influence and tax morality variables were significant when in an equation by themselves, and together with all the covariates. Although peers still possessed the most influence on tax compliance, tax morality consistently exerted incremental influence as well. The two variables separately decreased and increased compliance by 79 and 76 times, respectively. In the regression with all of the covariates, peer influence and tax morality were the only significant variables. When the interaction term is added, no substantive difference results. Peer influence and tax morality continue to be significant. The interaction term and the covariate terms are not significant. Table 6 Panel A shows these results.

Hierarchical multiple regression was used to evaluate the other version of the tax compliance dependent variable. Again, the interaction effect was included in non-initial versions of the regression. The first variables entering were peer influence and tax morality, both invariably significant. However, unlike the binary version, the interaction term enters in the next step, adding a significant ($p < .05$) incremental explanation of the tax compliance variance. The

version of the regression with covariates included does not differ in these results. Additional information exists in Table 6 Panel B.

Subsequent analysis on the nature of the interaction using Process (an SPSS subroutine) suggests that the inclusion of tax morality does not suppress the influence of peers, but instead magnifies it.

In sum, in the presence of a variable that captures the participants' personal feelings about the ethics of paying taxes, peer influence is undiminished. Whereas we should not discount the tax compliance importance of the personal opinions about right and wrong held by taxpayers, they appear not to act as a buffer against peer influence. On balance, H_3 is supported.

DISCUSSION

Tax compliance represents a very important and relatively poorly understood process. Its importance resides first in ensuring that the federal government has access to the resources that it needs to fulfill its many purposes, as have been determined by processes of law. Secondarily, tax compliance ensured that the planned degree of equity among taxpayers is actually realized. When a person fails to pay his/her taxes, those that do pay shoulder more than their fair share. The magnitude of the tax gap between what should have been paid and what has been paid suggests that considerable improvements in tax collection are needed. In the effort, the present research aspires to make a contribution.

Based on the intuition that people are not indifferent to what other people say and believe, we expected that influence would be exerted by peers upon intended tax paying behavior. This brought together the mandate of the law and the more elusive identification of

social norms. In a situation where coercive governmental influence has been degraded, the latter becomes more important. Prior research on tax compliance supported the intuition of interpersonal effects of this sort.

Using an experiment designed to isolate peer influence and to particularize its source, we support the basic idea that people are influenced by what they believe other people are doing. Taxpayers who have peers who tell them that compliance is not necessary, and therefore inconsistent with personal welfare, are less likely to report taxable income. These people do so despite the known legal sanctions that are in place for such behavior. The strength of peer influence should be appreciated in that context. Peer influence would be less obvious if peers were urging that the law be followed because of the built-in personal interest of doing so without these suggestions.

The results did not sustain the proposition that some peers exert more consequential influence than others. This research considered two obvious types of peers – family and coworkers. By using two sources of income that were not necessarily sourced in either the home or work situation, neither peer type possessed differential expertise regarding whether reporting should be done. This tended therefore to be referendum on whether additional trust should be extended to those who naturally would further the decision-makers' well-being. That this did not prove an advantage for family peers might suggest the special nature of tax advice.

The results could be interpreted as a validation of generic peer influence on tax paying. That family-sourced influence is not distinctly more consequential than that from non-relatives might indicate how desperate people are for tax guidance. If following the advice of others is an indication of trust, one would have expected a clearer distinction between relatives and others.

When quality personal knowledge is in rare supply, information from any source becomes more powerful, and people tend not to discount its veracity by virtue of its source.

Different types of income present different opportunities for taxpayers to evade their income tax paying obligations. However, accurate knowledge about how the government detects underpayments with "audit trails" should not be presumed to be widespread in the population. A more realistic assumption is the appreciation that irregular cash transactions are difficult for the taxing authority to trace. The current research presented two such transactions that would allow decision makers to make a reporting decision not completely driven by fear of the legal consequence.

The research sought to determine if the circumstances surrounding the receipt of cash could be associated with reporting variations. For these purposes, the payment for services rendered and for the use of one's property do not vary in the tax code's insistence that they are includable income. However, we felt that they might possess different meanings to individuals that would be consequential to tax reporting. Apparently, inflows of cash are more fungible, with participants failing to change their tax paying behavior in accordance with its origin. What might be more important than where the money comes from is where it might go, since the decision to comply necessitates an outward cash flow.

This research attempted to create tension between people that were outward directed and inner directed (Riesman, Glazer and Denney 2001). We suspected that the former exhibit very strong influence from peers. The latter, by virtue of their salient belief that tax compliance was the ethical choice, were expected to be more resistant to peer influence. In other words, those that better appreciated the ethical dimension of tax compliance should act in accordance with

their beliefs, and comply with the law notwithstanding what other people are telling them. However, this is not the case. Even though the tax morality works as anticipated, it is not sufficient to overcome the influence of peers that push even these "good" people toward non-compliance. Apparently, everyone is subject to the pressure created by knowledge of widespread non-conformity. From the perspective of protecting the integrity of the tax collection process, this is a very dangerous finding.

With a large number of control variables, this research attempted to reduce the unknown influence of alternative explanations. Only one proved to be worthy of note. Periodically, people's perceptions of tax fairness entered into the full explanation of tax compliance. People are apparently more reluctant to pay their legally required taxes if they do not accept the idea that others are doing likewise, in appropriate proportion. Since reasonable people can differ about this proportionality, tax fairness merits further consideration.

This research tried to embrace the fact that measurement is never perfect, and that the most reasonable of choices will leave something to be desired. Therefore, alternatives were offered when possible. Most importantly, two versions of the dependent variables were used throughout. Tax compliance is often binary where the taxpayer choices to fully report the transaction or pretend that it did not happen. Other taxpayers will pursue a middle path where the transaction is acknowledged as one that creates taxable income. However, the taxpayer purposefully reduces the amount, perhaps in an effort to retain more money by not reporting the actual amount, or to lessen the penalty by at least reporting some of the real amount. This called for a second version of tax compliance that allowed for the full range of partial payments. We also showed results with and without the covariate set. Although this did not make much

difference to the interpretations, we did not want to impose a singular alternative for the larger multidimensional picture of behavior.

This research is subject to the limitations common to all experimental work. Despite demographic-based resemblance to a cross-section of taxpayers, the ability of a relatively small sample to represent such a large population can always be questioned. Anyone can also problematize how seriously the hypothetical scenario was taken by participants. All experimenters can do is to assess attention and provide monetary incentives, as this research has done. These problems are compounded by the special situation of income tax research. This obligation raises strong passions among many, perhaps as a means to debate the proper role of government in a capitalistic economy. We included a social desirability control throughout the analysis in partial response to this. The results did not suggest that this control was very consequential. We also included other variables that sought to capture the relevant past experiences that participants might have had. However, we would not assert that these variables approximate the special feelings that people have about their own income tax obligations.

The study might have included more types of peers. However, this should not necessarily be the one that most people think is missing – the close personal friend who is not a coworker. Given the power and apparent pervasiveness of the influence effect on tax compliance, a better inclusion would be a very casual acquaintance or even a perfect stranger. Another possibility would be anonymous "advice" gleaned from the internet. We also could have introduced multiple peer voices which do not agree.

Future research could also explore why peer influence is so consequential. The significance of the tax fairness covariate in this research might provide a hint. If peers present

arguments grounded in relative terms, essentially triggering residual ideas of fairness, they might

be more consequential than other lines of persuasion.

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Table 1
Principal Components Analysis for Tax Morality Measure

Panel A: Components of the TaxMorality Measure

Item	Theoretical Component of Morality (Based on Rest 1986, and others)	Measure
MORAL1	Moral Motivation and Identity Implementation	I think it would be morally wrong to exclude income from my tax return, even if not reporting it would be undetected by the IRS.
MORAL2		Honestly reporting cash income fulfills my own personal moral or ethical obligations to society.
MORAL3	Moral Judgement	Citizens have a moral duty to obey all aspects of the tax law.
MORAL4	Moral Sensitivity	Cheating on taxes doesn't hurt anyone. (Reverse Coded)

Note: Participants indicated how strongly they agreed with the above statements on a 7-point Likert scale (Strongly Disagree to Strongly Agree)

Panel B: Results of Pricipal Components Analysis

Item	Component Loading	Communalities
MORAL1	0.926	0.857
MORAL2	0.858	0.736
MORAL3	0.858	0.736
MORAL4r	0.764	0.583

Note: Results of principal components analysis support that all measures are components of one factor, therefore a single measure for TaxMorality was calculated as an average score of these 4 items.

Table 2
Descriptive Information

Panel A: Means (SD) of Tax Compliance by Scenario using DV1*

	Peer Group		
	No Info	Family	Co-worker
Cash for Work	.45 (.50)	.16 (.37)	.19 (.40)
Cash for Rent	.56 (.50)	.17 (.38)	.20 (.41)

*DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).

Panel B: Means (SD) of Tax Compliance by Scenario using DV2**

	Peer Group		
	No Info	Family	Co-worker
Cash for Work	$4,210 ($3,430)	$2,200 ($3,190)	$3,210 ($3,320)
Cash for Rent	$5,170 ($3,740)	$3,000 ($3,630)	$2,730 ($3,460)

**DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in incredments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999). Means and standard deviations been converted from points to dollars on this table.

Panel C: Number of Participants

	Peer Group			
	No Info	Family	Co-worker	Total
Cash for Work	47	45	42	134
Cash for Rent	48	41	44	133
Total	95	86	86	267

Panel D: Means, Standard Deviations, and Pearson Correlation Matrix

	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) DV1	0.30	0.46	1.00														
(2) DV2	3.46	3.58	0.74 •••	1.00													
(3) PeerInfo	0.64	0.48	(0.34) •••	(0.26) •••	1.00												
(4) SocDes	3.35	1.32	0.08	0.13 •	(0.01)	1.00											
(5) TaxMorality	5.20	1.33	0.27 •••	0.28 •••	(0.08)	(0.03)	1.00										
(6) FAIR1	3.39	1.68	0.19 ••	0.18 ••	(0.10)	0.02	0.42 •••	1.00									
(7) FAIR2	5.00	1.79	0.05	0.01	(0.13) •	(0.02)	(0.07)	0.03	1.00								
(8) OTHERS1	65.06	19.75	0.13 •	0.15 •	(0.10)	0.09	0.25 •••	0.18 ••	0.05	1.00							
(9) OTHERS2	76.47	21.94	0.16 ••	0.17 ••	(0.06)	0.06	0.37 •••	0.18 ••	0.03	0.68 •••	1.00						
(10) DETEC1	2.35	1.45	0.11	0.09	0.04	0.03	(0.00)	0.01	(0.02)	(0.04)	(0.11)	1.00					
(11) DETEC2	14.04	14.35	0.14 •	0.12	(0.09)	0.11	0.04	0.04	0.08	(0.00)	0.01	0.26 •••	1.00				
(12) DETEC3	3.79	1.94	0.21 ••	0.16 ••	(0.11)	(0.04)	0.31 •••	0.07	(0.05)	0.06	0.10	0.26 •••	0.28 •••	1.00			
(13) PAST1	0.27	0.44	(0.20) ••	(0.20) ••	0.04	(0.04)	(0.50) •••	(0.15) •	0.01	(0.27) •••	(0.41) •••	(0.08)	(0.06)	(0.24) •••	1.00		
(14) PAST2	5.96	1.60	0.20 ••	0.20 ••	(0.06)	(0.04)	0.47 •••	0.10	(0.01)	0.23 •••	0.35 •••	(0.02)	0.06	0.20 ••	(0.55) •••	1.00	
(15) AUDIT1	0.05	0.22	0.07	0.05	(0.00)	(0.04)	(0.00)	(0.04)	0.01	(0.02)	(0.03)	0.16 ••	0.02	(0.03)	0.01	0.06	1.00

*,**,*** Correlation is significant at the .05, 0.01, .001 level (2-tailed).

Notes:

DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).

DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999.

Table 3
Test of Hypothesis 1A
Effect of Peers on Tax Compliance

Panel A: Effect of Peers on Tax Compliance - DV1

	DV 1 - Results of Logistic Regression					
	Excluding CoVariates Model 1			Including CoVariates Model 2		
Variable	B	S.E.	Exp(B)	B	S.E.	Exp(B)
PeerInfo	-1.54 ***	0.29	0.21	-1.57 ***	0.32	0.21
Covariates						
SocDes	0.14	0.11	1.16	0.15	0.12	1.16
FAIR1				0.19 *	0.09	1.21
FAIR2				-0.01	0.09	0.99
OTHERS1				0.00	0.01	1.00
OTHERS2				0.01	0.01	1.01
DETEC1				0.15	0.11	1.16
DETEC2				0.01	0.01	1.01
DETEC3				0.12	0.09	1.13
PAST1				-0.57	0.48	0.56
PAST2				0.21	0.14	1.24
AUDIT1				0.74	0.66	2.09
Constant	-0.47	0.42	0.63	-4.09 ***	1.37	0.02
n	267.00			267.00		
X2(df)	32.109 (2) ***			62.906 (12) ***		
Log-likelihood	292.21			261.41		
Nagelkerke R Square	0.16			0.299		
Overall correct classifiecations	68.50%			74.50%		

+,*,**,*** - p<0.1, .05, .01, .001 respectively, two-tailed.

Panel B: Effect of Peers on Tax Compliance - DV2

	DV2 - Results of OLS Regression					
	Excluding CoVariates Model 1			Including CoVariates Model 2		
Variable	B	S.E.	t-stat	B	S.E.	t-stat
PeerInfo	-1.91	0.44	-4.34 ***	-1.70	0.44	-3.85 ***
Covariates						
SocDes	0.35	0.16	2.21 *	0.33	0.16	2.11 *
FAIR1				0.24	0.13	1.93 +
FAIR2				-0.05	0.12	-0.38
OTHERS1				0.00	0.01	0.01
OTHERS2				0.01	0.01	0.88
DETEC1				0.17	0.16	1.12
DETEC2				0.01	0.02	0.51
DETEC3				0.11	0.12	0.97
PAST1				-0.47	0.60	-0.79
PAST2				0.23	0.16	1.46
AUDIT1				0.72	0.94	0.76
Constant	3.51	0.64	5.45 ***	-0.36	1.70	-0.21
n	267			267.00		
R^2	0.083			0.16		
Adjusted R^2	0.076			0.12		
F	11.964		***	4.10		***
df	(2, 264)			(12, 254)		

+,*,**,*** - p<0.1, .05, .01, .001 respectively, two-tailed.

Notes:

DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).

DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 4
Test of Hypothesis 1B
Effect of Peers on Tax Compliance by Group

Panel A: Results of Logistic Regression (DV1)

Referent Group = No Peer

Variable	Model 1 B	S.E.	Exp(B)	Model 2 (with covariates) B	S.E.	Exp(B)
PeerGroup				***		
PeerGroup(1) i.e. Family	-1.70 ***	0.36	0.18	(1.64) ***	0.39	0.19
PeerGroup(2) i.e. Co-worker	-1.40 ***	0.34	0.25	(1.51) ***	0.38	0.22
Covariates						
SocDes	0.16 ***	0.11	1.17	0.15	0.12	1.17
FAIR1				0.19 *	0.09	1.21
FAIR2				(0.01)	0.09	0.99
OTHERS1				(0.00)	0.01	1.00
OTHERS2				0.01	0.01	1.01
DETEC1				0.15	0.11	1.16
DETEC2				0.01	0.01	1.01
DETEC3				0.12	0.09	1.13
PAST1				(0.56)	0.48	0.57
PAST2				0.21	0.14	1.23
AUDIT1				0.75	0.67	2.12
Constant	-0.50	0.43	0.61	(4.09) ***	1.37	0.02
n	267.00			267		
X2(df)	32.662 (3) ***			63.005 (13) ***		
Log-likelihood	291.65			261.311		
Nagelkerke R Square	0.16			0.299		
Between-model likelihood ratio X2				30.343 **		
Overall correct classifiecations	68.50%			74.50%		

+,*,**,*** –p<.1, p <.05, p<.01, p<.001, two-tailed

Notes:
DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).
DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000   where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 4 (con't)

Table 4 (con't)
Test of Hypothesis 1B
Effect of Peers on Tax Compliance by Group

Panel B: Results of OLS Regression (DV2)

Referent Group = No Peer

Variable	Model 1				Model 2			
	B	SE B	t	p	B	SE B	t	p
Family	-2.16	0.51	-4.21	***	-1.87	0.51	-3.65	***
Coworker	-1.65	0.51	-3.22	***	-1.52	0.51	-2.96	***
Covariates:								
SocDes	0.37	0.16	2.29	*	0.35	0.16	2.16	*
Fair1					0.25	0.13	1.96	+
Fair2					-0.05	0.12	-0.40	
Others1					0.00	0.01	0.03	
Others2					0.01	0.01	0.89	0.38
Detec1					0.17	0.16	1.07	0.28
Detec2					0.01	0.02	0.48	0.63
Detec3					0.12	0.12	0.98	0.33
Past1					-0.43	0.60	-0.71	0.48
Past2					0.23	0.16	1.43	0.15
Audit1					0.77	0.95	0.82	0.42
Constant	3.46	0.65	5.35	***	-0.41	1.70	-0.24	
n	267				267.00			
R^2	0.086				0.16			
Adjusted R^2	0.076				0.12			
F	8.279 ***				3.81 ***			
df	(3, 263)				(13, 253)			

Panel C: ANCOVA Testing – Means Between Groups controlling for SocDes

Group	N	Mean	SE	95% CI for Mean	
				Lower	Upper
None	95	4.685	0.35	3.99	5.381
Family	86	2.526	0.37	1.793	3.258
Co-workers	86	3.031	0.37	2.298	3.764

Univariate Tests	SS	df	Mean Square	F	Partial ETA Squared
Contrast	233.531	2	116.77	9.85 ***	0.07
Error	3117.806	263	11.855		

Group Comparisons – Post Hoc

	Mean Difference	SE	Sig.
Family vs None	-2.16 ***	0.51	0.000
Co-worker vs None	-1.65 ***	0.51	0.004
Family vs Co-worker	-0.51	0.51	1.000

+,*,**,*** -p<.1, p <.05, p<.01, p<.001, two-tailed

Notes:
DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).
DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 5
Test of Hypothesis 2
Effects of Peers on Tax Compliance Behavior By Income Type

Panel A: Summary Logistic Regression Analysis for DV1

	Cash for Side Contract Work			Cash Rent		
	Model 1 (without covariates)			Model 2 (without covariates)		
Variable	B	S.E.	Exp(B)	B	S.E.	Exp(B)
PeerInfo	-1.38 **	0.41	0.25	-1.69 ***	0.40	0.18
Covariates						
SocDes	0.13	0.15	1.13	-0.28	0.63	0.75
Constant	-0.62	0.57	0.54	-0.28	0.63	0.75
n	134.00			133.00		
X2(df)	12.028 (2) **			20.311 (2) ***		
Log-likelihood	143.93			147.09		
Nagelkerke R Square	0.13			0.20		
Overall correct classifiecations	71.60%			68.40%		

	Cash for Side Contract Work			Cash Rent		
	Model 1 (with covariates)			Model 2 (with covariates)		
Variable	B	S.E.	Exp(B)	B	S.E.	Exp(B)
PeerInfo	-1.162 *	0.506	0.313	-2.003 ***	0.494	0.135
Covariates						
SocDes	0.189	0.179	1.208	0.124	0.2	1.131
FAIR1	0.432	0.143	1.541	-0.044	0.144	0.957
FAIR2	0.264 +	0.155	1.302	-0.165	0.124	0.848
OTHERS1	-0.021	0.017	0.98	0.023	0.018	1.023
OTHERS2	0.029 +	0.018	1.03	0.012	0.018	1.012
DETEC1	-0.163	0.2	0.85	0.447 *	0.174	1.564
DETEC2	0.031 +	0.017	1.031	-0.005	0.017	0.995
DETEC3	0.136	0.138	1.146	0.132	0.129	1.142
PAST1	-0.083	0.702	0.92	-0.914	0.839	0.401
PAST2	0.189	0.228	1.208	0.207	0.193	1.23
AUDIT1	1.88 +	1.009	6.555	0.374	1.017	1.453
Constant	-6.709 **	2.416	0.001	-4.292 *	2.015	0.014
n	134.00			133.00		
X2(df)	41.928 (12)	***		43.69 (12)	***	
Log-likelihood	114.03			123.71		
Nagelkerke R Square	0.391			0.391		
Overall correct classifiecations	79.90%			78.90%		

τ,*,**,*** -p<.1, p <.05, p<.01, p<.001

Notes:

DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).

DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 5 (con't)
Test of Hypothesis 2
Effects of Peers on Tax Compliance Behavior By Income Type

Panel B: Summary OLS Regression Analysis for DV2

Variable	Cash for Side Contract Work				Cash Rent		
	Model 1 (without covariates)				Model 2 (without covariates)		
	B	SE B	t		B	SE B	t
Constant	3.188	0.832	3.831 ***		3.871	1.004	3.854 ***
PeerInfo	-1.567	0.6	-2.611 *		-2.228	0.65	-3.430 **
SocDes	0.317	0.209	1.513		0.369	0.245	1.505
n	134				133		
R^2	0.063				0.103		
Adjusted R^2	0.048				0.089		
F	4.37 *				7.485 **		
df	(2, 131)				(2, 130)		

Variable	Cash for Side Contract Work				Cash Rent		
	Model 1 (with covariates)				Model 2 (with covariates)		
	B	SE B	t		B	SE B	t
Constant	-1.896	2.459	-0.771		-0.611	2.469	-0.248
PeerInfo	-1.157	0.623	-1.857 +		-2.112	0.658	-3.208 **
SocDes	0.367	0.213	1.724 +		0.29	0.254	1.142
Fair1	0.382	0.162	2.362 *		0.068	0.202	0.336
Fair2	0.208	0.171	1.216		-0.192	0.169	-1.136
Others1	-0.028	0.02	-1.436		0.037	0.021	1.748 +
Others2	0.027	0.019	1.366		0.005	0.02	0.257
Detec1	-0.167	0.227	-0.734		0.547	0.226	2.415 *
Detec2	0.02	0.021	0.949		0.004	0.025	0.142
Detec3	0.236	0.166	1.422		0.014	0.174	0.08
Past1	-0.368	0.777	-0.473		-0.34	0.97	-0.351
Past2	0.232	0.218	1.065		0.201	0.237	0.848
Audit1	1.352	1.27	1.065		0.678	1.538	0.441
n	134.00				133		
R^2	0.20				0.219		
Adjusted R^2	0.12				0.141		
F	2.56 **				2.805 **		
df	(12, 121)				(12, 120)		

+,*,**,*** -p<.1, p <.05, p<.01, p<.001, two-tailed

Notes:
DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).
DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 6
Test of Hypothesis 3
Effects of Peers and Tax Morality on Tax Compliance

Panel A: Results of Logistic Regression - DV1

| | Excluding CoVariates | | | | | | | | | Including CoVariates | | | | | |
| | Model 1 | | | Model 2 | | | Model 3 | | | Model 4 | | |
Variable	B	S.E.	Exp(B)	B	S.E.	Exp(B)	B	S.E.	Exp(B)	B	S.E.	Exp(B)
PeerInfo	(1.58) ***	0.30	0.21	(0.01)	1.51	0.99	(1.60) ***	0.32	0.20	0.13	1.57	1.14
TaxMorality	0.57 ***	0.14	1.76	0.72 ***	0.20	2.05	0.31 +	0.18	1.36	0.48 *	0.24	1.61
PeerInfo x TaxMorality				(0.29)	0.27	0.75				(0.31)	0.28	0.73
Covariates												
SocDes	0.16	0.11	1.17	0.16	0.12	1.17	0.15	0.12	1.16	0.15	0.12	1.16
FAIR1							0.12	0.10	1.13	0.12	0.10	1.12
FAIR2							0.00	0.09	1.00	0.00	0.09	1.00
OTHERS1							(0.00)	0.01	1.00	(0.00)	0.01	1.00
OTHERS2							0.01	0.01	1.01	0.01	0.01	1.01
DETEC1							0.16	0.12	1.18	0.16	0.12	1.17
DETEC2							0.01	0.01	1.01	0.01	0.01	1.01
DETEC3							0.09	0.09	1.09	0.09	0.09	1.09
PAST1							(0.43)	0.50	0.65	(0.48)	0.50	0.62
PAST2							0.13	0.15	1.14	0.12	0.15	1.13
AUDIT1							0.71	0.67	2.04	0.74	0.66	2.10
Constant	(3.54) ***	0.87	0.03	(4.36) ***	1.20	0.01	(4.75) ***	1.43	0.01	(5.57) ***	1.64	0.00
n	267.00			267.00			267.00			267.00		
X2(df)	52.669 (3) ***			53.784 (4) ***			65.955 (13) ***			67.201 (14) ***		
Log-likelihood	271.65			270.53			258.36			257.114		
Nagelkerke R Square	0.26			0.26			0.31			0.316		
Between-model likelihood ratio X2				1.11						1.246		
Overall correct classifiecations	75.30%			75.30%			75.30%			75.70%		

+,*,**,*** - p<0.1, .05, .01, .001 respectively, two-tailed.
DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).
DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999).

Table 6 (con't)
Test of Hypothesis 3
Effects of Peers and Tax Morality on Tax Compliance

Panel B: Results of OLS Regression - DV2

| | Excluding CoVariates | | | | | | Including CoVariates | | | | | |
| | Model 1 | | | Model 2 | | | Model 3 | | | Model 4 | | |
Variable	B	S.E.	t-stat	B	S.E.	t-stat	B	S.E.	t-stat	B	S.E.	t-stat
PeerInfo	(1.75)	0.43	(4.10) ***	1.96	1.81	1.09	(1.69)	0.44	(3.85) ***	2.10	1.84	1.14
TaxMorality	0.71	0.15	4.65 ***	1.21	0.28	4.32 ***	0.46	0.21	2.18 *	0.97	0.32	3.03 **
PeerInfo x TaxMorality				(0.70)	0.33	(2.11) *				(0.72)	0.34	(2.12) *
Covariates												
SocDes	0.37	0.15	2.42 *	0.36	0.15	2.38 *	0.35	0.16	2.20 *	0.33	0.16	2.11 *
FAIR1							0.12	0.14	0.91	0.10	0.14	0.75
FAIR2							(0.02)	0.12	(0.17)	(0.03)	0.12	(0.29)
OTHERS1							-	0.01	0.03	0.00	0.01	0.13
OTHERS2							0.01	0.01	0.65	0.01	0.01	0.61
DETEC1							0.20	0.16	1.27	0.19	0.15	1.22
DETEC2							0.01	0.02	0.61	0.01	0.02	0.73
DETEC3							0.05	0.12	0.44	0.04	0.12	0.32
PAST1							(0.15)	0.10	(0.24)	(0.31)	0.61	(0.51)
PAST2							(0.15)	0.16	0.89	0.11	0.16	0.70
AUDIT1							0.68	0.94	0.73	0.74	0.93	0.79
Constant	(0.37)	1.04	(0.35)	(2.98)	1.61	(1.80)	(1.68)	1.79	(0.94)	(3.98)	2.08	(1.91)
n	267			267			267.00			267.00		
R^2	0.153			0.167			0.18			0.19		
Adjusted R^2	0.143			0.154			0.14			0.15		
R square change				0.014						0.01		
F	15.792 ***			13.112 ***			4.20 ***			4.27 ***		
df	(3, 263)			(4, 262)			(13 , 253)			(14, 252)		
F change				4.452 *						4.473 *		
df				(1, 262)						(1, 252)		

+,*,**,*** - p<0.1, .05, .01, .001 respectively, two-tailed.

DV1 is a dichotomous measure of tax compliance indicating whether all cash income is likely to be reported (0 = No, 1= Yes).

DV2 is tax compliance measured as the amount of cash income, if not all, most likely to be reported (measured on a scale of 0 to 10 in increments of $1,000 where 0=$0, 1=$1,000, 2=$2,000 …and 10=$9,999