Seeking Professional Advice: The Effects of Tax Preparers on Compliance[*]

Jason DeBacker[†], Bradley T. Heim[‡],
Anh Tran[§], and Alexander Yuskavage[**]

May 29, 2019

Abstract

Professional tax preparation services claim to help clients better comply with the law while paying lower tax. We test this claim using data from random audits conducted under the IRS National Research Program to compare tax compliance between filers who self-prepared returns and those who used a preparation service. Since the taxpayers' decision to use tax preparation services is endogenous, we use an instrumental variables approach and instrument for the choice of preparer with measures of the diffusion of tax preparation services within a ZIP code. We find that professional tax preparers reduce rates of tax compliance. On average, returns that were filed with a professional preparer have audit adjustments that are roughly $3,100 larger than similar self-prepared returns. As a test of whether incentives in the professional tax preparation industry might drive increases in non-compliance, we also consider returns filed using preparers in the Volunteer Income Tax Assistance (VITA) programs. Compliance rates amongst VITA-prepared returns are no different than among self-prepared returns, suggesting that different motivations among professional tax preparers may be the cause of the differential compliance rates.

Keywords: individual income tax, tax audit, tax evasion, tax avoidance, tax preparers

JEL Classifications: H24, H26

1. Introduction

Many individuals get professional advice from lawyers, tax preparers, and other experts on different legal issues that may be too complex for the individual to handle on her own. An important question, then, is how do such services affect the likelihood that a law is violated? In other words, do such legal professionals encourage compliance or do they encourage the pushing of legal boundaries? Among such services, tax preparation has a vast economic importance and prevalence of use, providing an important context to analyze this question.

Consider that noncompliance with the individual income tax code results in a loss of about $319 billion in revenue to the U.S. Treasury each year (Internal Revenue Service, 2016). Furthermore, about 60 percent of tax filers use paid preparers, professionals with expertise understanding the Internal Revenue Code, to assist in completing and filing their tax return. Given their wide use, and the ability to potentially target enforcement at the preparer level, it is important to understand the role of these professionals in tax compliance. In this paper, we explore the effects of professional tax preparers on tax compliance.

The choice of taxpayers to use tax preparation services is an endogenous decision, making it difficult to estimate the causal impact of tax preparers on compliance. The current literature studying the effects of tax preparers on compliance finds mixed results. Klepper and Nagin (1989) and Klepper, Mazur, and Nagin (1991) both use data from the 1982 Tax Compliance Measurement Program (TCMP) and find that tax preparers reduce noncompliance by helping filers to more consistently report items that have clear reporting requirements. However, Klepper and Nagin (1989) find that preparers tend to increase noncompliance on line-items of the return for which there is more ambiguity, as measured by the variance in revenue rulings. Erard (1993) uses 1979 TCMP data to find that paid preparers who are Certified Public Accountants (CPAs) or lawyers increase noncompliance rates by about 4.5 times what would be found on self-prepared returns. He

finds smaller effects, an increase in noncompliance of about 15 percent, for other types of preparers. Erard (1997) uses the 1982 TMCP data, but a different empirical strategy, and finds similar effects of preparers on compliance. Hite and Hasseldine (2003) use a sample of operational audits by the IRS and find that returns prepared by CPAs have fewer adjustments, but that this correlation becomes negligible once income and sole proprietorship status are controlled for. More recently, Blumenthal and Christian (2004) survey the literature and find that the literature has advanced little since the original studies using the 1979 and 1982 TCMP data. Battaglini et al. (2019) provide a study of tax preparation services in Italy. They find that sole proprietors who use paid tax preparers have higher rates of non-compliance.

Hansen and White (2012) provide experimental evidence that preparers respond to changes in penalties and enforcement rates, becoming less likely to take aggressive positions or to sign returns as penalties and enforcement increase.

We use data from the randomized audits conducted by the National Research Program and an instrumental-variables approach to deal with taxpayer's endogenous decision to use tax preparation services. The data indicate that taxpayers are more likely to use a tax preparer when people around them use one. The diffusion of tax preparation services in a ZIP code is arguably exogenous to taxpayers' characteristics, providing a plausible instrument for the decision to use a tax preparer.

Using this approach, we find that returns filed with preparers have larger adjustments upon audit than similar returns that were self-prepared. This effect is significant. The mean adjustment to adjusted gross income (AGI) found upon audit is $3,106 higher for professionally prepared returns, after controlling for income and the complexity of the return. To put this in comparison, this represents about a 55% increase in the average audit adjustment. However, we do not find this effect among the Volunteer Income Tax Assistance (VITA). In fact, the coefficient reverses and becomes negative (albeit insignificant) with VITA preparation.

We also find heterogeneity in the effect of preparers on returns. Returns prepared for unmarried female filers show only a $1032 increase in audit adjustments relative to self-prepared returns. In comparison, returns prepared for married filers over the age of 50 show audit adjustments about $8672 more than returns that are self-prepared.

We add to the literature on tax preparers' effects on tax compliance in several ways. First, we provide a modern study of the role of tax preparers in tax compliance. Since 1982, we've seen significant changes in tax policy and with the tax preparation industry in the United States. Paid preparers continue to be widely used, but have been facing increasing competition from tax preparation software, which is now used by about 30% of taxpayers. Given these changes, it's important to revisit this question. Second, we are able to offer improvements in the identification of the causal effects or tax preparers on compliance. In particular, we are able to leverage the population files of individual income tax returns to create a set of instruments that proxy for the role of peers in the taxpayers' choice of preparer at the ZIP code level. In addition, we use alternative instruments including the availability of substitutes for paid preparers and proxies for the supply of preparers. Finally, we use a rich dataset spanning several cross-sections of randomized audit returns, to provide evidence on the heterogenous effects of tax preparers across different samples of filers.

The remainder of the paper proceeds as follows. Section 2 provides a background on the use of tax preparers in the United States. Section 3 outlines a model of how tax preparers may affect compliance and develops the hypotheses we test empirically. Section 4 describes the data and Section 5 presents our empirical model. We show and explain our results in Section 6. Section 7 concludes.

2. Background on Tax Preparers

About 60 percent of individual income tax filers use a paid preparer to help with the filing of their return. The IRS does not currently require any licensing of preparers, though many hold certifications or licenses such as certified public accountants (CPAs), lawyers, or IRS Special Enrolled Agents.[1] In 2011, the IRS began to require that all tax preparers register with the IRS to obtain a Preparer Tax Identification Number (PTIN). Further, some preparers completing a Form 1040 for a client were further required to obtain a license by passing a competency test administered by the IRS, though preparers who were CPAs (or supervised by a CPA), attorneys, or Enrolled Agents may have been exempt. The federal licensing requirements were subsequently struck down in DC District Court in 2013. However, some states, such as California, Maryland, New York, and Oregon, require state licensing for tax preparers.

Filers are more likely to use tax preparation services as their income increases and as their return becomes more complicated, for instance because of the presences of pass-through business income (see Klepper, Mazur, and Nagin (1991)). Long and Caudill (1987) find that tax payers with high marginal tax rates are more likely to employ tax preparers. Slemrod and Sorum (1984) find that more educated tax preparers spend less on tax preparation services.

Because professional tax preparers are professionals expected to have a better understanding of the tax code, penalties for noncompliance among preparers are often harsher than for individual

[1] An Enrolled Agent is a person who has earned special status to represent taxpayers before the IRS by passing a three-part IRS examination covering individual and business taxes or through experience as an IRS employee. Enrolled Agents are required to adhere to ethical standards and complete continuing education courses. See https://www.irs.gov/tax-professionals/enrolled-agents/enrolled-agent-information

filers. In particular, it is much more common for professional preparers to see jail time for misreporting income on a client's return.

3. Theory[2]

Our hypothesis is that paid preparers have strong incentives to minimize taxes for their clients. Thus, we believe that audit adjustments will be higher for those using paid preparers because of the aggressive positions these preparers take in order to maximize. In addition, tax preparers may shield clients from the impacts of audit, by either affecting the audit probability of providing explicit or implicit insurance when an audit occurs, such as offering advice on complying with the audit.

To motivate our instrumental variables model of preparer selection and show how a preparer may affect individual taxpayers' compliance decisions, we offer the following model. The model embeds a standard Allingham and Sandmo (1972) model of tax compliance into a model of the choice between self-preparation and using a paid preparer.

If a filer chooses to self-prepare a return, her expected utility is given as:

$$\text{EU}^{\text{sp}} = (1-p)U(Y - \tau X) + p\,U\big(Y - \tau X - \pi(Y - X)\big) - c_{sp}(\theta),$$

where Y is true income, τ is the tax rate, X is reported income, p is the audit probability for self-prepared returns, π is the penalty function, and $c_{sp}(\theta)$ gives the cost of self-preparation, which may be a function of some state variables such as the filer's cognitive ability and the value of their time (see, e.g., Long and Caudill (1987) and Slemrod and Sorum (1984)).

Similarly, if the filer chooses to use a paid preparer, her expected utility is given as:

$$\text{EU}^{\text{pp}} = (1-q)U(Y - \tau X) + q\,U\big(Y - \tau X - \psi\pi(Y - X)\big) - c_{pp}(\theta),$$

---

[2] While this entire paper is preliminary, this section is particularly preliminary.

where q is the probability of audit for professionally prepared returns, ψ is the "insurance" provided by paid preparers, and $c_{pp}(\theta)$ is the cost of a paid preparer, which maybe a function of state variables like the complexity of the filer's return. Note that "insurance" is used loosely here. What we mean by this is any support the paid preparer might give from an audit. This could be an explicit audit insurance policy, where the preparation firm covers the costs of audit, or it could be an implicit form of insurance that might take the form of advisement from a preparer that reduced the emotional and cognitive costs a filer faces when going through audit.

The choice to use a preparer is thus:

$$max \; \{ \; EU^{sp}, EU^{pp} \}$$

And a filer will choose to use a paid preparer if and only if: $EU^{pp} \geq EU^{sp}$. This condition implies that:

$$U(Y - \tau X)(p - q) + qU(Y - \tau X - \psi \pi(Y - X)) - pU(Y - \tau X - \pi(Y - X)) + c_{sp}(\theta) - c_{pp}(\theta) \geq 0$$

The likelihood that a filer choose a preparer is increasing in the "insurance" rate, ψ, increasing in the cost of self-preparation and the audit rate on self-prepared returns. The likelihood of choosing a preparer is decreasing in the audit rate on prepared returns and in the cost of paid preparation.

In addition, the amount of underreported income will increase as the audit rate falls and as audit penalties decline. Thus we should expect high non-compliance from returns filed using a paid preparer if $\psi < 1$ and if q < p.

In the next section we discuss identification of our empirical model. The key to such identification is controlling for the selection into the use of a paid-preparer. The model in this section suggests changes in the costs associated with paid- and self-preparation are important in this decision. Our instruments will therefore center around peer effects that provide information about preparation methods that lowers costs associated with using different modes of tax preparation.

4. Identification of the Effects of Paid Preparers on Compliance

Identification of the causal impact of tax preparers on compliance in this case is difficult because the decision to hire a tax preparer is endogenous, as is the choice of the tax preparer herself (Erard 1993). The prior literature, such as Erard (1993), has dealt with identification issues by using a structural estimator that relies on strong functional form assumptions. By using data on randomized audits, from the NRP, we are able to avoid questions about the endogeneity of an audit. However, we cannot simply compare differences in audit results between filers using paid preparers and those self-preparing because of selection bias.

To control for this selection, we estimate a two-stage instrumental variables model. In the first stage, we estimate a linear probability model of the likelihood that a filer uses a paid preparer. The excluded instrument in the first stage is the fraction of tax payers in the filer's ZIP code who use a paid preparer. This measure is proxying for peer effects; if my neighbors uses a paid preparer, I may be more likely to use one as well. We find considerable variation in this measure across ZIP codes. In estimating the first stage model of the likelihood that filer i in ZIP code z, at time t uses a paid preparer:

$$1\{Use\ Preparer\}_{i,z,t} = \alpha + \rho FracPreparers_{z,t} + \boldsymbol{\beta X}_{i,z,t} + \eta_t + u_{i,z,t} \qquad (1)$$

We include a set of tax-year fixed effects, represented by η_t, and a set of included instruments, $\boldsymbol{X}_{i,z,t}$. The included instruments are filing status, gender of the primary filer, linear and quadratic terms for age, the number of dependents on the return, and zip-code level controls; average AGI, log of

population, the audit rate (from operational audits), and the Herfindahl index for tax preparer concentration.[3] We report the results of our first stage regressions in the following section, but note here that the excluded instrument, the fraction of preparers in the ZIP code, is a strong predictor of preparer usage. The key identifying assumption we are making here is that the preparer-usage rate in the ZIP code is only related to an individual tax filer's compliance through its effects on his likelihood of using a preparer.

[Figure 1 about here]

In the second stage of our model we regress our set of included instruments and the fitted value for preparer use on the dollar amount of the audit adjustment found in the NRP audit:

$$Audit\ Adjustment_{i,z,t} = a + \phi\{Use\ \widehat{Preparer}\}_{i,z,t} + \gamma X_{i,z,t} + \delta_t + \varepsilon_{i,z,t} \qquad (2)$$

We estimate the model given in Equation (2) using the audit adjustment amount in levels (as opposed to its logarithm) because it can take on positive or negative values.

In addition to the first stage regression outlined above, we also estimate the first stage of the model using alternative excluded instruments. These include the fraction of taxpayers who e-file, the fraction of filers who usethe Volunteer Income Tax Assistance (VITA), and the fraction of filers claiming the EITC, all measured at the ZIP code level. The first two of these instruments to proxy for the effect of peers at driving the filer towards substitutes for a paid preparer, which

---

[3] We exclude from these regressions variables that are potentially endogenous to the use of a preparer such as the amount of reported income on the filers returns and the sources of reported income, or the use of certain tax credits, such as the EITC.

include software preparation or a VITA preparer.[4] Measures of the amount of EITC claims coming

from a ZIP code proxy for the supply of preparation services in an area. Weinstein and Patten

(2016) find that the location of tax preparer services highly influenced by the number of filers who

potential EITC claimants, who in turn represent potential clients. In addition, Kopczuk and Pop-

Eleches (2007) provide corroborating evidence, showing that the introduction of state e-filing

programs, which lead to an increase in the number of preparers, helped to drive up EITC claim

rates. Each of these instruments plausibly satisfies the exclusion restrictions for an instrumental

variable.

5. Data

Our primary source of data is the IRS's National Research Program (NRP). The NRP began in

2001 as a replacement for the Tax Compliance Measurement Program (TCMP) and as such it serves

as the basis for measures of the "tax gap" (the total amount of taxes not paid due to noncompliance)

(IRS 2016). After the initial wave in 2001, the NRP began selecting returns for audit annually,

starting in 2006 and continuing to the present. NRP audits differ from operational audits conducted

by the IRS. In particular, NRP audits are generally more thorough, covering all items on the filers

tax return. Operational audits, in contrast, often target items that appear to be at issue.

In our analysis, we use NRP waves for tax years 2006 to 2013. Each of these waves is

comprised of about 15,000 observations from a stratified random sample of the population of filers.

The NRP oversamples groups of particular interest for tax compliance such as high-income filers or

---

[4] Using the e-filer indicator that is record in our IRS data is an imperfect measure of the use of tax preparation software.
However, the vast majority of users of tax preparation software do e-file.

those claiming the Earned Income Tax Credit (EITC). However, using the sampling weights, we are able to construct a sample of filers that is representative of the population of filers.

The second data source we draw upon are the population of tax returns from 2006-2013. We use these to compute ZIP-code level measures that are used in our instrumental variables approach. Using information on the use of a paid preparer that is reported on Form 1040, we compute the fraction of filers in a ZIP code that use paid preparers for each year. For our other instruments we use data from these population files to compute the fraction of filers using a VITA preparer, the fraction of filers who e-file, the fraction of filers claiming the EITC, the mean EITC claim amount, mean AGI, the degree of observed competition among tax preparers , and a count of the number of filers by ZIP code. In computing the all of the instruments for use in our IV models, we exclude the individual filer from the ZIP code statistic used as an instrument for that filer's decision to use a preparer.

Table 1 compares means amounts of income, tax liability, mean age, and rates of EITC claims, and the presences of different schedules across filers who use paid preparers, those who don't, and all filers. We find that filers who use tax preparers tend to make more income, with an average AGI of $67,275 for those using preparers compared to $47,477 for those not using preparers. But the proportion of filers who claim the EITC is also higher for those using preparers, suggesting that complexity of one's return may play a role in the use of a paid preparer. Indeed, those with paid preparers are much more likely to have business income reported on Schedule C or E, and to have significantly more income from those sources, than filers who do not use a paid preparer.

[Table 1 about here]

Table 2 shows compliance rates between those who use paid preparers and those who do not, computed from adjustments to individuals tax returns from NRP audits. We measure compliance using audit adjustments found through NRP audits. Here, we consider both the frequency and magnitude of these adjustments. In the following sections, we focus on the size of these adjustments.

Compliance rates between those filers using preparers and those not using preparers reveal interesting patterns. Rates of compliance, as measured by the fraction of filers with non-zero adjustments, are quite similar across these two groups for adjusted gross income (AGI) and for wages and salaries. However, if we look at income that is more complicated to report and often with less third-party reporting, such as income reported on Schedule C, D, and E, we find significant differences between filers using preparers and those that do not. In particular, filers who do not use preparers have higher rates of adjustment to their reported income. Income from sole proprietorships, reported on Schedule C, is adjusted on 81% of returns filed using a paid preparer and 88% of the time on those filed without a paid preparer. The difference is even larger for capital gains income, reported on Schedule D, which is adjusted 35% of the time for those not using a paid preparer, but just 23% of the time for those using a paid preparer. Similarly, non-corporate business income, reported on Schedule E, is adjusted 62% of the time for those who do not use a paid preparer, but 50% of the time for those who use a paid preparer. This suggests higher noncompliance by those who do not use a paid preparer. Patterns of over- and underreported income are similar across these two groups, though they vary by source of income. However, when we look at amounts of income that is underreported, those using paid preparers have much larger amounts. For example, the mean amount by which Schedule D income is underreported by those using paid preparers is $8,051, compared to $3,167 by those who do not use a paid preparer. Likewise, the mean about by which Schedule E income is underreported is $10,172 by those using a

paid preparer and $7,517 by those who do not use a preparer. While the compliance rates in Table 2

do not show any causal evidence of the role of preparers in tax compliance, the patterns are

consistent with the results of prior work, such as Klepper and Nagin (1989), that finds tax preparers

leading to less mistakes, but more aggressive reporting when there is ambiguity in the law. Such

effects of paid preparers would lead to the patterns we see here – with more non-zero adjustments

to returns filed without a preparer, but larger amounts of underreported income on returns filed

using a preparer.

[Table 2 about here]

6. The Role of Paid Preparers in Tax Compliance

We now discuss the results of estimating the IV model of preparers' role in tax compliance, as

measured through audit adjustments. First, we discuss the effects across all filers and sources of

income. Then we turn to a comparison of paid preparers and VITA preparers. Finally, we provide

an analysis that allows the role of tax preparers to differ across filers to explore heterogeneity in the

role of preparers on tax compliance.

6.1 Baseline Results for All Filers

Table 3a presents results from the IV model estimated for all filers. Each column represents audit

adjustments to a different income or tax concept; AGI, taxable income, and total tax liability,

respectively. A summary of the first stage regression results are at the bottom of Table 3 and show that the excluded instrument, the fraction of filers in the ZIP code area using paid preparers, is a strong predictor of an individual filer's use of a preparer.

The broadest income measure, AGI, is adjusted by an additional $3,106 when a paid preparer is used to file the return. The average adjustment to AGI across all filers selected into the NRP is under $5,661, meaning that preparers increase noncompliance by about 55%. We find a similarly sized effect on taxable income, which has an adjustment that is about $3,156 larger among filers who use preparers. Like taxable income, total tax liability has larger upward adjustments among those who use preparers. We find that adjustments to tax liability are $761 more for filers using paid preparers. Table 3b shows the effect that the tax preparer has on the audit adjustment for various components of income, conditional on the filer having any income of that type. The only source that appears significantly affected is Schedule E income. From this point on, we generally only report the first stage estimates for the overall income IV regressions.

[Table 3 about here]

To see the importance of controlling for the selection into the use of a paid preparer, we present results from an ordinary least squares (OLS) model similar to Equation (2) in Table 4. These results follow the same format as Table 3, presenting models with estimates for adjustments to AGI, taxable income, and total taxes. Without controlling for selection into preparer use, the point estimates shrink considerably. The finding in the OLS model is that audit adjustments to AGI are about $1,391 dollars larger if a paid preparer is used, as compared to the estimate of $3,106 from the IV model. OLS estimates suggest that adjustments to taxable income and tax liability are also about half of the IV estimates. Thus, there is strong evidence that preparer use is endogenous and

that is tends to bias the results towards zero. This is consistent with filers who are more compliant

being more likely to select tax preparers.

[Table 4 about here]

In order to show that our particular choice of instrument is not driving these results, we

show the effect of preparers on adjustments to AGI from models with different excluded

instruments in Table 5.[5]   These instruments include the fraction of taxpayers who e-file, the

fraction of filers who use a VITA preparer, and the fraction of filers claiming the EITC, all

measured at the ZIP code level. . Across all these models, we find that filers who use a paid

preparer have larger adjustments to AGI upon audit, with the effects ranging from $1301 to $5594.

In examining the first stage results, we see that each instrument is a significant predictor of the use

of tax preparer and all have the expected sign. Increases in the use of substitutes for paid preparers

(such as preparation software or VITA preparers) results in a lower probability that a filer uses a

paid preparer. Increases in EITC claims in a ZIP code result in a higher probability that a filer in

that ZIP code uses a paid preparer, which is expected given research showing that tax preparation

firms a drawn to areas with higher EITC-eligible filers (Weinstein and Patten 2016).   We take the

robustness of the findings across these models support for the role of preparers in tax compliance.

[Table 5 about here]

---

[5] Results using each of these instruments on adjustments to other income sources are presented in Appendix Tables A.1-A.3.

6.2 Contrasting Paid Preparers with VITA Preparers

As we discuss in Section 3, our hypothesis is that the incentives that paid preparers face in attracting clients drives how aggressive they are with their clients' tax reporting. One way to attract paying clients is to maximize their refund or minimize taxes paid, which can lead to paid preparers pushing boundaries of what the IRS deems appropriate and result in larger adjustments upon audit. In this section, we contrast the effect of a paid preparer with the effect of a VITA preparer.

The VITA program provides free tax preparation services to qualifying taxpayers. These are taxpayers with low to moderate income, senior citizens, the disabled, and those with limited English language skills. VITA preparers are volunteers, often working a few hours a week during the main tax filing season (February to April). These volunteers typically meet with taxpayers in community centers, libraries, shopping malls, or other public locations. VITA preparers undergo training and as supported with tax preparation software. However, there are certain situations that the VITA preparers cannot help with such as depreciation and certain types of business income. Taxpayers who have such income and deduction sources cannot use the VITA program.

As with the use of paid preparers, we need to control for the selection of filers into the use of a VITA preparer. To do this, we employ the analogous instrumental variables approach. In particular, we use the fraction of filers using a VITA preparer in a ZIP code to proxy for peer effects regarding VITA usage.

Table 6a reports the results from estimating IV models for preparer use and VITA use on adjustments to income and its components. The estimated effect of VITA preparers on adjustments to almost all of the measures of income or income sources are negative, but the estimates are very noisy and are all not significant. This may be because the restrictions on VITA usage preclude many filers from ever using a VITA preparer regardless of how common it is in their area. Table 6b reports the results when we limit our sample to filers whose AGI post-audit is found

to be under $60,000. This eliminates a large number those VITA-ineligible filers. We now see that the effects of the VITA preparers on income are negative and significant. That is, VITA-eligible filers who take advantage of the program have audit adjustments that are much smaller than those who self-prepare. Because VITA volunteers do not face market pressure to compete for clients, they do not face the same pressures to push the boundaries as paid preparers. It is also possible that the type of individual who becomes a VITA volunteer is different than one who becomes a paid preparer, and is inclined to give more conservative tax preparation advice.

[Table 6 about here]

6.3 Tax avoidance or tax evasion?

When preparing a tax return, a preparer who wishes to lower their client's tax liability can do so either through allowed tax avoidance methods or disallowed tax evasion. It is often difficult to tell the two apart, and it is likely that in many cases even the preparer herself is not sure the extent to which a specific tax reduction strategy is evasion or avoidance. This has historically made it difficult to decompose total effects of preparers into these two categories.

However, one advantage of the NRP data is that not only are all returns in the sample audited, but unlike in operational audits, the auditor examines every part of the return. If we take the return post-audit to represent what the IRS considers to be the truth, then we now observe the return at two points: after the preparer has signed and submitted it to the IRS, and after the auditor has determined the filer's true tax status. The difference between these two returns therefore

reflects attempted-but-disallowed tax reduction strategies which we classify as tax evasion.[6] The effect of the tax preparer on post-audit income can be classified as attempted-and-allowed tax reduction strategies we classify as tax avoidance.

In order to separately estimate the effects of tax preparers on pre- and post- audit income, we would like to predict the level of an individual's income, rather than the change in income we have estimated up to this point. However, estimating the level of income conditional on demographic characteristics alone would be a heroic use of our IV, so instead we focus on the ratio between an individual's income and their total positive post-audit income. This serves two purposes. First, if we assume that total post-audit income is a measure of an individual's overall earning ability and is not affected by the specifics of their tax preparer's advice, we can use it to normalize various income sources and make them comparable across individuals. Second, we can use tax liability normalized by total post-audit income as a measure of the effective tax rate (ETR) faced by the filer.

Table 7a shows the effect of tax preparation on reported income. Individuals who use tax preparers report an AGI/(total income) that is 4.9 percentage points lower than those who do not. That is, for a given true total income, individuals who use a preparer report an AGI that is 4.9% lower than those that do not. Similarly, they report lower taxable income, and have an ETR that is a little bit more than one percentage point lower. Curiously, they report higher income from Schedules C, D, and E.

Table 7b shows the effects on post-audit income. There is now no difference between AGI at a given total income for individuals who do and do not use tax preparation. This suggests that the lower AGI reported by those with tax preparers can be attributed to tax evasion. Upon

---

[6] This definition of tax evasion will include math errors, good-faith mistakes, and other similar situations. Therefore, we wish to stress that our measure of tax evasion includes many types of activities which are either legal or are typically not prosecuted. Similarly, our measure does not include activities which escape complete detection by auditors.

examination, essentially none of that total difference is allowed. The ETR calculated from (Total

Tax)/(Total Income) is likewise the same across those who do and do not use tax preparers,

suggesting that most of the services provided by the tax preparer are in fact a form of tax evasion.

Preparers also appear to underreport income from Schedules C,D, and E based on the differences in

coefficients when using reported and actual incomes. However, not all of the work done by

preparers is classified as evasion. Those who use a preparer report lower taxable income even after

an audit, but the difference is smaller than what is reported on the return. And while some of the

Schedule incomes are underreported by tax preparers, the bulk of the reported differences are

allowed by the IRS, making it clear that the tax preparer is having legitimate effects on how

individuals structure their incomes.

[Table 7 about here]

6.4 How do preparers evade taxes?

In order to understand how tax preparers move income around on the tax return, Table 8a

reports the before-audit normalized income for a variety of sources, while Table 8b reports the

after-audit amount. In section 6.3, we found that tax preparers report lower overall income for their

clients but higher Schedule income. This can be reconciled by looking at the effect of tax

preparation on reported wages on Table 8a. Clients of tax preparers report wages that are 11.9%

lower than others with the same total income. This makes for a slightly counter-intuitive finding,

since wages are generally well-documented with third-party reporting and are difficult to manipulate.

But their clients also report higher incomes for almost every other source of income. In particular,

clients of tax preparers report 8.8% more Schedule C income than non-clients. So tax preparers

may be helping their clients reduce their W-2 income by instead earning it as 1099-MISC income or

some other form. Doing so may provide tax avoidance benefits such as allowing them to deduct

certain expenses.   However, income allocated to Schedule C may also allow tax preparers to

take advantage of the fact that there is less third-party reporting than for wage income. For instance, while the 1099-MISC is reported to the IRS by the payer, they receive no third-party reporting on most of the business deductions. Therefore we turn to Table 8b which reports the post-audit sources of income. Even after audit, clients of tax preparers report about 12.5% less wage income, close to the differential found prior to audit. Many of the other income sources likewise show little change after audit. However, Schedule C sees an increase from an 8.8% differential to an 11.6% differential. Schedule E income also shows an increase after audit. One possible explanation is that tax preparers who wish to lower their clients tax liabilities are constrained when the client earns mainly wage income. First, the preparer provides them with legitimate advice for how to convert their wage income into income from other sources. However, there is little direct tax benefit from this. Rather, by converting some income to a source with less third-party reporting, the tax preparer can engage in more aggressive tax strategies that are disallowed by the IRS when detected.

[Table 8 about here]

6.5 Heterogeneity in Effects Across Filers

Now we turn to considering heterogeneity in the effects of tax preparers on compliance. To do this, we split the sample into several groups. First, we consider gender differences by comparing taxpayers with who are single male filers to taxpayers who are single female filers.[7] Next, we explore differences between single (and head-of-household) versus married filers (i.e., those filing married-jointly, married-singly). Third, we show results comparing younger versus older married filers to explore differences across age. Finally, we compare filers of different income levels.

Tables 9a and 9b estimate IV models of Equation (2) separately separately for single males and single females. While tax preparers result in larger audit adjustments for both types of filers, the

---

[7] We exclude head-of-household and married-filing-single filers from these two subsamples, restricting them to only those who file as single.

magnitudes are about twice as large for men as for women. Furthermore, tax preparers appear to only affect the Schedule E adjustments of women, not of men. This result is interesting, because single men and single women are equally likely to have Schedule E income, and men receive about twice as much income from their Schedule E as women do. Table 10a estimates Equation (2) for all single and head-of-household filers, while Table 10b estimates for all married filers, whether filing jointly or singly. Tax preparers appear to have no effect on the AGI adjustment for single filers, but they do affect the taxable income and total tax. For married filers, preparers have a larger-than-average effect on all three measures. This suggests that while tax preparers aim to decrease the tax owed by both types of clients, the method they use varies by the specifics of that client's return.

[Table 9 about here]

[Table 10 about here]

Our next sample, shown in Tables 11a and 11b, is split is by age. Here, we compare tax filing units which are married filing jointly with a primary filer under the age of 50 to those where the primary filer is 50 or older. We estimate models separately by income source, which is especially important in this case as the composition of income varies over the lifecycle. In fact, the effect of the preparer on AGI adjustment is almost the same in the two samples, but the effect on specific sources of income are quite different. For those under 50, only Schedule E income appears to be affected by the preparer. On the other hand, for those over 50, both Schedule C and Schedule D income show large effects. Older married couples are more likely to have Schedule D income and have more of it when they do, so it is not surprising that the tax preparer has larger effects there. However, couples above and below 50 have comparable amounts of Schedule C income, raising the question of why the effect on older couples is so much stronger.

[Table 11 about here]

Finally, Tables 12a through 12e show the effects of tax preparers on audit adjustments of tax filers with different income levels. Based on their post-audit AGI, filers are grouped into one of five categories. By doing so, several trends are apparent. First, tax preparers increase the AGI, taxable income, and total tax adjustments for taxpayers of all income groups. This is consistent with the theory that their goal is to minimize taxes owed. Second, the amount with which they understate both the taxable income and the total tax liability is increasing in income. On the one hand, this is not particularly surprising, since filers with higher AGI will naturally provide the preparer with more taxable income and tax liability to manipulate. However, notice that the pattern does not hold up as strongly for adjustments to AGI itself. Finally, the areas where tax preparers have the most effect differs strongly by income group. The preparer has no significant effect on Schedules C, D, or E for the two lowest income groups, while all three are affected for the middle income group. For the very highest income group, the effect only appears for Schedule E income.

[Table 12 about here]

7. Conclusion

We find that returns filed with preparers have larger adjustments upon audit than returns of similar filers who self-prepare their returns. This effect is significant. The mean adjustment to adjusted gross income (AGI) found upon audit is $3,106 higher for professionally prepared returns, after controlling for income and the complexity of the return. To put this in perspective, this represents about a 55% increase in the average audit adjustment. We find heterogeneity in the effect of preparers on returns. Returns prepared for female filers show only minor inreases in audit adjustments relative to self-prepared returns. Returns prepared for married filers over 50 show the

largest increases in AGI as a result of audit adjustments, about $8672 more than returns that are self-prepared.

In future research, we will delve into the heterogeneity of effects across preparers. For example, are there differences between preparers from large and small firms? Across market structure? How does noncompliance vary between preparers who work for firms who issue refund anticipation loans versus those who do not? This analysis is ongoing.

References

Allingham, Michael G. and Agnar Sandmo, "Income tax evasion: a theoretical analysis," *Journal of Public Economics*, November 1972, 1 (3-4), 323–338.

Battaglini, Marco, Luigi Guiso, Chiara Lacava, and Eleonora Patacchini, "Tax Professionals: Tax-Evasion Facilitators or Information Hubs?," Working Paper 25745, National Bureau of Economic Research, April 2019.

Blumenthal, Marsha and Charles Christian, "Tax Preparers," in Henry J. Aaron and Joel Slemrod, eds., *The Crisis in Tax Administration*, Washington, D.C.: Brookings Institution Press, 2004.

Erard, Brian, "Taxation with representation: An analysis of the role of tax practitioners in tax compliance," *Journal of Public Economics*, September 1993, 52 (2), 163–197.

----, "Self-selection with measurement errors: A microeconometric analysis of the decision to seek tax assistance and its implications for tax compliance," *Journal of Econometrics*, December 1997, 81 (2), 319–356.

Hansen, Victoria J. and Richard A. White, "An Investigation of the Impact of Preparer Penalty Provisions on Tax Preparer Aggressiveness," *Journal of the American Taxation Association*, Spring 2012, 34 (1), 137– 165.

Hite, Peggy A. and Gary A. McGill, "An Examination of Taxpayer Preference for Aggressive Tax Advice," *National Tax Journal*, December 1992, 45 (4), 389–403.

---- and John Hasseldine, "Tax Practitioner Credentials and the Incidence of IRS Audit Adjustments," *Accounting Horizons*, March 2003, 17 (1), 1–14.

Internal Revenue Service. 2016. "Tax Gap Estimates for Tax Years 2008–2010."

Klepper, Steven and Daniel Nagin, "The Anatomy of Tax Evasion," *Journal of Law, Economics, and Organization*, Spring 1989, 5 (1), 1–24.

----, Mark Mazur, and Daniel Nagin, "Expert Intermediaries and Legal Compliance: The Case of Tax Preparers," *Journal of Law and Economics*, April 1991, 34 (1), 205–229.

Kleven, Henrik Jacobsen; Martin B Knudsen; Claus Thustrup Kreiner; Søren Pedersen and Emmanuel Saez. 2011. "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark." *Econometrica* 79(3):651-92.

Kopczuk, Wojciech and Cristian Pop-Eleches, "Electronic filing, tax preparers and participation in the Earned Income Tax Credit," *Journal of Public Economics*, August 2007, 91 (7-8), 1351–1367.

Long, James E. and Steven B. Caudill, "The Usage and Benefits of Paid Tax Return Preparation," National Tax Journal, 1987, 40 (1), 35–46.

Slemrod, Joel and Nikki Sorum, "The Compliance Cost of the U.S. Individual Income Tax System," National Tax Journal, December 1984, 37 (4), 461–474.

Weinstein, Jr. Paul and Bethany Patten, "The Price of Paying Taxes II: How paid tax preparer fees are diminishing the Earned Income Tax Credit (EITC)," Memo, Progressive Policy Institute 2016.

Table 1. Descriptive Statistics

	Filers Using a Paid Preparer	Filers Not Using a Paid Preparer	All Filers
AGI			
Nonzero Mean ($)	67,275	$47,477	58,801
Fraction with Wage and Salary Income	80.56%	88.06%	83.77%
Nonzero Mean ($)	54,009	$45,002	50,154
Fraction with Sch C Income	19.39%	12.02%	16.23%
Nonzero Mean ($)	14,591	$6,466	11,113
Fraction with Sch D Income	21.88%	13.58%	18.33%
Nonzero Mean ($)	23,587	$3,953	15,183
Fraction with Sch E Income	17.01%	5.59%	12.12%
Nonzero Mean ($)	33,741	$7,544	22,528
Fraction claiming EITC	15.78%	12.91%	14.55%
Nonzero Mean ($)	3,119	$2,384	2,805
Fraction with an upward adjustment to tax liabili	51.13%	43.57%	47.89%
Nonzero Mean ($)	1,667	982	1,374
Age	47	42	45
Fraction Married Filing Jointly	42.09%	32.89%	38.15%
Fraction Head of Household	11.08%	8.38%	9.92%
Number of Dependents (mean)	0.6	0.5	0.5
Observations			
Unweighted	75,142	30,233	105,375
Weighted	630,003,046	471,434,101	1,101,437,147

Note: Data come from the IRS National Research Program, 2006-2013. Statistics are computed using NRP sampling weights.

Table 2. Summary of audit adjustments

	Filers Using a Paid Preparer				Filers Not Using a Paid Preparer			
	Pre-audit Income	Nonzero Audit Adjustmen	Underreported Income	Overreported Income	Pre-audit Income	Nonzero Audit Adjustmen	Underreported Income	Overreported Income
Adjusted Gross Income	$67,147	$7,018	$9,112	-$3,719	$47,274	$3,626	$5,265	-$2,072
Non-zero fraction	100%	46%	39%	8%	100%	41%	32%	9%
Wages and Salaries	$43,510	$2,661	$4,591	-$7,375	$39,629	$96	$3,329	-$6,656
Non-zero fraction	81%	6%	5%	1%	88%	7%	5%	2%
Sch C Income	$2,829	$9,535	$11,602	-$4,915	$777	$7,707	$9,424	-$3,357
Non-zero fraction	19%	81%	71%	10%	12%	79%	69%	11%
Sch D Income	$5,162	$4,409	$8,051	-$5,515	$537	-$737	$3,167	-$2,009
Non-zero fraction	22%	23%	17%	6%	14%	35%	3%	10%
Sch E Income	$5,740	$5,873	$10,172	-$8,956	$422	$4,935	$7,517	-$3,498
Non-zero fraction	17%	50%	39%	11%	6%	62%	48%	15%
Earned Income Tax Credit	$492.24	-$1,328	$503	-$1,604	$308	-$1,092	$385	-$1,350
Non-zero fraction	16%	65%	9%	57%	13%	7%	1%	6%

Note: This table reports the measures of compliance found in NRP data from tax years 2006-2013. The first four columns report statistics summarizing tax compliance among tax filers who used a paid preparer in filing their tax return. The first column reports means by income and deduction sources and the fractions with those sources of income. The second column reports the average additional tax liability request during NRP Audits (often called audit adjustment), conditional on non-zero adjustment. The third and forth columns report the average underreported and overreported incomes, conditional on underreporting or overreporting. The final four columns report these same statistics for tax filing units that did not use a paid preparer.

Table 3a: Effect of tax preparers on Audit Adjustment Size

	Full Sample			
	1st Stage	AGI	Taxable Income	Total Tax
Share of returns prepared	0.968***			
	(0.025)			
Paid Preparer Use		3106.343***	3156.146***	761.382***
		(869.508)	(563.844)	(186.761)
Age	0.003***	213.826***	268.228***	73.269***
	(0.001)	(13.672)	(11.607)	(3.188)
Age Squared	0.000	-2.079***	-2.660***	-0.729***
	(0.000)	(0.156)	(0.117)	(0.031)
Primary Filer Male	0.034***	1010.066***	933.705***	295.330***
	(0.006)	(116.595)	(103.738)	(30.496)
Number of Kids	0.031***	-2.694	37.827	15.158
	(0.003)	(162.393)	(69.636)	(22.906)
Avg Agi	-0.000*	0.025**	0.012***	0.004***
	(0.000)	(0.012)	(0.003)	(0.001)
ln(Population)	0.005*	0.983	79.730	35.791**
	(0.003)	(75.950)	(52.788)	(15.574)
Audit Rate	1.597***	78064.765***	91243.619***	19132.111***
	(0.416)	(20662.170)	(10096.744)	(3081.610)
Preparer HHI	0.112	-1237.813	-5874.452***	-1404.317***
	(0.068)	(3160.315)	(1166.148)	(328.901)
Filing Status Controls	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes
R-squared	0.065	0.004	0.005	0.004
N	1080216864	1080216864	1080216864	1080216864

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 3b: Effect of tax preparers on Audit Adjustment Size, selected schedules

	Conditional Sample							
	1st Stage	Sch C	1st Stage	Sch D	1st Stage	Sch E	1st Stage	EITC
Share of returns prepared	0.752***		0.786***		0.553***		0.913***	
	(0.040)		(0.054)		(0.044)		(0.044)	
Prep usage (fitted)		-920.908		1429.879		12522.064***		3.992
		(3055.199)		(1439.548)		(3023.747)		(71.173)
Age	0.002	503.510***	0.008***	78.475**	0.002	123.523**	-0.001	-19.699***
	(0.002)	(52.408)	(0.002)	(33.870)	(0.002)	(48.230)	(0.002)	(2.828)
Age Squared	0.000	-5.304***	-0.000**	-0.745***	-0.000	-1.468***	0.000	0.232***
	(0.000)	(0.537)	(0.000)	(0.285)	(0.000)	(0.409)	(0.000)	(0.033)
Primary Filer Male	0.044***	2877.424***	-0.023	877.666***	0.021	464.932	0.053***	3.939
	(0.011)	(372.182)	(0.015)	(292.089)	(0.015)	(504.068)	(0.011)	(15.508)
Number of Kids	0.014***	240.874	0.010*	59.021	0.011**	113.277	0.051***	-25.959***
	(0.005)	(222.854)	(0.006)	(100.072)	(0.004)	(205.092)	(0.005)	(9.343)
Avg Agi	-0.000*	0.013*	-0.000	-0.004	-0.000	0.002	-0.000**	0.000*
	(0.000)	(0.008)	(0.000)	(0.002)	(0.000)	(0.003)	(0.000)	(0.000)
ln(Population)	0.008**	418.103**	-0.013***	-43.074	-0.008**	380.864***	0.021***	-20.622***
	(0.004)	(188.793)	(0.005)	(146.495)	(0.004)	(142.783)	(0.005)	(5.757)
Audit Rate	0.951	80507.754***	-0.291	95883.060**	-1.224	1.46e+05***	1.817***	-6993.014***
	(0.668)	(21813.836)	(1.173)	(40219.839)	(0.951)	(26430.231)	(0.579)	(1048.901)
Preparer HHI	0.044	-6021.271*	0.266**	1584.611	-0.053	-6385.785	0.128	301.976**
	(0.108)	(3490.450)	(0.131)	(4219.361)	(0.101)	(3893.988)	(0.110)	(125.659)
Filing Status Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.037	0.004	0.057	0.001	0.027	.	0.068	0.021
N	186399211	186399211	206580006	206580006	140088495	140088495	159699984	159699984

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 4: Effect of Tax Preparer Usage on Adjustment Size, Ordinary Least Squares

	Full Sample			Conditional Sample			
	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Paid Preparer Use	1390.612***	1273.342***	350.248***	1502.018***	421.309**	-3.097	-36.224***
	(146.032)	(90.837)	(28.436)	(365.252)	(187.031)	(263.867)	(11.830)
Age	219.245***	274.174***	74.567***	498.976***	87.172***	160.025***	-19.704***
	(14.153)	(11.438)	(3.225)	(54.141)	(28.491)	(41.015)	(2.828)
Age Squared	-2.074***	-2.654***	-0.727***	-5.330***	-0.786***	-1.537***	0.233***
	(0.154)	(0.115)	(0.031)	(0.534)	(0.263)	(0.353)	(0.033)
Primary Filer Male	1078.398***	1008.691***	311.704***	2765.452***	856.892***	807.065*	6.358
	(113.850)	(98.583)	(28.581)	(331.906)	(299.519)	(446.922)	(15.093)
Number of Kids	54.225	100.288	28.797	204.071	70.001	259.983	-23.910***
	(145.074)	(69.346)	(23.493)	(230.773)	(97.478)	(194.975)	(8.353)
Avg Agi	0.025**	0.012***	0.004***	0.013*	-0.004	0.003	0.000
	(0.012)	(0.003)	(0.001)	(0.008)	(0.002)	(0.003)	(0.000)
ln(Population)	-22.461	54.003	30.173*	428.491**	-76.013	118.314	-20.378***
	(74.606)	(54.217)	(16.772)	(197.786)	(126.989)	(113.856)	(5.719)
Audit Rate	85666.879***	99586.001***	20953.773***	72888.867***	99048.710**	1.62e+05***	-6866.373***
	(22740.489)	(9538.767)	(2881.583)	(22432.752)	(38469.419)	(23537.559)	(997.186)
Preparer HHI	-1438.883	-6095.101***	-1452.499***	-5833.387*	1774.827	-7238.459**	295.202**
	(3112.243)	(1165.322)	(330.866)	(3536.753)	(4150.531)	(3692.431)	(126.024)
Filing Status Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.004	0.007	0.005	0.005	0.001	0.002	0.021
N	1080216864	1080216864	1080216864	186399211	206580006	140088495	159699984

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 5: Effect of alternative IVs on AGI adjustment

	eFile IV		VITA IV		EITC IV	
	1st Stage	AGI	1st Stage	AGI	1st Stage	AGI
Local efile Use	-0.868***					
	(0.027)					
Local VITA use			-1.539***			
			(0.161)			
Local EITC claim rate					0.528***	
					(0.044)	
Paid Preparer Use		3064.207***		1301.010		5594.274
		(1167.870)		(2941.530)		(6005.465)
Age	0.003***	213.959***	0.003***	219.528***	0.003***	205.968***
	(0.001)	(13.986)	(0.001)	(20.450)	(0.001)	(17.877)
Age Squared	0.000	-2.079***	0.000	-2.074***	0.000	-2.087***
	(0.000)	(0.156)	(0.000)	(0.150)	(0.000)	(0.168)
Primary Filer Male	0.036***	1011.744***	0.039***	1081.966***	0.039***	910.979***
	(0.006)	(122.001)	(0.006)	(173.446)	(0.006)	(256.516)
Number of Kids	0.032***	-1.296	0.033***	57.197	0.032***	-85.230
	(0.003)	(171.273)	(0.003)	(173.673)	(0.003)	(276.758)
Avg Agi	-0.000***	0.025**	-0.000**	0.025**	0.000***	0.025**
	(0.000)	(0.012)	(0.000)	(0.012)	(0.000)	(0.012)
ln(Population)	0.002	0.407	-0.010***	-23.685	-0.016***	34.978
	(0.003)	(79.039)	(0.003)	(88.159)	(0.003)	(104.715)
Audit Rate	2.428***	78251.464***	4.497***	86063.889***	-0.583	67041.165***
	(0.425)	(21045.600)	(0.461)	(31183.998)	(0.609)	(17703.610)
Preparer HHI	0.173**	-1242.751	0.077	-1449.383	-0.362***	-946.248
	(0.068)	(3142.945)	(0.071)	(2870.998)	(0.075)	(3765.153)
Filing Status Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.056	0.004	0.035	0.004	0.036	0.000
N	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 6a: Effect of VITA Preparer Usage on Adjustment Size

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of returns VITA prepared	1.015***							
	(0.083)							
VITA usage (fitted)		-1972.740	-4919.806	-937.761	-2.71e+04	28234.734	-9.04e+04	40.104
		(4467.034)	(3120.871)	(923.102)	(17647.907)	(26591.745)	(1.25e+05)	(262.267)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.030	0.004	0.006	0.004	0.001	.	.	0.021
N	1080216864	1080216864	1080216864	1080216864	186399211	206580006	140088495	159699984

Table 6b: Effect of VITA Preparer Usage on Adjustment Size, Low-income Taxpayers Only

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of returns VITA prepared	1.195***							
	(0.103)							
VITA usage (fitted)		-4781.653***	-2457.463**	-545.404***	-1.47e+04*	293.669	-3.34e+04	38.008
		(1710.865)	(971.001)	(183.186)	(8025.197)	(5032.427)	(47900.692)	(262.275)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.034	0.002	0.024	0.022	0.004	0.002	.	0.021
N	744001499	744001499	744001499	744001499	112638905	85847303	55582460	159682494

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a VITA preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 7a: Effect of Tax Preparer Usage on Normalized Reported Amount

	Full Sample			Conditional Sample			
	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Prep usage (fitted)	-0.049***	-0.229***	-0.013**	0.428***	0.053*	0.136**	0.045***
	(0.008)	(0.017)	(0.006)	(0.040)	(0.029)	(0.054)	(0.014)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.002	0.039	0.056	.	0.033	0.042	0.133
N	1080216864	1080216864	1080216864	186399211	206580006	140088495	159699984

Table 7b: Effect of Tax Preparer Usage on Normalized Actual Amount

	Full Sample			Conditional Sample			
	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Prep usage (fitted)	-0.001	-0.173***	0.001	0.572***	0.072**	0.244***	0.045***
	(0.003)	(0.016)	(0.006)	(0.048)	(0.030)	(0.059)	(0.013)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.006	0.096	0.080	.	0.028	.	0.141
N	1080216864	1080216864	1080216864	186399211	206580006	140088495	159699984

Notes: This table reports the results of a regression of income measures (normalized by total income) on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 8a: Effect of tax prep on normalized pre-audit income

	Wages	Interest	Dividends	Sch C	Sch D	Pensions	Sch E	Other
Prep usage (fitted)	-0.119***	0.032***	0.011*	0.088***	0.017***	-0.049***	0.033***	0.017***
	(0.016)	(0.007)	(0.006)	(0.009)	(0.006)	(0.011)	(0.006)	(0.006)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.372	0.064	0.052	.	0.022	0.289	0.028	0.004
N	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864

Table 8b: Effect of tax prep on normalized post-audit income

	Wages	Interest	Dividends	Sch C	Sch D	Pensions	Sch E	Other
Prep usage (fitted)	-0.125***	0.036***	0.011*	0.116***	0.018***	-0.051***	0.042***	0.023***
	(0.016)	(0.007)	(0.006)	(0.010)	(0.006)	(0.011)	(0.007)	(0.007)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.376	0.062	0.053	.	0.022	0.292	0.027	0.002
N	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864	1080216864

Notes: This table reports the results of a regression of income measures (normalized by total income) on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 9a: Effect of Paid Preparer Usage on Adjustment Size, Single Men

	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
		Full Sample				**Conditional Sample**		
Share of Returns Prepared	0.903***							
	(0.055)							
Paid Preparer Use		2780.839**	4257.214***	1193.539***	4325.277	135.708	19431.470	-13.979
		(1080.390)	(1032.239)	(283.118)	(3994.249)	(3419.904)	(13659.256)	(191.824)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.057	0.005	0.004	0.002	0.006	0.005	.	0.018
N	259895800	259895800	259895800	259895800	32694794	35092289	19855929	22548505

Table 9b: Effect of Paid Preparer Usage on Adjustment Size, Single Women

	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
		Full Sample				**Conditional Sample**		
Share of Returns Prepared	1.008***							
	(0.054)							
Paid Preparer Use		1031.725*	2077.969***	583.350***	3246.005	1074.914	4295.275*	-120.406
		(590.155)	(530.357)	(127.473)	(3028.786)	(3403.002)	(2458.676)	(180.044)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.068	0.005	0.009	0.001	0.005	.	.	0.027
N	262520816	262520816	262520816	262520816	25319759	40962018	19107927	29750522

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 10a: Effect of Paid Preparer Usage on Adjustment Size, All Single

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of Returns Prepared	0.932***							
	(0.034)							
Paid Preparer Use		830.350	2342.839***	622.021***	-1300.162	-14.580	11410.347**	-10.335
		(736.564)	(595.179)	(179.614)	(3633.496)	(2253.351)	(4799.993)	(82.364)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.064	0.005	0.009	0.006	0.010	0.002	.	0.022
N	631477975	631477975	631477975	631477975	76630697	84132678	45467538	117455726

Table 10b: Effect of Paid Preparer Usage on Adjustment Size, All Married

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of Returns Prepared	1.014***							
	(0.037)							
Paid Preparer Use		6280.374***	4474.176***	1019.073***	-524.830	2161.654	13387.984***	28.814
		(1736.543)	(1065.226)	(367.378)	(4341.614)	(1984.068)	(3889.644)	(131.041)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.056	0.001	0.001	0.002	0.003	0.000	.	0.021
N	448738889	448738889	448738889	448738889	109768514	122447328	94620957	42244258

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 11a: Effect of Paid Preparer Usage on Adjustment Size, Married Under 50

	1st Stage	Full Sample			Conditional Sample			
		AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of Returns Prepared	1.166***							
	(0.050)							
Paid Preparer Use		7283.073**	4419.696***	985.337*	-2008.894	1629.206	12859.053***	-29.891
		(3249.055)	(1493.946)	(554.959)	(6792.950)	(1360.796)	(4267.779)	(151.570)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.077	0.003	0.002	0.002	0.002	0.002	.	0.023
N	211617535	211617535	211617535	211617535	55994099	44504562	36004350	31926612

Table 11b: Effect of Paid Preparer Usage on Adjustment Size, Married Over 50

	1st Stage	Full Sample			Conditional Sample			
		AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of Returns Prepared	0.825***							
	(0.055)							
Paid Preparer Use		8671.984***	6858.274***	1769.778***	6346.981*	5473.328*	10813.934	352.174
		(2152.790)	(1593.233)	(453.582)	(3366.170)	(3257.693)	(6009.549)	(262.909)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.036	.	.	.	.	.	.	.
N	206589046	206589046	206589046	206589046	48518186	74581649	55951048	10112247

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 12a: Effect of Tax Preparer Usage on Adjustment Size, AGI < $15k

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of returns prepared	0.953***							
	(0.052)							
Paid Preparer Use		2035.737**	535.508***	94.808***	-1251.346	664.274	18009.701	-34.684
		(858.566)	(194.390)	(36.416)	(1229.383)	(1015.132)	(19173.348)	(106.330)
R-squared	0.071	0.001	.	0.001	0.012	0.001	.	0.020
N	247241068	247241068	247241068	247241068	36695744	27014129	13865309	73310426

Table 12b: Effect of Tax Preparer Usage on Adjustment Size, AGI $15k-$35k

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of returns prepared	1.018***							
	(0.048)							
Paid Preparer Use		869.934**	1159.732***	305.246***	2514.019	-2227.702	4026.995	47.487
		(405.001)	(366.571)	(65.442)	(1615.938)	(2282.696)	(3133.271)	(94.787)
R-squared	0.086	0.010	0.040	0.035	0.017	.	.	0.018
N	286280088	286280088	286280088	286280088	41421137	27602290	18596615	73893422

Table 12c: Effect of Tax Preparer Usage on Adjustment Size, AGI $35k-$70k

	Full Sample				Conditional Sample			
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E	EITC
Share of returns prepared	0.952***							
	(0.054)							
Paid Preparer Use		2241.034***	4184.999***	954.665***	9463.860***	2062.024**	6062.759**	-285.257
		(621.620)	(637.303)	(140.114)	(3024.661)	(896.961)	(3062.665)	(310.847)
R-squared	0.063	0.009	.	.	.	.	.	0.041
N	269198862	269198862	269198862	269198862	45638820	44033927	32014847	12495270

All Tables

Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 12d: Effect of Tax Preparer Usage on Adjustment Size, AGI $70k-$150k

	Full Sample				Conditional Sample		
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E
Share of returns prepared	1.017***						
	(0.056)						
Paid Preparer Use		3049.137**	6458.303***	1571.916***	8565.356**	190.712	4383.910
		(1385.979)	(1305.698)	(324.092)	(3644.636)	(1127.564)	(3475.752)
R-squared	0.055	0.010	.	0.003	0.023	0.006	.
N	209184313	209184313	209184313	209184313	43225045	65765946	44871698

Table 12e: Effect of Tax Preparer Usage on Adjustment Size, AGI > $150k

	Full Sample				Conditional Sample		
	1st Stage	AGI	Taxable Income	Total Tax	Sch C	Sch D	Sch E
Share of returns prepared	0.602***						
	(0.070)						
Paid Preparer Use		26973.953*	32163.437**	8246.180*	-2.40e+04	6116.534	58990.746***
		(15873.624)	(13611.061)	(4892.367)	(39787.725)	(9358.332)	(17635.748)
R-squared	0.044	.	.	.	0.000	0.003	.
N	68312533	68312533	68312533	68312533	19418465	42163714	30740026

All Tables

Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table A1: Effect of Tax Preparer Usage on Adjustment Size, Efile IV

	Full Sample			
	1st Stage	AGI	Taxable Income	Total Tax
Local eEfile Rate	-0.868***			
	(0.027)			
Paid Preparer Use		3064.207***	3085.710***	692.326**
		(1167.870)	(773.343)	(282.007)
Individual Controls	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes
R-squared	0.056	0.004	0.005	0.004
N	1080216864	1080216864	1080216864	1080216864

	Conditional Sample							
	1st Stage	Sch C	1st Stage	Sch D	1st Stage	Sch E	1st Stage	EITC
Local eFile Rate	-0.663***		-0.629***		-0.503***		-0.911***	
	(0.043)		(0.058)		(0.048)		(0.047)	
Paid Preparer Use		-433.413		2186.384		11593.235***		53.071
		(5039.141)		(1745.039)		(3205.240)		(76.992)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.030	0.004	0.048	0.000	0.023	.	0.065	0.017
N	186399211	186399211	206580006	206580006	140088495	140088495	159699984	159699984

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table A2: Effect of Tax Preparer Usage on Adjustment Size, VITA IV

	Full Sample			
	1st Stage	AGI	Taxable Income	Total Tax
Local VITA rate	-1.539***			
	(0.161)			
Paid Preparer Use		1301.010	3244.582	618.448
		(2941.530)	(2044.228)	(605.036)
Individual Controls	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes
R-squared	0.035	0.004	0.005	0.004
N	1.08e+09	1.08e+09	1.08e+09	1.08e+09

	Conditional Sample							
	1st Stage	Sch C	1st Stage	Sch D	1st Stage	Sch E	1st Stage	EITC
Local VITA rate	-0.946***		-1.327***		-1.064***		-1.541***	
	(0.244)		(0.354)		(0.271)		(0.225)	
Paid Preparer Use		12535.993		-1.35e+04		8768.136		-25.784
		(7867.103)		(12669.048)		(10782.329)		(168.495)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.015	.	0.037	.	0.013	.	0.038	0.021
N	1.86e+08	1.86e+08	2.07e+08	2.07e+08	1.40e+08	1.40e+08	1.60e+08	1.60e+08

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Effect of Tax Preparer Usage on Adjustment Size

	Full Sample			
	1st Stage	AGI	Taxable Income	Total Tax
Local VITA rate	0.528***			
	(0.044)			
Paid Preparer Use		5594.274	2058.878	90.564
		(6005.465)	(1785.392)	(541.207)
Individual Controls	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes
R-squared	0.036	0.000	0.006	0.004
N	1.08e+09	1.08e+09	1.08e+09	1.08e+09

	Conditional Sample							
	1st Stage	Sch C	1st Stage	Sch D	1st Stage	Sch E	1st Stage	EITC
Local VITA rate	0.419***		0.274***		0.178**		0.581***	
	(0.063)		(0.095)		(0.075)		(0.070)	
Paid Preparer Use		1029.664		5143.787		20810.969		-261.663
		(6309.432)		(10032.709)		(16697.544)		(165.972)
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zipcode Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.017	0.005	0.036	.	0.012	.	0.040	.
N	1.86e+08	1.86e+08	2.07e+08	2.07e+08	1.40e+08	1.40e+08	1.60e+08	1.60e+08

Notes: This table reports the results of a regression of audit adjustments on an indicator for an the use of a paid preparer and a set of control variables. Demographic controls include an indicator for dependents claimed, whether the primary filer is male, filing status, age, and age squared. Zipcode Controls include the log of population, the operational audit rate, tax preparer market concentration, and average AGI. Standard errors clustered at the individual filer level are reported in parentheses below the point estimates. N denotes the number of weighted observations. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.