

The Effects of Refund Anticipation Loans on the Use of Paid Preparers and EITC Take-up

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The IRS has an uneasy relationship with tax return preparers. Preparers make it easier for individuals to file their taxes, but they sell financial products that some believe are exploitative. Because these products are complements with paid tax preparation assistance, their availability should affect tax compliance outcomes that are influenced by the use of a paid preparer. I study a regulatory intervention that curtailed the market for refund anticipation loans (RALs) and find that eliminating RALs reduced demand for tax preparation services, reduced EITC claims, and increased demand for an alternative credit product. The analysis suggests that financing the cost of paid tax preparation may be a significant barrier for low-income taxpayers and that consumer protection regulation that targets the financial services provided by tax preparers should account for the collateral consequences on tax filing and compliance.

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1. Introduction

For many households, a tax return preparer stands between them and the U.S. Treasury. These households find that completing an individual income tax return is too burdensome to do on their own, and so tax return preparers satisfy a market demand that could result in lower tax compliance rates and higher rates of non-filing, if unmet. Many preparers also sell to their customers financial and nonfinancial products that are paid for out of the taxpayer's tax refund. National tax preparation chains, such as H&R Block and Jackson Hewitt, as well as used-car dealers and payday lenders, all provide tax preparation services and attempt to bundle some other good or service with it. Uneasiness about the products sold by return preparers and the fees that they charge has led to increasing regulation of the tax preparer industry and those products.

Regulation of the financial products sold by tax return preparers has largely been done at the state level and within a consumer protection framework. Refund anticipation loans (RALs), in particular, have drawn a great deal of criticism from consumer groups and a regulatory change in 2010 nearly extinguished the market for RALs. This has been viewed as a victory by consumer protection advocates, who believe that the loans are harmful to the people who use them. Like payday loans and car title loans, RALs have very high APRs and tend to be purchased by low-income individuals. And so, like those loans, they have the patina of exploitation and consumer advocates argue that their terms are unfair and taxpayers would be better off without them. RALs are unquestionably expensive, but a more elusive question is whether the households who use RALs are acting in their own best interests. If they are, then the disappearance of RALs, distasteful though they seem, may have been welfare reducing for those households.

But focusing on the consumer protection concerns arising from financial products such as RALs neglects the fact that these products are complements with tax preparation assistance, and interventions into those product markets could affect the use of tax preparers, with effects on tax

compliance and take-up of transfers such as the earned income tax credit or the health insurance premium tax credit. What distinguishes RALs from other high-cost credit products is that RALs are closely linked to the tax system, to the collection of taxes and the distribution of benefits through tax law. Because RALs are bundled with tax preparation assistance, the price and availability of RALs is likely to affect the use of paid preparers, and the decision to use a paid preparer has consequences for tax compliance. Thus, an evaluation of the elimination of the RAL market should consider any collateral effects on the use of paid return preparers, income tax return filings rates, and tax compliance generally. In this paper I report the first evidence of the effect of the RAL market on the demand for tax preparation assistance and the collateral effects on EITC take-up and demand for an alternative credit product, known as a refund anticipation check (RAC), for financing the cost of tax preparation assistance. I find that eliminating RALs is associated with reduced demand for tax preparation services, decreased rates of EITC take-up, and substitution of RACs for RALs. In my preferred specification, I find that 80% of RAL borrowers shifted to a RAC, while 10% of RAL borrowers shifted to self-preparation and 5% stopped claiming the EITC.

Identification of the effect of RAL availability on these outcomes is challenged by both omitted variable and reverse causality concerns. First, taxpayer characteristics that are associated with low incomes, EITC eligibility, credit constraints, and the need for tax preparation assistance will induce observed correlations between RALs, the use of paid preparers, and EITC claims. Second, since RALs are secured by refunds, generally EITC refunds, an increase in EITC claims will tend to cause an increase in RALs. In order to identify the causal effect of RAL availability on these outcomes, I exploit a large regulatory intervention by the IRS that caused the near total disappearance of the large market for refund anticipation loans in 2011. On August 5, 2010 the IRS announced that it would no longer provide lenders with a “debt indicator,” which revealed to

lenders whether the refunds that secured RALs would be subject to garnishment for child support or other debts. Without the debt indicator, the number of RALs in 2011 fell by 84% from the prior year and the maximum amount of a loan was cut by lenders from \$10,000 to \$1,500. The regulatory change was national in application, but had heterogeneous effects across the country depending on the share of the taxpayers who were RAL users before 2011. I use this plausibly exogenous change in RAL availability and a simple difference-in-difference design to estimate the effect of RALs on the tax outcomes of interest.

The data do not allow me to differentiate between rational taxpayers, who would be harmed by an intervention that reduces the set of filing options available to them and taxpayers who, because of some form of cognitive bias, may be made better off by eliminating RALs. However, the high degree of substitution from RALs to RACs and the reduction in EITC claims suggests that many of the taxpayers who previously obtained RALs place a high value on paid preparation assistance and are either credit constrained or extremely impatient in the early months of the calendar year. I report survey evidence corroborating this. These results suggest that regulators should be wary about current efforts to curtail the market for RACs, since this product provides one of the last financing options for taxpayers who need tax assistance but are otherwise credit constrained and do not have cash on hand. Consumer regulation of financial products sold to taxpayers must work hand-in-hand with tax administration, taking into account the cross elasticities of the changing price of the regulated products on the demand for preparation assistance, and the changes in compliance that may follow from inducing more taxpayers to prepare their own returns.

Section 2 describes the role of paid preparers and the sources of demand for RALs and RACs, and provides historical and institutional detail about the RAL market leading up to the 2011

filing season. Section 3 describes the data used in the analysis and reports summary statistics. I discuss the empirical strategy in Section 4 and Section 5 reports the results. In Section 6, I discuss the welfare consequences of the elimination of the RAL market and Section 7 concludes.

2. Tax return preparers and their role as credit providers

More than half of all taxpayers use a paid professional to help prepare their tax return, and more than 60% of EITC claimants use a paid preparer. Use of a paid preparer is especially common among Hispanic and African American households, households with lower educational attainment, and lower incomes. What explains the demand for paid tax preparation assistance in these populations? Taxpayers cite a lack of understanding of tax law, the amount of time that it would take to file tax returns without help, and the belief that using a preparer will reduce the likelihood of an audit (Book (2009)). Thus, some of the demand for paid preparation assistance appears to be driven by the complexity of the tax system and the burden of complying with filing obligations, which are greater for both individuals who have more sophisticated business dealings and those with lower educational attainment who are EITC-eligible (Holtzblatt and McCubbin (2004); Slemrod and Sorum (1984)). In light of the importance of tax compliance complexity as source of demand for tax prep assistance, it is unsurprising that tax compliance varies with the use of preparation assistance (Long and Caudill (1987); Klepper and Nagin (1989); Klepper, Mazur, and Nagin (1991); Erard (1993); Leviner (2012)).

There is evidence that the availability of tax preparation assistance affects the likelihood that a taxpayer will claim the earned income tax credit and that they will adjust their reported incomes in response to the incentives it creates (Chetty and Saez (2013); Chetty, Friedman, and Saez (2013)). An IRS audit of EITC claims for tax years 2006-2008 found that, among low-income

filers who reported knowing about the EITC, 80% of those who used a paid preparer claimed the credit whereas only 70% of those who prepared their own return did so.¹ Kopczuk and Pop-Eleches (2007) find that tax preparers increased EITC take-up following the introduction of electronic filing, although Blumenthal, Erard, and Ho (2005) do not find an effect of tax preparation on EITC claims.

There are several reasons why preparers might increase EITC claims. On the one hand they can help manage the complexity of completing the relevant forms, which has been shown to be a deterrent to take-up (Bhargava and Manoli (2015)) even if some complexity is part of an optimal transfer system (Kleven and Kopczuk (2011)). On the other hand, the high-powered incentives that preparers have to obtain a refund for their clients creates the risk of fraudulent claims. These incentives come not just from the fact that a reputation for obtaining a refund is likely to attract customers, but also because tax preparers have historically sold a variety of financial products that are purchased with the proceeds of these refunds.

2.1 Refund loans and refund checks

Refund anticipation loans are short-term loans, usually of one to two weeks. Tax return preparers facilitate the loans for the financial institutions with which they work, and then typically acquire an economic interest in the pool of loans from the institution (usually a bank). A taxpayer who takes out a RAL will have her tax refund directly deposited in a checking account owned by the institution, and the proceeds of the refund will be applied to pay off the principal of the loan, interest and loan origination fees, as well as fees for the tax preparation itself. If the refund is less

¹ <http://www.taxpolicycenter.org/briefing-book/key-elements/poor/paid-preparers.cfm>. I do not evaluate whether all of the increase in EITC claims associated with paid preparation are meritorious. There is some evidence of a correlation between audit adjustments and RAL applications. Book (2009).

than the amount owed on the loan plus fees, then the taxpayer is liable for the difference. The following short summary of how RALs work appears in the 2009 Annual Report for H&R Block:

RALs. RALs are offered to our U.S. clients by a designated bank primarily through a contractual relationship with HSBC Holdings plc (HSBC). An eligible, electronic filing client may apply for a RAL at one of our offices. After meeting certain eligibility criteria, clients are offered the opportunity to apply for a loan from HSBC in amounts up to \$9,999 based on their anticipated federal income tax refund. We simultaneously transmit the income tax return information to the IRS and the lending bank. Within a few days after the filing date, the client receives a check, direct deposit or prepaid debit card in the amount of the loan, less the bank's transaction fee, our tax return preparation fee and other fees for client-selected services. Additionally, qualifying electronic filing clients are eligible to receive their RAL proceeds, less applicable fees, in approximately one hour after electronic filing using the Instant Money service. A RAL is repaid when the IRS directly deposits the participating client's federal income tax refund into a designated account at the lending bank.

At their peak, in 2002, there were 14.1 million RAL applications filed. In 2010, the year before the debt indicator was eliminated, H&R Block originated 2.1 million RALs, with an average amount of \$3,000 with a term of ten to eleven days. Each loan issued by H&R Block cost the taxpayer about \$62, or 2.1% of the loan principal, although the cost of a RAL varies from preparer to preparer. In 2010, Jackson Hewitt charged \$51 in fees plus 4 percent of the loan amount. Depending on the preparer and lender, total tax preparation and RAL fees could be up to \$500 (Book (2009)).

RALs have been especially common in low-income communities. Early season filers, many of whom are EITC claimants, are most likely to use RALs and other tax-related financial products. As a result, critics have long argued that RALs are a "drain" on funds intended for low-income households, particularly the EITC. In 2008, 63% of RAL customers were EITC recipients and 44% of EITC recipients obtained a RAL or RAC, as compared with only 7% of non-EITC recipients. The Urban Institute reported that the median AGI of RAL borrowers was less than

\$20,000, and that a quarter of taxpayers with incomes between \$10,000 and \$25,000 used a RAL (NCLC (2011)). The National Consumer Law Center (NCLC) calculates that RAL loan fees, preparer add-on fees, and tax preparation fees cost at least \$292 per EITC taxpayer for a total “drain” on the EITC program of \$1.5 billion in 2010 (NCLC (2010)). A series of reports by the NCLC and the Consumer Federation of America also found that African American and Latino taxpayers disproportionately receive RALs, and in 2008 the New York State Division of Human Rights sued Jackson Hewitt and Liberty Tax Service for targeting minorities for RAL sales.

Refund anticipation checks (RACs) would not, at first glance, appear to be a substitute for RALs; they do not allow the taxpayer to access her refund immediately. With a RAC, the taxpayer’s refund is deposited by the U.S. Treasury into an account opened at a participating bank, for a fee. The taxpayer is disbursed the refund from that account. H&R Block’s annual report describes their RAC product as follows:

RACs. Refund Anticipation Checks are offered to U.S. clients who would like to either: (1) receive their refund faster and do not have a bank account for the IRS to direct deposit their refund; (2) have their tax preparation fees paid directly out of their refund; or (3) receive their refund faster but do not qualify for a RAL under the existing credit criteria. A RAC is not a loan and is provided through a contractual relationship with HSBC.

RACs have a couple of features that are relevant for the purpose of comparing them with RALs. The first is that they allow the taxpayer to have her refund directly deposited into a checking account, which allows her to receive it more quickly than if she had to wait for a paper check to be mailed. A refund that is sent by direct deposit generally arrives a week before a refund check is received in the mail. The second feature is that RACs allow taxpayers to defer paying tax preparation fees, because they are subtracted from the refund when it is disbursed to the taxpayer. One might view some portion of the cost of a RAC as representing interest on the cost of borrowing

the tax preparation fees, and so both RALs and RACs represent a loan of the tax preparation fee. There is evidence that when one form of high-interest credit is unavailable, individuals shift to other forms of high-interest credit (Bhutta, Goldin, and Homonoff (2016)).

Tax preparation firms have historically differed in their reliance on revenues from financial products such as refund anticipation loans and refund anticipation checks. For example, consumer advocates have noted that Jackson Hewitt is more reliant on fees from RALs and other financial products than H&R Block (NCLC (2010)). This difference is reflected in the segmentation of the market and the difference clienteles served by the firms. In 2010, H&R Block sold a RAL or RAC to 40% of its clients. In 2008, Jackson Hewitt sold a financial product to 91% of its customers and derived 26% of its revenues from financial product fees. Liberty Tax, the third largest individual return preparer, derived 29% of its revenues from RAL and RAC fees in 2009. There have been few empirical studies of RALs and RACs. The study that is closest in spirit to this one is Jones (2016), which examined the effect of disclosure regulations and interest rate caps on RALs and RACs. Jones finds no effect of disclosure laws on the availability of RALs, but evidence suggesting that state interest rate regulation may have driven households to cross state borders to obtain these products.

2.2 Demand for refund loans

Why do people take out RALs and RACs? On the one hand they make it possible to borrow the cost of tax preparation and receive refunds more quickly; tax preparers assert that they would lose tax preparation customers if they did not sell credit products. Consumer advocates argue that these products exploit unsophisticated filers and that they offer little benefit at a high cost (Theodos et al. (2011)). Certainly RAL and RAC users are poorer, on average, than non-users but whether they are unsophisticated or not is an open question. RAL and RAC use is correlated

with low incomes, youth, head-of household filing status, EITC receipt, and lower educational attainment, all of which may be indicators of credit constraints (Elliehausen (2005)). Households with an adjusted gross income (AGI) below \$45,000 are more likely to use RALs, but the effects are strongest in the \$5,000 to \$10,000 AGI range (Theodos et al. (2011)). Among low and medium income households, unbanked households are more than twice as likely as similar banked households to take out a RAL, and many respondents say that they take out the RAL to get the money sooner and pay down other debt, or to pay tax preparation fees (Barr and Dokko 2008). For other taxpayers, the relationship between tax preparation and the RAL is reversed: some taxpayers go to preparers primarily for the loan, and view the tax return filing fee as part of the cost of the RAL (NCLC (2010)).

One challenge for opponents of RALs is that they cannot observe the benefit to RAL borrowers of an advance refund. In fact, one Urban Institute study reports some evidence that the benefit of accessing a refund sooner may be considerable for RAL borrowers; borrowers use them to discharge financial obligations and defer payment of tax preparation fees that they may not otherwise be able to finance. RALs and RAC applications are overwhelmingly filed in the first few weeks of filing season and there is evidence that many customers become delinquent on rent, utilities and other expenses over the winter holidays with the expectation of receiving their RAL in late January or early February and getting current on their obligations (Theodos et al. (2011)). Deferring payment of these already delinquent liabilities another couple of weeks could be very costly, potentially leading to eviction or utilities being cut off. The liquidity constraints of these households makes even paying tax preparation fees burdensome. Half of those surveyed in an Urban Institute study said that paying the tax prep fees was an important motivator in taking out a RAL or RAC (Theodos et al. (2011)).

In addition to time preferences and credit constraints, two important variables that influence the relative benefits of tax financial products and the use of paid preparers are whether consumers have a checking account into which they can have their refund directly deposited and whether they have internet access that they can use to e-File their return. Direct deposit provides a one-week timing benefit over receiving a refund check by mail, and unbanked taxpayers may also incur check cashing fees if they receive a paper refund check. e-Filing provides an even larger timing benefit; it allows taxpayers to get their refunds at least three weeks earlier than they would by paper filing. Survey evidence is consistent with these theoretical timing benefits. Theodos et al. (2011) find that RAL borrowers are motivated by post-holiday financial strain, unexpected expenses, the inability to pay cash for tax preparation assistance and either the lack of consumer credit or unwillingness to incur greater credit debt to pay for tax assistance, as well as the lack of a bank account and mistrust of banks.

2.3 The disappearance of the refund loan market

The market for RALs nearly disappeared in 2011; RAL applications fell by 84.5% for that single year, from 6.85 million to 1 million and by 2013 there were only 69,100 RAL applications. This precipitous decline was caused by a single regulatory change and a two other market disruptions in the supply of RALs. The regulatory change was that the IRS stopped providing to preparers a “debt indicator,” which revealed whether a RAL applicant would have their refund garnished for back taxes, other government debts such as federally-funded student loans, and child support arrears. The FDIC subsequently notified RAL lenders that making loans without the debt indicator was “unsafe and unsound.” In addition, JPMorgan, which had provided financing to 13,000 independent preparers, exited the RAL market. HSBC, which had provided financing to H&R Block’s clients, was forced out of the market by the Office of the Comptroller of the

Currency, which prohibited it from making the loans. As a consequence, in 2011 only three small, state-chartered banks made RALs: Republic Bank & Trust, River City Bank, and Ohio Valley Bank/Fort Knox Financial Services. Even for banks that continued to make RALs, the loss of the debt indicator reduced the size of the maximum RAL that the banks would provide. For 2011, the maximum loan available from Republic Bank was \$1,500 and from River City Bank it was \$750. Previously, RALs had been offered up to \$10,000.

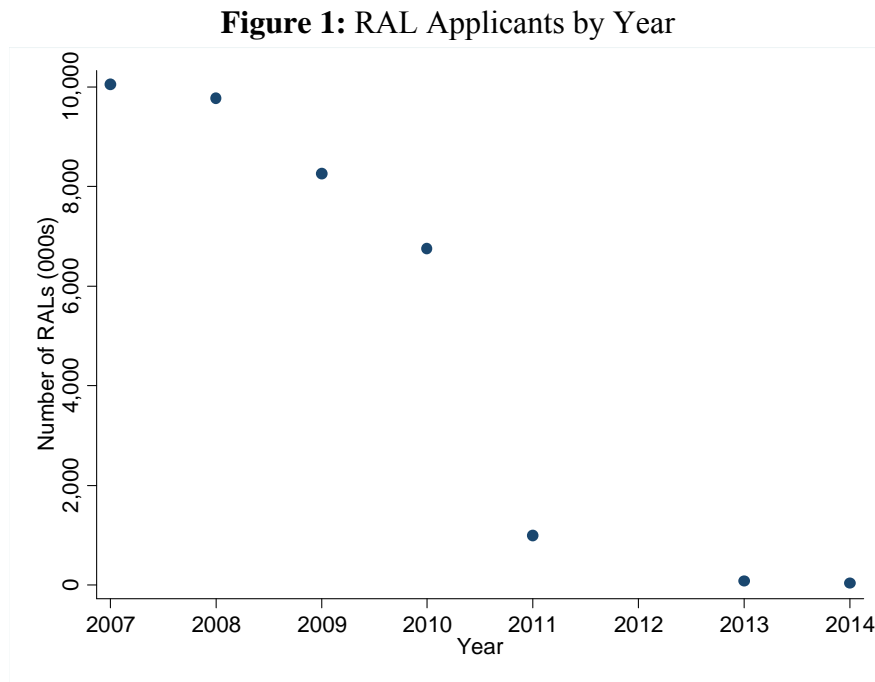
In response to the pressure of reduced RAL revenues, Jackson Hewitt and Liberty Tax began charging additional fees for any RALs that they facilitated. Ultimately, the loss of RALs had a significant effect on Jackson Hewitt, which was heavily reliant on revenue from the product. In addition to the loss of RAL fees, tax preparers offer RALs as an inducement to for prospective clients to purchase tax preparation services. Jackson Hewitt lost 15% of its retail customers in 2010 because it was unable to provide RALs at half its locations. Its business fell by 8% in markets where it remained able to provide RALs, suggesting that some of the decline in its business was due to other factors, but the decline in their business fell by 21% in markets where it was unable to provide RALs.

3. Data sources and summary statistics

The analysis is based on annual zip-code level tax return data from the IRS' Statistics of Income Division. These data were aggregated to the county level and merged with information on county characteristics from the U.S. Census and Bureau of Labor Statistics, and information about the locations of paid tax preparer offices for the three largest national tax preparation chains.

3.1 County-level tax, economic and demographic data

Data on aggregate tax return filings at the zip-code level were provided by the Brookings Institution, which obtained the data from the IRS. These data include the number of filings in thirteen different AGI brackets, the number and amount of EITC claims, and the number of self-prepared returns and number of refund anticipation loans and refund anticipation checks issued, among other variables. Figure 1 shows the times series of RAL applications by year for 2007-2014, and illustrates the precipitous and discontinuous decline in RALs for the 2011 filing season. Data on RALs and RACs are unavailable for 2012.



I aggregated the data to the county level using 2010 and 2011 crosswalks provided by the Department of Housing and Urban Development in order to merge them with data on population, racial demographics, and poverty and unemployment. Allocation of zip codes across counties, where necessary, was done according to the share of residential addresses in each county. Estimates of local population demographics and poverty rates were obtained from the U.S. Census

and employment data were taken from the Local Area Unemployment Statistics series generated by the Bureau of Labor Statistics. Although aggregating the data to the county level reduces the power of the statistical analysis, it allows me to control for local economic conditions and population trends that might confound estimates of the causal effect of the elimination of RALs, and these data are not available at a lower level of geography.

3.2 Tax preparer data

I obtained data on the locations of the three largest national tax preparer chains from AggData LLC, which has collected location data from the websites of H&R Block, Jackson Hewitt, and Liberty Tax at least annually since January 2010. Individual tax preparation locations are geocoded and include zip code identifiers. In certain years, AggData collected location data more than once and when this was the case I used the locations listed on the first collection date after January 1. For the two filing seasons that are the focus of this study, these dates are January 14, 2010 and January 20, 2011. As discussed above, the three national chains differ in the degree to which they rely on revenues from financial products sole in connection with tax preparation. Figure 2 shows that in counties where Jackson Hewitt offices make up the majority of national chain preparer offices, the mean share of taxpayers applying for a RAL was greater than in counties where H&R Block or Liberty Tax are dominant. Although the gap between counties where different preparers were dominant disappeared by 2013, there remained a one percentage point gap in 2011, reflecting that fact that Jackson Hewitt was able to secure limited RAL financing in that year.

Figure 2: RAL Applicants by Majority Tax Preparer

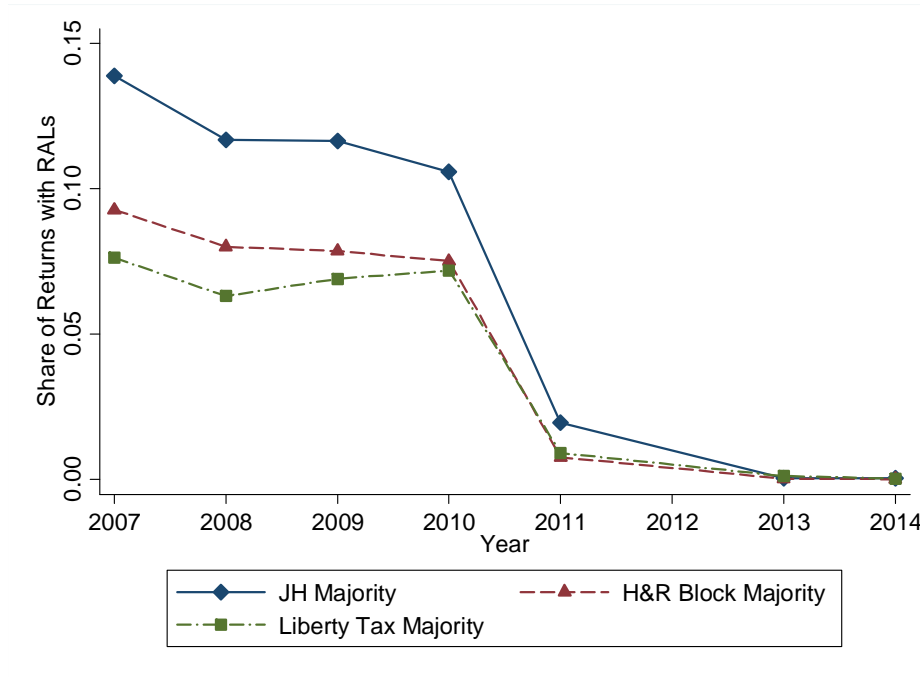


Table 1 shows summary statistics for U.S. counties in 2009, the tax year generally corresponding to the 2010 filing season, by the share of tax returns for which a RAL application was made. Each row reports a mean (unweighted) characteristic of counties in three terciles of the distribution of RAL use. Counties where RALs are more popular tend to have more EITC and child tax credit claims and a higher share of refunds. RAL use is associated with more RAC use and lower rates of self-preparation as well as higher rates of direct bank deposits for refunds and lower filing rates overall. Counties with high rates of RAL use also tend to be smaller and poorer, with higher unemployment rate and lower labor force participation, with higher shares of black and Hispanic residents. Interestingly, high RAL-use counties tend to have more tax preparers despite being smaller than low RAL-use counties. Differences in the supply side of tax prep services are also apparent. Jackson Hewitt is the dominant tax preparer in 20% of the high RAL-use counties, but it is the majority preparer in only 3.6% of the low RAL-use counties.

Table 1
2009 County Summary Statistics by Tercile of RAL Use

	2010 Share of Returns with RALs		
	0-4.3%	4.3-9.2%	9.2-51.0%
Share of Returns			
EITC	15.8	21.4	31.9
Child Tax Credit	16.2	17.7	19.0
Additional CTC Claims	11.4	15.3	22.7
Education Credit	6.9	6.2	5.2
Refunds	76.5	81.6	84.7
Direct Deposit	50.9	57.4	61.6
RALs	2.4	6.4	14.6
RACs	5.7	9.0	12.3
Self-Prepared	36.4	37.5	32.2
1040	71.8	66.6	62.0
1040a	16.6	21.5	26.6
1040z	11.0	11.6	11.1
AGI <\$30k	46.6	51.1	57.2
AGI >\$100k	9.7	7.5	5.4
Number of Returns	61,030	44,363	15,761
Share of Population			
Black	2.8	6.4	17.9
Asian	1.9	1.1	0.6
Hispanic	6.1	8.6	9.9
Labor Force	53.5	49.1	44.8
Tax Returns Filed	42.9	40.7	36.3
Population	143,501	108,056	41,829
Unemployment Rate	7.6	9.3	10.2
Poverty Rate	11.9	15.3	21.7
Median Income	\$49,941	\$43,436	\$35,430
Number of Offices			
Number of Lib. Tax Offices	0.09	0.15	0.11
Number of JH Offices	0.24	0.54	0.79
Number of H&R Block Offices	0.87	1.27	1.43
Total Offices	1.20	1.96	2.34
Liberty Tax Majority	0.1	0.2	0.2
Jackson Hewitt Majority	3.6	11.1	19.4
H&R Block Majority	59.5	57.7	52.1

Thus, looking at the cross section of counties before 2011, RAL use is positively correlated with RAC, the number of EITC claims, and the share of tax return filings with less than \$30,000 in adjusted gross income, and it is negatively correlated with the share of returns that are self-prepared. These correlations are all statistically significant. The strong correlation between the

demand for RALs and RACs and the number of EITC claims and low-income taxpayers are likely due to unobserved credit constraints or time preferences that are correlated with low incomes. Heterogeneity across counties in the number of these taxpayers suggest that a simple cross sectional analysis of the relationship between RALs and other tax filing and compliances decisions will yield biased and inconsistent estimates of the effect of RALs on these other decisions. Figures 3 and 4 shows the counties where RALs were common in 2010 and the very few counties in 2011 in which RALs were still available.

Figure 2: 2010 Refund Loans by County as Share of Returns

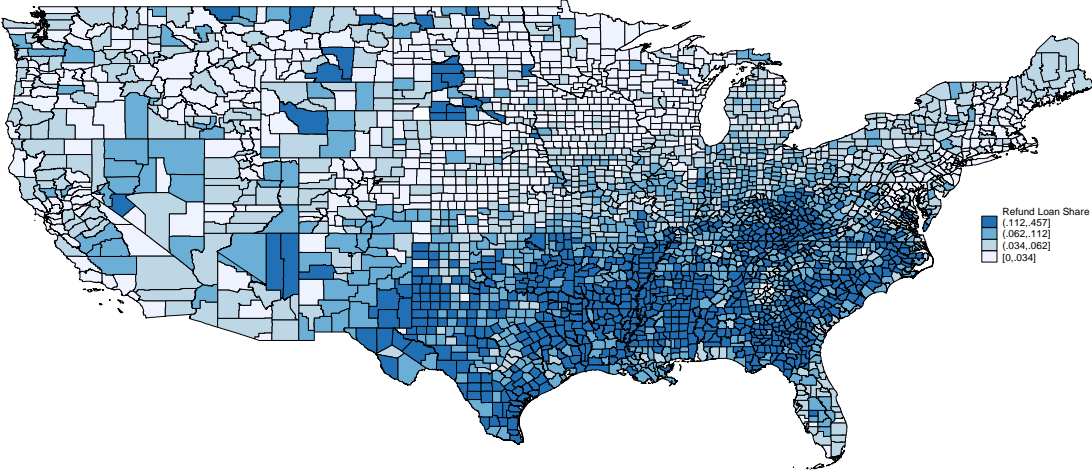


Figure 3: 2011 Refund Loans by County as Share of Returns

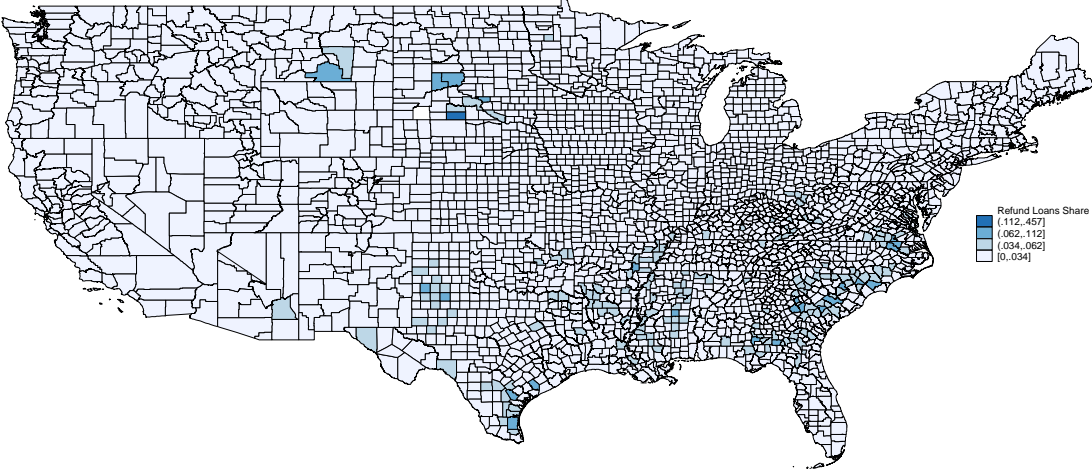


Table 2 compares the counties with RAL rates of more than one percent in 2010 and 2011 to show the selection effects of eliminating the debt indicator and the characteristics of counties in which RALs were still available after 2010. Recall that among the three national tax preparer chains Jackson Hewitt was the only one that was able to make RAL loans in 2011.

Table 2
Summary Statistics for Counties with RAL Rates >1%

	2010	2011
Share of Returns		
EITC	23.5	29.8
Child Tax Credit	17.8	18.9
Additional CTC Claims	16.8	21.4
Education Credit	6.1	6.2
Refunds	81.4	84.2
Direct Deposit	57.3	64.1
RALs	8.2	2.4
RACs	9.3	21.7
Self-Prepared	35.5	35.8
1040	66.3	63.1
1040a	22.0	24.6
1040z	11.4	12.2
AGI <\$30k	52.0	55.2
AGI >\$100k	7.5	6.6
Number of Returns	41,479	29,331
Share of Population		
Black	9.4	18.9
Asian	1.1	0.8
Hispanic	8.4	9.7
Labor Force	48.8	45.3
Tax Returns Filed	39.9	37.4
Population	100,552	74,216
Unemployment Rate	9.1	10.2
Poverty Rate	16.5	21.0
Median Income	\$42,604	\$37,858
Number of Lib. Tax Offices	0.12	0.19
Number of JH Offices	0.55	0.82
Number of H&R Block Offices	1.24	1.21
Total Offices	1.91	2.23
JH Majority Preparer	11.9	19.1
JH Majority Preparer in 2010	11.9	23.5

The few counties in which RALs were still available are those where demand is likely the highest. These are smaller counties in which 29.8 percent of filers claim the EITC and 84 percent claim a refund. Unemployment and poverty rates are higher and residents of these counties have lower incomes and have more than twice as many black residents, on average, as counties with high RAL use in 2010. In 2011, Jackson Hewitt was the majority tax preparer in nearly 20 percent of the counties where more than one percent of filers had a RAL. A dominant Jackson Hewitt presence in 2010 is predictive of a county still having RALs in 2011; in 2010 Jackson Hewitt was the majority tax preparer in 11.9 percent of counties in which RAL use was common, but it was the majority tax preparer in 23.5 percent of counties where RAL use was still common in 2011.

4. Empirical Strategy

In order to identify the effect that the availability of refund anticipation loans has on tax compliance, I exploit a regulatory change that nearly eliminated RALs for the 2011 filing season. Before 2011, the IRS provided tax return preparers with a “debt indicator” that revealed whether any given RAL applicant would have their refund garnished for back taxes, other government debts such as federally-funded student loans, and child support arrears. On August 5, 2010 the IRS announced that it would not provide tax preparers financial institutions with the indicator for 2011. This decision was the result of a process that began in January 2008, when the IRS issued a request for comments about whether it should limit the information it made available to lenders to facilitate the sale of certain financial products. The IRS was specifically concerned about whether these products, the profitability of which depended on the taxpayer’s refund, encouraged preparers to file false refund claims. The elimination of the debt indicator was a national policy change that affected all tax return preparers and financial institutions. However, the large variation across

counties in the share of taxpayers using RALs means that the number of taxpayers affected was heterogeneous across counties.

There were two other disruptions to the supply of RALs in 2011. In addition to the elimination of the debt indicator, JPMorgan Chase voluntarily stopped providing RAL financing for the numerous small tax preparers with which it had historically worked, and the Office of the Comptroller of the Currency (OCC) ordered HSBC, which provided the loans for H&R Block's clients, to stop making the loans as well. Jackson Hewitt's stock jumped 30% when news of the OCC's decision was released. In 2011, only three small banks stood ready to make RALs. Jackson Hewitt continued to offer RALs at only some locations, and the small preparers that had relied on JPMorgan, and H&R Block, which had worked with HSBC, were excluded from the market entirely.

4.1 Identification

We are interested in the effect that RALs have on the number of taxpayers who pay for tax preparation services rather than prepare their own returns, the number of EITC claimants, and the demand for RACs. At the county level, all of these outcomes likely depend on county demographics, including incomes, employment, labor force participation, and the availability of paid tax preparation services. To control for fixed county characteristics that may be correlated with both the use of RALs and the outcomes of interest, I implement a simple difference-in-difference research design and control for time-varying county characteristics that I can observe. The identifying assumption is that the un-modeled trend in outcomes is not different for counties that had more RALs in 2010. Figures 3a-3c show the mean value of the outcome variables and the number of returns filed for the years 2007-2011. This time period demonstrates both the pre-

intervention trend and the first year after the debt indicator was eliminated, for quintiles of the distribution of RAL use in 2010.

Figure 3a: RACs by Year and 2010 RAL Use

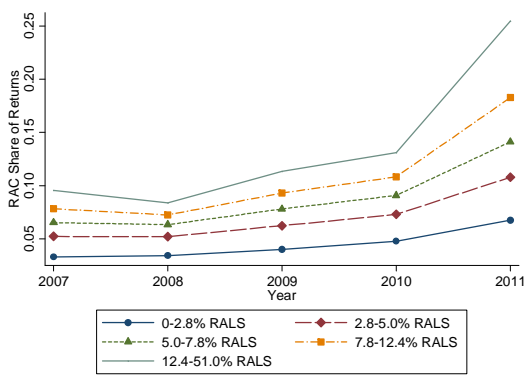


Figure 3b: EITC by Year and 2010 RAL Use

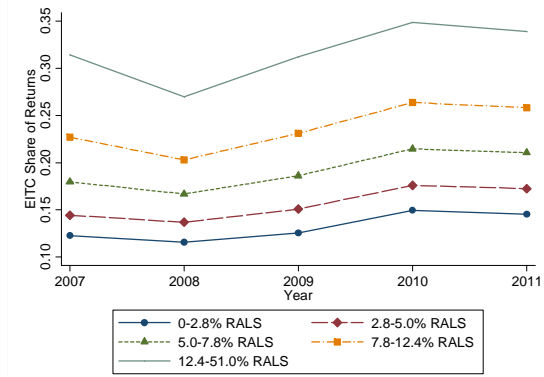


Figure 3c: Self-Prep by Year and 2010 RAL Use

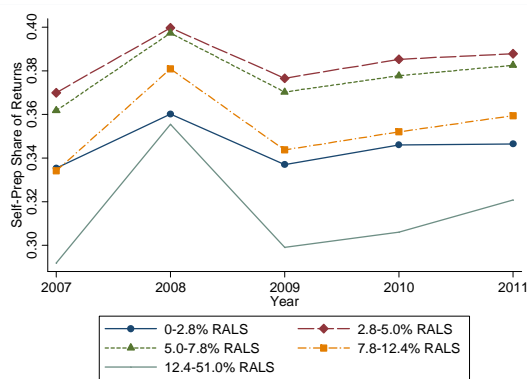


Figure 3a shows a roughly parallel trend in the share of RAC applicants by year for the years 2007-2010, but a noticeable jump in the number of RAC applicants in 2011 for those counties with the most RALs in 2010. This is the first evidence that eliminating the RAL market caused taxpayers to substitute to RACs. Figure 3b also shows that the parallel trends necessary for identification of the effect of RALs on EITC claims is plausible. A close inspection suggests that the decline in EITC claims in 2011 may have been greater in counties with the most RALs in 2010, but the effect is much subtler than the effect on RACs. In 2011, EITC participation rates did drop

in 39 states, an unusually large decline in participation compared with the declines in 2010 and 2012 of five states and eighteen states, respectively. Figure 3c shows the time trends for the share of returns that were self-prepared. The large jump in the number of self-prepared returns for 2008, particularly among the counties with the most RALs, is due to the 2008 stimulus payments which were only distributed to eligible taxpayers who filed a return for the 2007 tax year. This caused a large increase in the number of filers who were not otherwise obligated to file a return, many of whom filed their own return. Focusing on the change in number of self-filers from 2009-2010, the trends appear similar. However, in 2011 there was an increase in the number of self-prepared returns that appears to vary monotonically with the number of RALs in the county in 2010. For example, the largest increase was concentrated in counties where at least 12.4% of filers had a RAL in 2010. Taken together, the visual evidence supports the identifying assumption of parallel trends in the outcome variables before 2011 by share of filers claiming a RAL in 2010.

In most years, it would also be unreasonable to interpret the coefficient on the change in RALs as reflecting the effect of RALs on the outcome of interest. The number of EITC claims, for example, would be expected to cause the number of RALs, not the other way around. However, the effect of eliminating the RAL indicator and of financing from two large banks disappearing from the market for RALs caused the near-total elimination of the market. From 2010 to 2013 the number of RALs fell by 99% and nearly all of the variation in the change in RALs at the county level is due to different starting places, the different share of RALs in 2009. As Figures 3a-3c illustrate, these differences do not appear to be associated with different trends in the outcomes of interest before 2010.

4.2 Specifications

I implement the difference-in-difference identification strategy using two econometric specifications. The first specification models the change in the dependent variable of interest from 2010 to 2011 in county c as a function of the change in RALs and change in economic and demographic characteristics X :

$$\Delta DV_c = \alpha + \beta \Delta RAL_c + \Gamma \Delta X_c + \epsilon_c \quad (1)$$

Each variable in the estimating equation is the difference in the level value of the variable from 2010-2011. The variable ΔRAL_c is the change in the share of tax returns in county c for which a RAL was obtained and DV_c is either the change in number of RACs, self-prepared returns, and EITC claims as a share of all returns filed. The coefficient β is the parameter of interest, and the causal effect of RALs on the dependent variable under the assumptions of the model. In my second specification, I use the panel from 2008-2010 to estimate the following equation:

$$DV_{c,t} = \alpha + \gamma_c + \beta_1 POST + \beta_2 RAL_{2010} + \beta_3 POST \times RAL_{2010} + \Gamma X_{c,t} + \epsilon_{c,t} \quad (2)$$

I begin the panel after 2008 because of the surge in stimulus-related filings that year created a population of returns that is not comparable to other years. The variable $POST$ is a dummy variable for the year 2011 and RAL_{2010} is a continuous variable measuring the share of returns for which a RAL was obtained in 2010. β_3 is the parameter of interest in the model. Although the overwhelming cause of the change in RALs in 2011 was the elimination of the debt indicator, which affected all counties and caused the almost complete disappearance of the RAL market, H&R Block also lost its financing partner in HSBC while Jackson Hewitt and Liberty Tax remained able

to make a few RALs in some regions. Moreover, differences across tax preparers in their ability to provide RACs may create heterogeneity in the effect of RAL declines across counties. For these reasons, I also estimate equations (1) and (2) by interacting the RAL variable with categorical variables indicating whether one of the three preparers was the majority preparer in the county.

5. Results

Tables 3-5 show the parameter estimates for the effect of refund anticipation loans on refund checks, self-prepared returns, and EITC claims, respectively. Columns I and II of each table report the estimates for equations (1) and (2), and columns III and IV include estimates for the interaction terms of RALs with the majority tax preparer in each county. Coefficient estimates for the demographic and economic controls and number of returns filed are omitted, but I summarize those estimates in the text. Equation (2) was estimated using a quadratic year trend. The results suggest that, when RALs were eliminated, roughly 80% of RAL applicants switched to RACs, 10% of taxpayers switched to self-preparation, and 5% stopped claiming the EITC.

5.1 *The Effect of RALs on RACs*

Table 3 reports estimates of the effect of RALs on RACs. The coefficient estimate on ΔRAL in column I is the primary estimate of interest: a one percentage point decline in RAL use caused a 0.8 percentage point increase in RAC use in 2010, on average. This estimate is virtually the same using the entire 2007-2011 panel. Columns III and IV shows estimates from equations where the change in RALs is interacted with the dominant tax preparation firm in the county (*i.e.*, the firm, if any, with more than half of the offices in the county attributable to the three national chains).

Table 3: Effect of RALs on RACs

	I	II	III	IV
Δ RAL	-0.809*** (0.007)		-0.768*** (0.012)	
Post10		-0.008*** (0.001)		-0.006*** (0.001)
RAL10		0.109*** (0.014)		0.131*** (0.018)
Post10#RAL10		0.805*** (0.009)		0.743*** (0.016)
JH Majority Preparer			-0.003 (0.002)	0.025*** (0.003)
H&R Majority Preparer			-0.002* (0.001)	0.005*** (0.001)
Liberty Majority Preparer.			0.004** (0.002)	-0.009*** (0.003)
Post10#JH Maj.Prep.				-0.002 (0.002)
Post10#H&R Maj.Prep.				-0.004*** (0.001)
Post10#Lib. Maj.Prep.				0.003 (0.002)
JH Maj.Prep.#RAL10				-0.175*** (0.032)
H&R Maj.Prep.#RAL10				-0.024 (0.019)
Lib Maj.Prep.#RAL10				0.087*** (0.032)
Post10#JHMajPrep#RAL10				0.076*** (0.028)
Post10#HRMajPrep#RAL10				0.096*** (0.019)
Post10#LibMajPrep#RAL10				-0.145** (0.056)
JH Maj.Prep.# Δ RAL			-0.058* (0.032)	
H&R Maj.Prep.# Δ RAL			-0.062*** (0.015)	
Lib. Maj.Prep.# Δ RAL			0.091* (0.046)	
Observations	3,135	18,803	3,135	18,803
R-squared	0.908		0.910	
Demographic Controls	YES	YES	YES	YES
Economic Controls	YES	YES	YES	YES
Number of Counties		3,136		3,136
Time Trends		YES		YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

The coefficients on the interaction terms are statistically significant, and reveal that the substitution from RALs to RACs was stronger in counties where Jackson Hewitt or H&R Block

were the dominant preparer as compared with counties where there was no dominant preparer. It is possible that Jackson Hewitt and H&R Block marketed RACs more aggressively than other preparers or that they had relationship with banks that made them better able to offer this product than smaller preparers whose relationships with the banks were limited to the refund loan market. On the other hand, in counties where Liberty Tax was the dominant preparer, there was significantly less substitution to RACs. The data cannot distinguish whether this is due to unobservable differences in changes in demand for RACs relative to RALs in Liberty Tax counties, or differences in Liberty Tax's business practices.

Coefficient estimates for the demographic and economic covariates are generally consistent with the summary statistics. RACs are more common in counties with higher shares of black and Hispanic residents, and are increasing in measures of economic hardship such as the unemployment rate and decreasing in median income.

5.2 The Effect of RALs on Demand for Paid Preparers

Table 4 reports the coefficient estimates for the effects of RALs on the share of filers who prepare those returns themselves, rather than through a paid preparer. The coefficient of -0.101 in column I corresponds to a 0.1 percentage point increase in the share of returns that are self-prepared for every one percentage point decrease in the share of filers obtaining a RAL. The magnitude of this effect varies across the four regression models between 0.088 and 0.131 but the estimates are all statistically significant at the one percent level. Together with the estimated effects on substitution to RALs, this suggests that more than 90 percent of the taxpayers who took out RALs in 2010 switched to RACs or abandoned tax preparation. In contrast to the results for the RACs, there is no strong evidence that the effect of the RALs on demand for paid preparation services differs across tax preparers.

Table 4: Effect of RALs on Self-Preparation of Returns

	I	II	III	IV
Δ RAL	-0.101*** (0.008)		-0.088*** (0.012)	
Post10		-0.007*** (0.001)		-0.003** (0.001)
RAL10		-0.501*** (0.034)		-0.311*** (0.050)
Post10#RAL10		0.131*** (0.009)		0.124*** (0.017)
JH Majority Preparer			-0.001 (0.002)	0.064*** (0.009)
H&R Majority Preparer			-0.002** (0.001)	0.030*** (0.006)
Liberty Majority Preparer.			-0.008 (0.009)	0.016 (0.016)
Post10#JH Maj.Prep.				0.002 (0.003)
Post10#H&R Maj.Prep.				-0.007*** (0.002)
Post10#Lib. Maj.Prep.				-0.005 (0.027)
JH Maj.Prep.#RAL10				-0.509*** (0.077)
H&R Maj.Prep.#RAL10				-0.301*** (0.055)
Lib Maj.Prep.#RAL10				0.587* (0.300)
Post10#JHMajPrep#RAL10				0.009 (0.030)
Post10#HRMajPrep#RAL10				-0.000 (0.021)
Post10#LibMajPrep#RAL10				-0.065 (0.321)
JH Maj.Prep.# Δ RAL			-0.039* (0.021)	
H&R Maj.Prep.# Δ RAL			-0.014 (0.016)	
Lib. Maj.Prep.# Δ RAL			-0.151 (0.113)	
Observations	3,135	21,936	3,135	21,936
R-squared	0.120		0.126	
Demographic Controls	YES	YES	YES	YES
Economic Controls	YES	YES	YES	YES
Number of Counties		3,136		3,136
Time Trends		YES		YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

5.3 The Effect of RALs on EITC Claims

RALs provide an inducement for taxpayers to use a paid preparer, and they also provide the preparer with an incentive to claim the refundable EITC on the taxpayer's behalf. Thus, eliminating RALs could reduce the number of EITC claims either because taxpayers who prepare their own returns are less likely to claim the EITC than ones who go to a paid preparer, or because paid preparers are less motivated to seek an EITC refund for the taxpayer. Table 5 reports estimates of the effect of RALs on the share of returns on which the earned income tax credit was claimed. In the first-difference model estimate in columns I, the effect of a one percentage point decline in RALs as a share of returns filed is a roughly 0.05 percentage point decline in EITC claims as a share of returns. In the panel data models in column II, the estimated effect is 0.016 percentage points. The difference in magnitudes is likely due to the fact that the underlying trends in EITC claims are not perfectly parallel. In fact, EITC claims were increasing at a slightly faster rate in counties higher level rates of RAL use in 2010, which biases the coefficient estimates for the effect of RALs downward, so that the true effect of eliminating RALs is likely larger than 0.05. Shortening the window around the elimination of the debt indicator reduces this bias.

The data do not permit me to identify whether the decline in EITC claims is attributable to taxpayers who began to prepare their own returns or those who continued to use a paid preparer. Under the assumption that the decline is concentrated among those who shifted to self-preparation, the coefficient estimates suggest that taxpayers are 50 percent less likely to claim the EITC as a result of self-preparation under model I. To the extent that the decline in EITC claims is associated with taxpayers who continued to use a paid preparer, 50 percent is an overestimate of the effect of self-preparation on EITC take-up. Recall that the IRS audit described in Section 2 found a 10 percentage point effect of self-preparation on EITC claims. As with the self-preparation estimates,

there is no strong evidence that the effect of RALs on EITC claims varies with the identity of the preparer in the county. This is expected if the decline is concentrated among non-filers.

Table 5: Effect of RALs on EITC Claims

	I	II	III	IV
Δ RAL	0.052*** (0.004)		0.043*** (0.008)	
Post09		-0.008*** (0.000)		-0.007*** (0.001)
RAL09		0.633*** (0.017)		0.626*** (0.026)
Post09#RAL09		-0.016*** (0.004)		-0.019*** (0.007)
JH Majority Preparer			0.001 (0.001)	0.008** (0.004)
H&R Majority Preparer			0.002** (0.001)	-0.005*** (0.002)
Liberty Majority Preparer.			0.004 (0.003)	-0.016*** (0.005)
Post09#JH Maj.Prep.				0.001 (0.001)
Post09#H&R Maj.Prep.				-0.001 (0.001)
Post09#Lib. Maj.Prep.				-0.005 (0.004)
JH Maj.Prep.#RAL09				-0.056 (0.039)
H&R Maj.Prep.#RAL09				0.024 (0.026)
Lib Maj.Prep.#RAL09				0.061 (0.102)
Post09#JHMajPrep#RAL09				-0.008 (0.014)
Post09#HRMajPrep#RAL09				0.007 (0.010)
Post09#LibMajPrep#RAL09				0.133*** (0.044)
JH Maj.Prep.# Δ RAL			0.003 (0.012)	
H&R Maj.Prep.# Δ RAL			0.018* (0.009)	
Lib. Maj.Prep.# Δ RAL			-0.014 (0.042)	
Observations	3,135	21,936	3,135	21,936
R-squared	0.128		0.133	
Demographic Controls	YES	YES	YES	YES
Economic Controls	YES	YES	YES	YES
Number of Counties		3,136		3,136
Time Trends		YES		YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

5.4 Zip Code Level Robustness

In order to test the robustness of these results I estimated regression equations similar to (1) and (2) at the zip code level. Because of the greater number of zip codes, the hypothesis tests at this unit of analysis have much more power, but economic and demographic controls are not available. The estimates for the effect of RALs on RACs differ slightly in magnitude but corroborate the county-level estimates: declines in RALs caused a roughly 72% offsetting increase in RACs from 2010-2011, and the effects were stronger in areas where Jackson Hewitt or H&R Block was the dominant preparer. The zip code analysis also indicates that the decline in RALs caused taxpayers to shift toward self-preparation and that the effect was larger in zip codes where Jackson Hewitt or H&R Block was the majority preparer. The estimate for the effect of Liberty Tax as the majority preparer is of the same sign, but the scarcity of counties where Liberty Tax was dominant makes the estimate too imprecise to be statistically significant at conventional levels.

The estimated effect of RALs on EITC claims are of the same direction, similar magnitude, and are statistically significant at the zip code level. The estimates for the interaction terms indicate that the positive effect of RALs on EITC claims is larger in counties where Jackson Hewitt or H&R Block are the majority preparer, by 2.2 and 2.7 percentage points, respectively. Taken together with the effects on self-preparation, these results are consistent with the decline in EITC claims being concentrated in the population of taxpayers who shifted away from paid preparation assistance.

6. Discussion

Until 2011, most taxpayers entitled to a tax refund had five mutually exclusive options: use a paid preparer and get a RAL, use a paid preparer and get a RAC, use a paid preparer and get neither, file a return without assistance, or do not file a return. Eliminating RALs unambiguously increases the number of taxpayers who choose the latter four options, but the distribution across these alternatives depends on how the costs and benefits of the remaining options appeal to the preferences of the taxpayers who previously took out RALs.

The benefits of RACs and RALs are timing benefits, and the costs are the out-of-pocket fees. In the case of a RAL, all costs and benefits are borne currently; a taxpayer receives her refund, net of fees, generally within a day of filing her taxes. If the taxpayer gets a RAC, the out-of-pocket cost of tax preparation is deferred (along with the RAC fees) until the refund is deposited into the checking account set up on the taxpayer's behalf by the preparer. If the taxpayer pays only for tax preparation, she must pay that cost at the time of filing but will not receive her refund for another two or three weeks, depending on whether she has a bank account in to which her refund can be directly deposited or not. If she prepares her return herself she will receive the maximum possible refund (net of fees), but she must incur the time and hassle cost of preparing her own return and the timing of her refund will depend on her banking status and method of filing. For example, if the taxpayer does not have ready access to online filing, she must file a paper return, which will delay her refund by an additional three weeks. Thus, the benefits of going to a paid preparer include not just the avoided time and hassle costs of self-preparation, but also the benefits of electronic filing for those taxpayers who would otherwise file paper returns. In 2010, 47 percent of tax returns were still filed on paper.

While the RAL generally provides only a current net benefit (the refund, net of the cost of the loan and the cost of tax preparation), and the RAC provides only a future net benefit, the other two filing options offer the combination of a current cost (either the time spent preparing one's return or the out-of-pocket cost of paid preparation) and a larger future benefit. The sequence of costs and benefits implicates the time preferences of the taxpayer. A taxpayer with a sufficiently high discount rate and for whom the hassle of preparing her own return is sufficiently high will choose a RAL. Admittedly, taxpayers who want a RAL have a very high discount rate. Consider the following calibration of a simple model of the taxpayer's choice. Assume that the taxpayer is entitled to a \$2,000 refund and that the price of tax preparation is \$150, the price of a RAL is \$100 and the price of a RAC is \$30. A taxpayer who exponentially discounts future cash flows at a single fixed rate will prefer a RAL to a RAC only if she is indifferent between \$2,000 in one week and \$1,960 today. On an annualized basis, the taxpayer's time preferences become stark: she will be indifferent between \$2,000 in one year and \$699 today. A taxpayer with such preferences who is banked and has access to e-filing will a taxpayer will prefer a RAL to self-preparation if the hassle costs of self-preparation are at least \$170. If she is unbanked and must file by paper, then she will prefer a RAL to self-preparation even if the hassle cost is only \$22. Since taxpayers who prefer RALs tend to discount the future relatively heavily, when RALs are eliminated they will tend to choose RACs, because self-preparation and paid preparation both require paying immediate costs (in time and hassle or in cash) in exchange for future benefits. This is consistent with the high degree of substitution from RALs to RACs that we observe in the data.

From a welfare perspective, removing a filing option, such as taking out a RAL, can only make rational individuals who would have chosen that option worse off. Moreover, the near-disappearance of most of the RAL market in 2011 coincided with a 50% increase in the cost of

RALs for those taxpayers who were still able to obtain one from Republic Bank, creating a negative price externality for those taxpayers (NCLC (2010), NCLC (2011)). Arguments against RALs tend to suggest that consumers are making a mistake in purchasing them, and that the products are exploiting some sort of cognitive error or bias, although these arguments tend not to be explicit about the nature of that bias. One natural candidate explanation for RAL demand that might justify intervention in the market is if taxpayers are present-biased and credit constrained. Although we cannot distinguish between rational and biased taxpayers with these data and so a welfare analysis of the observed effects of eliminating RALs is outside of the scope of this analysis, a simple $\beta - \delta$ model of impatience is suggestive.

Because RACs provide the only filing option in which the costs of tax preparation are deferred until the receipt of the refund then such taxpayers will tend to switch from RALs to RACs. Taxpayers who would most prefer a RAC but are tempted to take out a RAL because of their bias will, in the absence of a RAL, in fact choose a RAC from among their remaining options and so be made better off by the elimination of the RAL market. A taxpayer who is tempted to take out a RAL but would be best off by paying only for tax preparation services will also choose a RAC rather than pay the immediate cost of tax preparation in exchange for an ungarnished refund in the future. Nevertheless, she is better off with a RAC than a RAL. The third possibility is that the taxpayer chooses a RAL but that she would do best to prepare her own return. Such a taxpayer has low self-preparation costs and is patient in the long run, but her bias tempts her to take out a RAL. If a RAL is not available, the taxpayer may either prepare her own return or take out a RAC, depending on the magnitude of her bias and whether she benefits from the e-filing and direct deposit advantages of a RAC. Whether she is better or worse off in the absence of a RAL is ambiguous.

The behavioral and welfare effects of eliminating the RAL market depend on the preferences of the taxpayers. Eliminating RALs would be expected to cause both rational and present-biased taxpayers to switch to RACs and some biased individuals to switch to self-preparation, with positive welfare effects for biased individuals who should optimally have either a RAC or only tax preparation services, and negative effects for some biased individuals who should be preparing their own return and for rational taxpayers. Accounting for the net effect of eliminating RALs would require identifying the proportion of taxpayers of each type in the filing population.

7. Conclusions

In this paper, I exploit a change in the regulation of refund anticipation loans to identify the effect of the RAL market on the supply and demand for paid tax preparation, EITC take-up, and the use of RACs. Nearly eliminating RALs increased the use of refund anticipation checks and reduced the use of paid tax preparers and EITC claims. The implication for tax administration policy is that decisions to regulate tax preparers and limit the scope of their businesses must take into account the cross elasticities of the changing price of the regulated activities on the demand for their services, and the changes in compliance, such as EITC take-up, that may follow from inducing more taxpayers to prepare their own returns.

Consumer groups, which argued persistently for the elimination of RAL market, have set their sights on RACs, which they also view as exploitative. The framework in this paper provides reasons to be especially cautious about eliminating the RAC option, because it is the sole option available to taxpayers that allows them to file with assistance without incurring immediate out-of-

pocket costs. In the absence of this option, individuals who heavily discount future cash flows, or are credit-constrained and cash-poor may file prepare only cursory and inaccurate returns, or not file at all. More generally, the welfare effects of financial products that resemble RALs, such as payday loans and other alternative financial products, are often evaluated in isolation from the other choices (such as filing a tax return) that may be dependent on that borrowing. Determinations about whether these products are welfare-enhancing must take these choices into account.

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References

- Barr, Michael S., and Jane K. Dokko. 2008. "Third-Party Tax Administration: The Case of Low- and Moderate-Income Households." *Journal of Empirical Legal Studies* 5 (4): 963–981.
- Bhargava, Saurabh, and Dayanand Manoli. 2015. "Psychological Frictions and the Incomplete Take-Up of Social Benefits: Evidence from an IRS Field Experiment." *The American Economic Review* 105 (11): 3489–3529. doi:10.1257/aer.20121493.
- Bhutta, Neil, Jacob Goldin, and Tatiana Homonoff. 2016. "Consumer Borrowing after Payday Loan Bans." *The Journal of Law and Economics* 59 (1): 225–59. doi:10.1086/686033.
- Blumenthal, Marsha, Brian Erard, and Chih-Chin Ho. 2005. "Participation and Compliance with the Earned Income Tax Credit." *National Tax Journal*, 189–213.
- Book, Leslie. 2009. "Refund Anticipation Loans and the Tax Gap." *Stan. L. & Pol'y Rev.* 20: 85.
- Chetty, Raj, John N. Friedman, and Emmanuel Saez. 2013. "Using Differences in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings." *The American Economic Review* 103 (7): 2683–2721. doi:10.1257/aer.103.7.2683.
- Chetty, Raj, and Emmanuel Saez. 2013. "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients." *American Economic Journal: Applied Economics* 5 (1): 1–31. doi:10.1257/app.5.1.1.
- Elliehausen, Gregory. 2005. "Consumer Use of Tax Refund Anticipation Loans." *Credit Research Center Monograph* 37. <http://faculty.msb.edu/prog/CRC/pdf/M37.pdf>.
- Erard, Brian. 1993. "Taxation with Representation." *Journal of Public Economics* 52 (2): 163–97. doi:10.1016/0047-2727(93)90019-P.

- Holtzblatt, Janet, and Janet McCubbin. 2004. "Issues Affecting Low-Income Filers." In *The Crisis in Tax Administration*. Brookings Institution Press.
- Jones, Maggie R. 2016. "A Loan by Any Other Name: How State Policies Changed Advanced Tax Refund Payments." Accessed September 28.
https://www.census.gov/srd/carra/16_04_A_Loan_By_Any_Other.pdf.
- Klepper, Steven, Mark Mazur, and Daniel Nagin. 1991. "Expert Intermediaries and Legal Compliance: The Case of Tax Preparers." *The Journal of Law & Economics* 34 (1): 205–229.
- Klepper, Steven, and Daniel Nagin. 1989. "The Role of Tax Preparers in Tax Compliance." *Policy Sciences* 22 (2): 167–94.
- Kleven, Henrik Jacobsen, and Wojciech Kopczuk. 2011. "Transfer Program Complexity and the Take-Up of Social Benefits." *American Economic Journal: Economic Policy* 3 (1): 54–90. doi:10.1257/pol.3.1.54.
- Kopczuk, Wojciech, and Cristian Pop-Eleches. 2007. "Electronic Filing, Tax Preparers and Participation in the Earned Income Tax Credit." *Journal of Public Economics* 91 (7–8): 1351–67. doi:10.1016/j.jpubeco.2006.11.003.
- Leviner, Sagit. 2012. "Role Tax Preparers Play in Taxpayer Compliance: An Empirical Investigation with Policy Implications, The." *Buff. L. Rev.* 60: 1079.
- Long, James E., and Steven B. Caudill. 1987. "The Usage and Benefits of Paid Tax Return Preparation." *National Tax Journal*, 35–46.
- National Consumer Law Center and Consumer Federation of America. 2010 Refund Anticipation Loan Report.
- National Consumer Law Center and Consumer Federation of America. 2011 Refund Anticipation Loan Report.
- Slemrod, Joel, and Nikki Sorum. 1984. "The Compliance Cost of the U.S. Individual Income Tax System." *National Tax Journal* 37 (4): 461–74.
- Theodos, Brett, and others. 2011. "Who Needs Credit at Tax Time and Why: A Look at Refund Anticipation Loans and Refund Anticipation Checks."
<http://webarchive.urban.org/publications/412304.html>.