Evidence on Subsequent Filing from the State of Michigan’s Income Tax Amnesty

Abstract - Based on individual taxpayer–level data from Michigan, this study provides first–time empirical evidence on the subsequent filing compliance of state income tax amnesty participants. We find that about two–thirds of new filers and nine–tenths of previous filers who filed amended returns under amnesty, subsequently filed income tax returns. These results hold after controlling for observable differences between new and amending filers. Although in aggregate an estimated 5,500 taxpayers were added to Michigan’s tax rolls, the additional revenue raised from these taxpayers appears marginal, at about 0.1 percent of the state’s personal income tax revenues.

INTRODUCTION

Since the mid–1980s, the District of Columbia and 35 states in the United States have conducted tax amnesties (U.S. Congress, 1998). Taxpayers who participate in these programs typically are granted immunity from prosecution and civil penalties and sometimes also have the interest on back taxes abated.1 Through 2001, these programs generated almost $2.5 billion in gross revenues and attracted participation by large numbers of taxpayers, including many that had not previously filed returns (i.e., non–filers). As a result, amnesties continue to be popular with state tax administrators—since 1997 eight states (Arkansas, Louisiana, Michigan, Missouri, New Jersey, New Mexico, New York, and Wisconsin) have offered tax amnesties, all for the second or third time. In addition, Maryland and Ohio held first–time amnesties in late 2001.

Apart from the revenue potential, amnesties are considered attractive because they provide an opportunity for existing taxpayers to wipe the slate clean and for previous non–filers to start with a clean slate. Indeed, in an extensive review of state amnesty programs, Ross (1986, p. 152) reports that “[m]ost state officials said the primary goals of their amnesty programs were prospective: to get taxpayers back on the tax rolls and to improve future compliance.” Both of these goals imply that amnesties can increase long–run rev-

enues. However, it is unclear from the extant empirical research whether amnesties have achieved these goals. Muddying the waters are conceptually opposing arguments and uncertain theoretical predictions about the impact of amnesties on both participation and revenues. In particular, not much is known about what happens to taxpayers that come forward in an amnesty, especially those who were not in the system to begin with (the non-filers). We believe that examining this issue is central to assessing the success of amnesties in improving future compliance.

This study provides first-time empirical evidence on the subsequent filing behavior of participants in a state income tax amnesty. Specifically, we examine the success of a state tax amnesty in adding taxpayers to the tax rolls and keeping them in the tax system. The evidence is based on a random sample of individual taxpayer returns filed during the State of Michigan’s amnesty program in 1986. These data allow us to observe the subsequent filing compliance of both previous non-filers (hereafter “new filers”) and previous filers who amended their returns under amnesty (hereafter “amending filers”). To benchmark the subsequent filing rates as well as the profile of the amnesty participants with the taxpaying population in general, we use federal tax return data of Michigan filers from the Statistics of Income (SOI) Panel because comparable state-level data outside of the amnesty are not available. In addition, we use these results together with aggregate information on tax payments at the state level to infer the revenue effects of bringing new filers into the system.

We find that for Michigan amnesty participants filing a 1983 income tax return, about 73 percent subsequently filed state income tax returns for tax year 1986, compared to an 82 percent subsequent filing rate for federal returns filed by Michigan residents. However, the subsequent filing rate of the amnesty participants was quite different for new filers and amending filers: about 68 to 72 percent of new filers compared with about 88 to 93 percent of amending filers filed a tax year 1986 return. The difference between the two groups persists even after controlling for the differing characteristics of these two groups. Using the federal return-based subsequent filing rate as the benchmark, our results imply that nearly 5,500 new taxpayers were added to Michigan’s tax rolls. In revenue terms, these taxpayers added about $3.4 million in new revenue, which is about 0.1 percent of Michigan’s personal income tax revenues. Thus, while it appears that the amnesty was successful in attracting many participants and in retaining many of them in the system (especially over two-thirds of the new filers), its impact on revenues appears negligible.

The rest of the paper is organized as follows. In the next section we discuss the theory and previous research on amnesties to provide the background for our study. We then describe the Michigan amnesty program and the individual taxpayer-level data originating from that program as well as the federal return data used to benchmark our results. Next, we report the results of our univariate tests of subsequent filing of both new filers and amending filers and the results of regression models that control for observable differences between the two groups.

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2 As an aside it should be noted that despite misgivings about a federal amnesty, these goals also are shared at the federal level. A concrete example is the IRS’s non-filer program launched in 1992, which was the Service’s first widely publicized effort resembling a typical amnesty.

3 As explained later, a limitation of our analysis is that for some observations the “subsequent filing” we observe could very well have been within a year following the amnesty.

4 Although the comparisons with SOI data yield useful insights on the amnesty’s impact on subsequent filing, our results are properly viewed as being conditional on amnesty participation. This limitation is discussed later.
We end with revenue estimates suggested by our results and some concluding remarks.

THEORY AND PREVIOUS RESEARCH

Although there is an extensive theoretical literature on the economics of tax compliance, extensions of that literature to amnesties is of fairly recent origin (e.g., Alm and Beck, 1990; Andreoni, 1991; Malik and Schwab, 1991; Stella, 1991; Graetz and Wilde, 1993). Drawing on the standard expected utility model of tax compliance based on Allingham and Sandmo’s (1972) extension of Becker (1967), these studies contend that amnesties would not affect taxpayer behavior. The principal argument is that if a taxpayer previously evaluated the costs and benefits of noncompliance and chose not to comply, reducing the costs \textit{ex post} would not induce participation in an amnesty or increase future compliance. In fact, as many point out, amnesties may reduce future compliance because they may raise the expectation of another amnesty and thus lower the expected costs of noncompliance.\footnote{See, for example, Lerman (1986), Leonard and Zeckhauser (1986), Alm, McKee, and Beck (1990), Andreoni (1991), and Alm and Beck (1993).} This is not idle speculation given the record of repeat amnesties.\footnote{See U.S. Congress (1998), Table 2 as updated by the authors. To quell speculation about repeat amnesties, however, Georgia legislatively mandated that its first amnesty would be its only amnesty.} It has also been suggested that taxpayers may infer weakened enforcement from an amnesty offer and revise their expectations of the probability of detection and punishment, which would also lead to less compliance (U.S. Congress, 1998).

In contrast to the no effect or negative effect predictions, Malik and Schwab (1991) suggest that in an “adaptive utility” framework taxpayers learn about their utility function through experience, so they may choose to participate in an amnesty even though they chose to evade earlier. Further, amnesties are almost always offered in conjunction with increased enforcement, either in penalties, audit rates, or both, so it is not surprising that most amnesty programs have been successful in attracting many participants. An increase in enforcement unambiguously increases future compliance in rational choice models.\footnote{Stella (1991), however, argues that this prediction may not hold because cost-minimizing tax agencies have an incentive to exaggerate their enforcement efforts. This lack of credibility causes a slow change in taxpayers’ beliefs about the true level of enforcement.} Because of these conflicting claims, the effect of typical amnesty programs on future compliance and revenue is uncertain. To further complicate matters, except for Graetz and Wilde (1993), these models tend to focus on amending filers rather than new filers. The resulting limited insights offered by these models have prompted calls for empirical studies.

Unfortunately, progress on the empirical front has been stymied primarily because individual amnesty return data are virtually nonexistent. Most empirical work in the area uses aggregate data from individual states (e.g., Joulfaian, 1988; Alm and Beck, 1993),\footnote{One exception is Dubin and Wilde (1990) who perform a cross-state analysis of aggregated data rather than focus on a single state. They do not detect any revenue increase from amnesties.} or focuses on under-reporters who file amended returns and who generally constitute the smaller group of amnesty participants (e.g., Crane and Nourzad, 1988; 1992). An exception is Fisher et. al.’s study (1989), which profiled amnesty participants using the same sample as this study.\footnote{As discussed later, however, there are many important differences in the empirical procedures used in our study compared to those used by Fisher et. al. (1989).} Without specifying a formal model, Fisher et. al. (1989) hypothesized that amnesty participants are likely to be those who: (1) perceive a large increase in the

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likelihood that past evasion will be detected or penalties will be imposed; (2) now feel increased guilt with respect to their past behavior; or (3) evaded small amounts of taxes and are not concerned that participation will reveal other evasion, such as federal income taxes. Consistent with their expectations, Fisher et al. found that relatively few participants evaded large amounts of taxes over long periods of time and a large number of taxpayers used the amnesty to pay relatively small amounts of taxes. They also found that many taxpayers were known by the tax authorities and were probably in compliance with the federal tax system.

Using data from the Massachusetts amnesty program, Joulfaian (1988) found that chronic nonfilers and filers who underreported tax were not attracted to amnesty programs. He also found that the immediate “yield” of tax amnesties is highly significant when compared to audit effort, but less significant when compared to overall revenues.

Examining a time-series of monthly individual income tax revenues for the period January 1980 through December 1989, Alm and Beck (1993) explored the long-run revenue effects of the 1985 Colorado tax amnesty. They find the amnesty had virtually no long run impact on either the level or the trend of tax collections and conclude that a typical amnesty is unlikely to generate significant new revenue but also is unlikely to have significant negative effects on long-term compliance.

In summary, neither the analytical models of amnesty participation nor the empirical studies directly examining the revenue effects of amnesties address the question of subsequent filing after an amnesty, although increasing that rate is often mentioned as an important goal of an amnesty program. In particular, the previous research has not examined whether new filers continue to stay in the tax system, which has been at the heart of the debate on amnesties and is the central focus of this study.

MICHIGAN’S AMNESTY PROGRAM, SAMPLE DATA AND DESCRIPTIVE STATISTICS

In this section, we briefly describe the State of Michigan’s tax amnesty program that provides the individual taxpayer-level data from amnesty participants used in this study to examine the subsequent filing issue. We then provide descriptive statistics for amnesty returns that are used in the empirical tests and also for federal returns from Michigan filers that are used as a benchmark.

The Michigan Tax Amnesty Program

Michigan’s tax amnesty program ran from May 12 to June 30, 1986, and shared many features that have characterized state amnesty programs generally (Michigan Department of Treasury, 1987). Specifically, the amnesty itself was legislatively authorized, held for a relatively short duration (50 days), covered all taxes (due on or before September 30, 1985), and waived all criminal and civil penalties for failure to file a return or pay any state tax. The legislation also allowed tax and interest on outstanding assessments (i.e., accounts receivable) to qualify for amnesty. However, taxpayers under criminal investigation or civil or criminal prosecution were precluded from participation. Moreover, the program was proposed as part of a larger package of tax reform measures that included funding for enhanced enforcement efforts, increasing the rate and coverage of most existing penalties, and enacting new penalties. Apart

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10 A more complete description of Michigan’s amnesty program can be found in Goddeeris et. al. (1989) and Fisher et. al. (1989).
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from extensively publicizing these measures, just prior to the amnesty, the Michigan Department of Treasury (DOT) also sent letters to taxpayers identified as having filed a federal income tax return from a Michigan address without having filed the corresponding Michigan state tax return. Presumably, this action further increased the credibility of the threat of enhanced enforcement.

About 75,000 taxpayers participated in the amnesty program, filing over 128,000 returns and paying approximately $110 million in taxes and interest. However, a large percentage of the participants and revenue came from existing accounts receivable, arguably at a cost of future revenue. The approximately 27,350 taxpayers without outstanding assessments prior to amnesty filed nearly 47,200 returns and paid about $44.6 million in taxes and interest. Although four other taxes were also represented, most amnesty applications related to the state individual income tax—almost 33,000 returns and $13.6 million in taxes and interest.11

Sample Data

Sample of Michigan Amnesty Returns

The Michigan DOT drew a 10 percent simple random sample of the amnesty applications submitted (hereafter, the “amnesty sample”).12 After deleting returns from taxpayers who filed for amnesty but owed no additional taxes and those taxpayers who were denied amnesty, the final amnesty sample consisted of 2,951 usable individual income tax returns, 588 (19.9 percent) from amending filers, and 2,363 (80.1 percent) from new filers.13 This sample showed amending filers and new filers paid $1.51 million and $330 thousand, respectively, in taxes and interest.

After the amnesty, the DOT matched the taxpayer identification number of each amnesty participant to Michigan returns for tax year 1986 (TY86) filed through the second extension deadline for these returns (October 15, 1987). Although the DOT did not extract TY86 information for these returns, this “fact of filing” for TY86 provides us the unique opportunity to analyze the subsequent filing behavior of amnesty participants.

To perform the subsequent filing analysis, we started with those amnesty participants who filed a TY83 return that was due April 16, 1984, two years prior to the amnesty. Although 17 different tax years (1968 to 1984) are represented in the sample, we chose the TY83 returns for several reasons: (1) these returns comprise over one-third of all individual income tax returns filed during the amnesty; (2) using a single tax year avoids confounds introduced by taxpayers who filed amnesty applications for multiple tax years;14 and (3) selecting TY83 also allows a match to a larger sample of federal returns filed by Michigan residents, which is described below. After deleting seven returns with

11 The four other taxes besides the individual income tax for which amnesty returns were submitted were the Michigan single business tax, and the sales and use, intangibles, and inheritance taxes. It should be noted that all revenue amounts (for Michigan and other amnesty programs) are “gross” not new, net revenues brought in by the amnesty. Costs that should be considered include administrative costs of the revenue agency for promoting and implementing the amnesty program, but such data are not available.
12 Each amnesty participant was required to submit an amnesty application along with all related tax returns. A single amnesty application could contain one or multiple tax returns.
13 See Michigan Department of Treasury (1988) for more detail on the data collection procedures. As part of that process, the DOT undertook several quality assurance measures to ensure integrity of the data. Prior to beginning this analysis, however, we again examined the data in detail. By comparing extreme and anomalous values to the original data collection documents, we uncovered additional errors that we corrected in our data prior to analysis, so our sample statistics occasionally differ slightly from the DOT report.
14 Thirty percent of new filers and 15 percent of amending filers filed multiple returns.
an adjusted gross income (AGI) greater than $200,000 to allow comparison to the federal return data, we have a working sample of 1,003 returns, of which 227 (22.6 percent) are from amending filers and 776 (77.4 percent) are from new filers.

In supplemental analysis (not presented in detail), we use amnesty participants’ TY84 returns that were due April 15, 1985 (one year prior to the amnesty) for sensitivity tests. Together, the TY83 and TY84 returns comprise nearly 70 percent of the amnesty sample.

Sample of Federal Income Tax Returns of Michigan Residents

Federal income tax return data for Michigan residents come from the Statistics of Income Panel of Individual Returns (SOI Panel), which is part of the Ernst & Young Tax Research Database. The SOI Panel is a subset of the SOI Individual Model File and represents a simple random sample of individual income tax returns filed each year. An indicator for the taxpayer’s state of residence allows us to identify the federal returns of Michigan taxpayers. To protect confidentiality of taxpayer identity, however, the state of residence information is available only for returns with AGI less than $200,000.

The 1983 SOI Panel file contains 19,120 returns filed during calendar year 1984, of which 653 TY83 returns are from Michigan residents. We matched these taxpayers to TY86 returns in the SOI Panel that were filed during calendar year 1987 to estimate subsequent filing rates for federal returns from Michigan residents. We defined the federal subsequent filing rate as the percentage of TY83 Michigan filers who also filed a TY86 return from Michigan to make it comparable to the state amnesty subsequent filing rate. Because the 1986 SOI Panel file includes only one-half as many taxpayer IDs as in 1983, only 312 returns from Michigan residents are available in the 1983–1986 panel.

Descriptive Statistics on the Sample Data

Table 1 provides descriptive statistics on TY83 returns of the Michigan amnesty participants in the first two columns, and on the TY83 federal income tax returns filed by Michigan residents from the SOI Panel in the third column. Because of the interest in understanding the profile of amnesty participants already in the tax system relative to the nonfilers who filed returns for the first time during the amnesty, we describe the amending and new filers in the Michigan amnesty sample separately. We first compare these two groups in terms of income and taxes and then in terms of their available demographic and other characteristics. We then compare the amnesty participants with the profile of Michigan residents gleaned from federal returns.

The new filers in the amnesty reported a mean (median) AGI of $20,410 ($15,160) and Michigan taxable income of $15,181 ($9,384). Although only about half (47 percent) of these new filers indicated that they had a portion of their taxes prepaid (either through withholding or estimated payments) prior to the amnesty, these prepayments represented about 60 percent of their total tax liability.15 In comparison, the amending filers reported a much higher income—mean (median) AGI of $36,268 ($30,250) and Michigan taxable income of $32,183 ($24,421). However, most of these taxpayers had prepaid a bulk of their tax liability, with over 86 percent indicating some tax prepayments that in dollar terms amounted to about 82 percent of their total tax liability. In fact, slightly over two-thirds of these taxpayers actually indi-

15 The amount of the prepayments reported here and later in the text is based on the total dollar amount of prepayments, rather than the averages reported in the tables for “percent tax prepaid.” The large number of zeros for taxpayers who did not prepay any tax skew the averages in the tables.
### TABLE 1

**DESCRIPTIVE STATISTICS ON MICHIGAN AMNESTY PARTICIPANTS AND FEDERAL RETURNS FROM MICHIGAN**

<table>
<thead>
<tr>
<th></th>
<th>Tax Year 1983</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Michigan Amnesty Returns</td>
<td>New Filers</td>
<td>Amending Filers</td>
<td>SOI Panel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>776</td>
<td>227</td>
<td>653</td>
</tr>
</tbody>
</table>

**INCOME & TAXES:**

**Federal Adjusted Gross Income**
- Mean: $20,410, $36,268, $19,946
- Standard Error: ($706), ($1,789), ($676)
- Median: [$15,160], [$30,250], [$15,580]

**Michigan Taxable Income**
- Mean: $15,181, $32,183
- Standard Error: ($635), ($2,121)
- Median: [$9,384], [$24,421]

**Michigan Tax Liability**
- Mean: $966, $2,035
- Standard Error: ($40), ($134)
- Median: [$606], [$1,542]

**Amnesty Tax Paid**
- Mean: $367, $250
- Standard Error: ($24), ($29)
- Median: [$143], [$1,542]

**Percent Tax Prepaid**
- Mean: 35.7%, 69.8%, 275.6%
- Standard Error: (1.5%), (2.3%), (64.4%)
- Median: [0.0%], [86.5%], [126.1%]

**Sample Proportions:**
- Prepaid: 0.469, 0.863, 0.922
- Refund: 0.000, 0.674, 0.848

**DEMOGRAPHIC AND OTHER CHARACTERISTICS:**

**Number of Dependents**
- Mean: 0.92, 1.06, 1.06
- Standard Error: (0.05), (0.07), (0.07)
- Median: (0.00), (1.00), (0.00)

**Sample Proportions:**
- Married Filing Jointly: 0.389, 0.714, 0.568
- Home Owner: 0.122, 0.154, 0.325
- Paid–Preparer: 0.469, 0.728, 0.441
- Attaching DOT Letter: 0.245, 0.031, NA

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1 The table reports means of nonzero values for each variable. For continuous variables, the second row reports the standard errors in parentheses and the third row reports the medians in brackets. NA indicates “not available.”

2 Federal individual income tax returns included in the Statistics of Income (SOI) Panel of Individual Returns indicating Michigan as their state of residence. These returns are limited to those with AGI < $200,000 because the state of residence is unavailable in SOI data for higher income returns to protect individual taxpayer confidentiality.

3 N is the maximum number of observations for each group; because of missing data, the actual number of observations differs for each variable.
cated a refund on their original return. Hence, not surprisingly, they paid a smaller amount of amnesty taxes—average (median) $250 ($110), or just over 12 percent of their total tax liability.

In terms of demographic and other characteristics, most of the new filers are single (about 60 percent), with less than one dependent on average. By contrast, most of the amending filers are married (over 70 percent), with just over one dependent on average. In terms of tax return preparation, slightly less than half of the new filers used a paid-preparer (47 percent), whereas nearly three-fourths of the amending filers used a paid-preparer (73 percent). Finally, we examined the proportion attaching a copy of the DOT letter sent to suspected nonfilers. About 22 percent of new filers and, surprisingly, 3 percent of amending filers attached a copy of the letter to their amnesty application.16

Based on counterpart data available for Michigan filers from federal income tax returns reported in the third column of Table 1, the new filers have certain similarities to Michigan taxpayers in general. For example, the mean (median) AGI of the new filers in the amnesty of $20,410 ($15,160) is almost identical to the mean (median) AGI reported by Michigan taxpayers on federal returns of about $19,950 ($15,580). Amending filers on the other hand have significantly higher AGI than the average Michigan filer ($36,268 vs. $19,946, t = 8.53). Further, paid-preparer usage by new filers in the amnesty (47 percent) is similar to that of the population in general (44 percent). However, in terms of the proportion of the sample that prepaid taxes, number of dependents and marital status, the amending filers in the amnesty appear more similar to the Michigan taxpayers in general.17

TESTS OF SUBSEQUENT FILING BY AMNESTY PARTICIPANTS

In Tables 2 and 3 we report results of univariate tests and in Table 4 the results of regression models to explain the subsequent filing behavior of amnesty participants. Specifically, Table 2 provides the frequency distribution of subsequent filing, and Table 3 presents comparative sample characteristics by subsequent filing.

“Subsequent filing” in this study is defined as whether the Michigan amnesty participant who filed a TY83 state income tax return during amnesty subsequently filed a regular TY86 return. We should note, however, that there might be little difference between the time of the amnesty filing and the 1986 return filing. Indeed, given that the amnesty application was filed in May or June 1986 and the TY86 return was due by October 1987, “subsequent” filing could very well be within the next year for some of the sample observations. Ideally, we would like to have had the fact-of-filing information for later years as well as a better (longer) time separation between the amnesty and the regular filings, but we do not.

Frequency of Subsequent Filing

As Table 2 shows, 73.1 percent of the Michigan amnesty participants filing a TY83 return also filed a TY86 return sub-

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16 Given this letter was sent to taxpayers who had filed a federal income tax return but not a Michigan state income tax return, it is surprising that amending filers attached the DOT letter. However, we were unable to obtain information on how many letters were sent or to whom and thus could not determine whether there was any systematic coding error for this variable and to what extent it might affect the results.

17 One statistic from the SOI data reported in Table 1 (mean “percent tax prepaid” of 275.6), appears anomalous. It appears, however, that a small denominator contributed to this large mean of about 280 percent—the sample includes some returns with very small tax liabilities that filed for refunds. The median over prepayment is only about 26 percent, which is in line with aggregate numbers—653 Michigan taxpayers in the SOI sample reported tax of $1,637,855, withholding of $1,933,736, and estimated tax payments of $166,632, which implies an over prepayment by 28 percent.
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sequent to the amnesty. This rate is slightly less than the overall subsequent filing rate of 76.1 percent for amnesty participants from all tax years (Michigan Department of Treasury, 1988). Breaking down this overall rate between the rate at which new filers subsequently file and the rate at which the amending filers subsequently file, addresses the central question of whether the amnesty was successful in bringing nonfilers into the system. As shown in the table, the subsequent filing rate of the new filers is 68.6 percent, which is significantly less than the 88.5 percent rate of amending filers ($z = 7.41$). The chi-square statistic from the cross-tabulation of amnesty returns, which tests for an association between amnesty return type and subsequent filing, is highly significant ($\chi^2 = 35.672, p = 0.001$).

We also calculated dollar-weighted measures of subsequent filing rates (not reported in the tables) because these have implications for estimating the amnesty’s impact on future revenue as discussed later. The 1,003 taxpayers in our sample paid $3.4 million in amnesty tax for TY83. The 733 who subsequently filed accounted for $2.2 million, which results in a weighted subsequent filing rate of 64.1 percent. That rate is lower than the rate based on taxpayer frequencies. Comparing new and amending filers in the same fashion results in subsequent filing rates of 59.7 percent and 86.0 percent respectively, an even larger difference than discussed above.

While the above comparison provides a basis for evaluating the success of amnesties in bringing nonfilers into the system, it is not completely satisfactory because we cannot infer how many of the new filers would have filed a TY86 return in the absence of the amnesty. The subsequent filing rate from federal returns in the SOI Panel provides an exogenous benchmark for evaluating this issue. As shown in Table 2, this rate for Michigan residents is 82.1 percent, which is significantly higher than the subsequent filing rate from federal returns in the SOI Panel (86.5 percent).

**TABLE 2**

<table>
<thead>
<tr>
<th>Subsequent Filer</th>
<th>Michigan Amnesty Returns</th>
<th>SOI Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>270 (73.1%)</td>
<td>56</td>
</tr>
<tr>
<td>Yes</td>
<td>733 (68.6%)</td>
<td>256 (82.1%)</td>
</tr>
<tr>
<td></td>
<td>1,003</td>
<td>312</td>
</tr>
</tbody>
</table>

1 “Subsequent Filer” is defined as a taxpayer who filed a tax year 1983 Michigan state income tax return under the State’s amnesty program and then subsequently filed a regular Michigan state income tax return for tax year 1986.

2 Federal individual income tax returns included in the Statistics of Income (SOI) Panel of Individual Returns indicating Michigan as their state of residence. These returns are limited to those with AGI < $200,000 because the state of residence is unavailable in SOI data for higher income returns to protect individual taxpayer confidentiality.

The overall percentage of TY83 taxpayers in the SOI Panel filing a TY86 federal return is 86.5 percent. However, 4.4 percent of those taxpayers filed a TY86 return from another state, leaving a balance of 82.1 percent filing subsequently from Michigan. We should note, however, that even though we calculate the subsequent filing rate using SOI data from the same periods as the amnesty (TY83 to TY86), the TY83 federal returns were filed during calendar year 1984, whereas the TY83 Michigan returns filed during the amnesty were filed in May and June 1986. Hence, it is likely that the SOI subsequent filing benchmark rate may be understated because of the longer time period between initial and subsequent filing.
ing rate of the new filers \( (z = 4.92) \) but lower than that of the amending filers \( (z = 2.14) \). The federal benchmark also provides a basis for estimating the impact of the amnesty in adding taxpayers to the tax rolls. Assuming that the amnesty and enhanced enforcement increased the subsequent filing rate for amending filers from 82.1 percent to 88.5 percent, the upper bound estimate of taxpayers (new and amending) added to the tax rolls is 5,470 returns (weighted).\(^{19}\) Those additional tax returns represent less than two–tenths of one percent of Michigan taxpayers.\(^{20}\)

Profile of Subsequent Filers in the Amnesty and Federal Data

To understand the profile of the taxpayers added to the tax rolls, we present in Table 3 descriptive statistics on the characteristics of the subsequent filers in three parts—Panel A provides an overall comparison of subsequent filing by the Michigan amnesty participants with Michigan residents in the SOI Panel, Panel B breaks down the Michigan amnesty participants between the new and the amending filers, and Panel C further breaks down the new filers between those who might have been known or not known to the Michigan DOT.

Comparison of Michigan Amnesty Participants v. Michigan Federal Filers

Based on the Michigan amnesty data in columns one and two of Panel A, relative to those that did not file subsequently, the subsequent filers have higher income—their mean (median) federal AGI is $25,181 ($20,726) v. $21,897 ($17,610), and their Michigan taxable income is $20,354 ($15,128) v. $16,013 ($10,819). In terms of taxes, a greater proportion of the subsequent filers tend to have some tax prepay-

\[^{19}\text{Five hundred and thirty two new filers plus 15 [6.4 percent (88.5% – 82.1%) of the 227] amending filers, times ten = 5,470 returns.}\]

\[^{20}\text{This calculation is based on the IRS’s estimate of 3.57 million Michigan individual income taxpayers for TY83 (IRS, 1985).}\]
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**TABLE 3**
PROFILE OF SUBSEQUENT FILERS
Panel A: Comparison of Michigan amnesty participants with Federal returns from Michigan by subsequent filing status

<table>
<thead>
<tr>
<th>Subsequent Filer</th>
<th>Amnesty Returns</th>
<th>SOI Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>733</td>
<td>270</td>
<td>270</td>
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</tbody>
</table>

**INCOME & TAXES:**

Federal Adjusted Gross Income

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,181</td>
<td>($874)</td>
<td>$21,897</td>
<td>($1,268)</td>
</tr>
<tr>
<td>$22,780</td>
<td>($995)</td>
<td>$11,181</td>
<td>($1,896)</td>
</tr>
</tbody>
</table>

Michigan Taxable Income

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,354</td>
<td>($920)</td>
<td>$16,013</td>
<td>($1,072)</td>
</tr>
<tr>
<td>$20,500</td>
<td>($15,128)</td>
<td>$6,695</td>
<td>($10,819)</td>
</tr>
</tbody>
</table>

Michigan Tax Liability

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,293</td>
<td>($58)</td>
<td>$1,017</td>
<td>($68)</td>
</tr>
<tr>
<td>$964</td>
<td>($192)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Amnesty Tax Paid

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>$298</td>
<td>($21)</td>
<td>$455</td>
<td>($45)</td>
</tr>
<tr>
<td>$124</td>
<td>($192)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Percent Tax Prepaid

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.4%</td>
<td>(1.6%)</td>
<td>35.7%</td>
<td>(2.6%)</td>
</tr>
<tr>
<td>124%</td>
<td>(0.0%)</td>
<td>117%</td>
<td>(0.0%)</td>
</tr>
</tbody>
</table>

Sample Proportions:

Prepaid: 0.583 0.467 0.930 0.881
Refund: 0.183 0.070 0.844 0.857

**DEMOGRAPHIC AND OTHER CHARACTERISTICS:**

Number of Dependents

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Error</th>
<th>Median</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.96</td>
<td>(0.04)</td>
<td>1.17</td>
<td>(0.08)</td>
</tr>
<tr>
<td>0.94</td>
<td>(0.08)</td>
<td>0.83</td>
<td>(0.19)</td>
</tr>
<tr>
<td>1.00</td>
<td>(1.00)</td>
<td>[0.00]</td>
<td>[0.00]</td>
</tr>
</tbody>
</table>

Sample Proportions:

Married Filing Jointly: 0.494 0.399 0.625 0.286
Home Owner: 0.127 0.137 0.381 0.119
Paid–Preparer: 0.537 0.520 0.415 0.333
Attaching DOT Letter: 0.194 0.190 NA NA

Categorizing that their rate of subsequent filing also differs, we profile subsequent filers separately by new and amending filers in Panel B of Table 3. As shown in the first two columns, there appears to be hardly any difference in the profile of new filers who subsequently filed and those who did not subsequently file, both in terms of income and taxes as well as in terms of demographic and other characteristics. Surprisingly, however, the income of new filers who subsequently filed is slightly less than the income of new filers who did not subsequently file (mean/median of $19,901/$14,880 v. $21,538/$16,771). Also noteworthy is that the new filers who subsequently filed had prepaid more of their taxes (about 64 percent) than new filers who did not subsequently file (about 52 percent).
In contrast, columns three and four of Panel B of Table 3 show that there appears to be a vast difference in the profile of amending filers who subsequently filed and those who did not. For example, the mean (median) AGI of amending filers who subsequently filed is $37,779 ($32,041) compared with $24,823 ($22,246) for amending filers who did not subsequently file. Similarly, the tax liability of the amending subsequent filers is about twice their counterpart group that did not subsequently file, but they paid fewer taxes with the amnesty application ($243 compared with $305). This is not surprising given that almost 88 percent of the amending filers who subsequently filed had prepaid some of their taxes that in

<table>
<thead>
<tr>
<th>Subsequent Filer²</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>N²</td>
<td>532</td>
<td>244</td>
<td>201</td>
<td>26</td>
</tr>
</tbody>
</table>

### INCOME & TAXES:

**Federal Adjusted Gross Income**

- Mean: $19,901 ($37,779)
- Standard Error: $(818) $(1,956)
- Median: $14,880 ($2,041)

**Michigan Taxable Income**

- Mean: $14,956 ($33,877)
- Standard Error: $(768) $(1,926)
- Median: $8,899 ($2,326)

**Michigan Tax Liability**

- Mean: $953 ($3,113)
- Standard Error: $(572) $(1,206)
- Median: $645 ($1,613)

**Amnesty Tax Paid**

- Mean: $319 ($957)
- Standard Error: $(26) $(108)
- Median: $130 ($572)

**Percent Tax Prepaid**

- Mean: 36.8% (71.4%)
- Standard Error: (1.9%) (2.4%)
- Median: (0.0%) (86.8%)

**Sample Proportions:**

- Prepaid: 0.472 0.434
- Refund: 0.000 0.000

### DEMOGRAPHIC AND OTHER CHARACTERISTICS:

**Number of Dependents**

- Mean: 0.91 0.94
- Standard Error: (0.06) (0.09)
- Median: (0.00) (0.00)

**Sample Proportions:**

- Married Filing Jointly: 0.385 0.396
- Home Owner: 0.122 0.123
- Paid–Preparer: 0.461 0.486
- Attaching DOT Letter: 0.262 0.208

TABLE 3 (continued)

PROFILE OF SUBSEQUENT FILERS²

Panel B: Comparison of “new filers” with “amending filers” participating in the Michigan amnesty program by their subsequent filing status²

<table>
<thead>
<tr>
<th></th>
<th>New Filers</th>
<th></th>
<th>Amending Filers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>N</td>
<td>532</td>
<td>244</td>
<td>201</td>
<td>26</td>
</tr>
</tbody>
</table>

In contrast, columns three and four of Panel B of Table 3 show that there appears to be a vast difference in the profile of amending filers who subsequently filed and those who did not. For example, the mean (median) AGI of amending filers who subsequently filed is $37,779 ($32,041) compared with $24,823 ($22,246) for amending filers who did not subsequently file. Similarly, the tax liability of the amending subsequent filers is about twice their counterpart group that did not subsequently file, but they paid fewer taxes with the amnesty application ($243 compared with $305). This is not surprising given that almost 88 percent of the amending filers who subsequently filed had prepaid some of their taxes that in
### TABLE 3 (continued)

#### PROFILE OF SUBSEQUENT FILERS

*Panel C: Comparison of “known” new filers with “unknown” new filers in the Michigan amnesty by their subsequent filing status*

<table>
<thead>
<tr>
<th>Subsequent Filer²</th>
<th>“Known” New Filers⁴</th>
<th>“Unknown” New Filers⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>N²</td>
<td>362</td>
<td>144</td>
</tr>
</tbody>
</table>

#### INCOME & TAXES:

<table>
<thead>
<tr>
<th></th>
<th>“Known” New Filers⁴</th>
<th>“Unknown” New Filers⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Adjusted Gross Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>$22,071</td>
<td>$17,319</td>
</tr>
<tr>
<td>Standard Error</td>
<td>($946)</td>
<td>($2,247)</td>
</tr>
<tr>
<td>Median</td>
<td>[$18,688]</td>
<td>[$10,091]</td>
</tr>
<tr>
<td>Michigan Taxable Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>$17,600</td>
<td>$10,312</td>
</tr>
<tr>
<td>Standard Error</td>
<td>($914)</td>
<td>($1,630)</td>
</tr>
<tr>
<td>Median</td>
<td>[$14,890]</td>
<td>[$4,773]</td>
</tr>
<tr>
<td>Michigan Tax Liability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>$1,122</td>
<td>$662</td>
</tr>
<tr>
<td>Standard Error</td>
<td>($558)</td>
<td>($102)</td>
</tr>
<tr>
<td>Median</td>
<td>[$958]</td>
<td>[$154]</td>
</tr>
<tr>
<td>Amnesty Tax Paid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>$237</td>
<td>$763</td>
</tr>
<tr>
<td>Standard Error</td>
<td>($25)</td>
<td>($98)</td>
</tr>
<tr>
<td>Median</td>
<td>[$117]</td>
<td>[$162]</td>
</tr>
<tr>
<td>Percent Tax Prepaid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>66.7%</td>
<td>68.5%</td>
</tr>
<tr>
<td>Standard Error</td>
<td>(2.2%)</td>
<td>(3.1%)</td>
</tr>
<tr>
<td>Median</td>
<td>[84.5%]</td>
<td>[82.3%]</td>
</tr>
<tr>
<td>Sample Proportions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid</td>
<td>0.693</td>
<td>NA</td>
</tr>
<tr>
<td>Refund</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### DEMOGRAPHIC AND OTHER CHARACTERISTICS:

<table>
<thead>
<tr>
<th></th>
<th>“Known” New Filers⁴</th>
<th>“Unknown” New Filers⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Dependents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.00</td>
<td>0.71</td>
</tr>
<tr>
<td>Standard Error</td>
<td>(0.07)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Median</td>
<td>[0.00]</td>
<td>[0.00]</td>
</tr>
<tr>
<td>Sample Proportions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married Filing Jointly</td>
<td>0.438</td>
<td>0.310</td>
</tr>
<tr>
<td>Home Owner</td>
<td>0.133</td>
<td>0.120</td>
</tr>
<tr>
<td>Paid–Preparer</td>
<td>0.455</td>
<td>0.564</td>
</tr>
<tr>
<td>Attaching DOT Letter</td>
<td>0.348</td>
<td>0.000</td>
</tr>
</tbody>
</table>

¹The table reports the means of nonzero values for each variable. For continuous variables, the second row reports the standard errors in parentheses and the third row reports the medians in brackets. NA indicates “not available.”

²“Subsequent Filer” is defined as a taxpayer who filed a tax year 1983 Michigan state income tax return under the State’s amnesty program and then subsequently filed a regular Michigan state income tax return for tax year 1986.

³Federal individual income tax returns included in the Statistics of Income (SOI) Panel of Individual Returns indicating Michigan as their state of residence. These returns are limited to those with AGI < $200,000 because the state of residence is unavailable in SOI data for higher income returns to protect individual taxpayer confidentiality.

⁴“Known” taxpayers are those who either have taxes withheld or pay estimated taxes or had a W–2 or who attached the DOT letter with their amnesty application. “Unknown” taxpayers are those for whom none of the above conditions are satisfied.

⁵N is the maximum number of observations for each group; because of missing data, the actual number of observations differs for each variable.
dollar terms amounted to over 80 percent of their total tax liability. Interestingly, over three-fourths of the amending filers who did not subsequently file had prepaid some of their taxes that in dollar terms amounted to nearly 70 percent of their total tax liability. Another characteristic that appears to distinguish the amending filers is their filing status—slightly over three-fourths of those that remained in the system were married filing jointly, whereas they comprised less than half of those who did not file subsequently. However, the percentages of homeownership and those using a paid-preparer go in the opposite direction, which is curious considering that married taxpayers are more likely to own rather than rent homes. It is possible that some of these differences might not be reliable as there is only a small number of observations (26) for amending filers who did not subsequently file.

Comparison of “Known” v. “Unknown” New filers

To obtain additional insight into the profile of new filers, we further classified them based on whether they were (or could have been) “known” to the Michigan DOT and present those results in Panel C of Table 3. A taxpayer was classified as “known” if any of the following were true: a return claimed that state taxes had been withheld or estimated taxes had been paid, a Form W–2 was attached to the return, or the amnesty application included a copy of the Michigan DOT letter. Recall that this letter was sent to taxpayers identified by the Michigan DOT from IRS data as having filed a federal return with a Michigan address.

Based on our classification scheme, about 65 (35) percent of new filers were “known” (“unknown”) to Treasury prior to amnesty. Relative to the known new filers, the unknown new filers generally had lower average incomes and tax liabilities, but much higher amnesty tax payments. They were more likely to be single, less likely to be a homeowner, and claimed fewer dependents. About 37 percent of these unknown new filers did not subsequently file a tax return in 1986. These taxpayers had much higher average AGI than unknown participants who filed a return in 1986 ($17,319 v. $12,965). Taxable income, tax liability, and amnesty tax paid information correlate with the higher AGI. In particular, unknown new filers who did not subsequently file had average amnesty tax payments over twice that of known new filers ($763 v. $237 or $270) and about 50 percent higher than unknown new filers who subsequently filed. Among the known new filers, few differences exist between those who filed subsequent to the amnesty and those who did not file subsequently.

Logit Regression Results of Subsequent Filing

To test for an association between subsequent filing and observable taxpayer characteristics, we estimate two logit regression models, one for new filers, and one for amending filers. The dependent variable in both models is the natural log of the odds that an amnesty participant subsequently files a TY86 return. Following the descriptive statistics, we include explanatory variables for income and available demographic and other characteristics labeled as follows:21

- **INCOME**, defined as the natural log of AGI plus ten;
- **DEPS**, the number of dependency exemptions (other than for taxpayer and spouse);

21 In untabulated results, we also estimated the logit models including other demographic/personal characteristics observable in the data, such as whether the amnesty participant lived in an urban area, was a “transient” based on certain occupational codes, or was a “chronic nonfiler” defined as a taxpayer filing more than two returns under amnesty. None of these variables were significant and overall regression results were similar to those in Table 4.
Evidence on Subsequent Filing from the State of Michigan’s Income Tax Amnesty

- MARRIED, an indicator for filing status, coded 1 if married filing jointly and 0 otherwise;
- HOMEOwn, an indicator coded 1 if taxpayer is a homeowner and 0 otherwise;
- PREPARER, an indicator coded 1 if the taxpayer uses a paid-preparer and 0 otherwise;
- PREPAY, an indicator coded 1 if any taxes are prepaid either through withholding or estimated payments and 0 otherwise; and
- DOT–LTR, an indicator coded 1 if taxpayer attached a letter from the DOT that was sent to suspected non-filers and 0 otherwise.

Because taxpayers with high income are more likely to be “visible” to the tax authorities and are less likely to fall below the income-filing threshold, we expect INCOME to be positively associated with subsequent filing. Similarly, homeownership, using a preparer, having tax prepayments and having received a letter from the Michigan Treasury is likely to indicate greater visibility to the tax authorities. Thus we also expect HOMEOwn, PREPARER, PREPAY and DOT–LTR to be positively associated with subsequent filing. Although we also include taxpayer demographics (marital status and family size) because they typically are included in most taxpayer compliance models, their impact on subsequent filing is unclear. If marital status and family size capture social commitment, MARRIED and DEPS might be positively associated with subsequent filing, but these variables might also reflect greater propensities to underreport because of the marriage penalty and financial needs.

The regression results reported next, however, are subject to certain limitations. First, these models are conditional on participation in the amnesty. Thus, it is likely that there is a self-selection problem—unobserved characteristics that might have led to participation in the amnesty in the first place might be associated with the subsequent filing decision and correlated with the included variables. Not correcting for that problem would yield biased estimates. However, data limitations preclude us from addressing this issue. Second, the fact-of-filing information is for tax year 1986. We do not have other information from the 1986 returns, and hence the regressors are based on 1983 data. Finally, the set of regressors in the two models are identical. We have no reasonable basis for believing that the determinants of subsequent filing for the new and amending filers are different. Given these limitations, the results are primarily descriptive.

Table 4 reports the coefficient estimates and the related chi-square statistics from the two logit models based on the 867 (214 amending filers and 653 new filers) amnesty returns for which data on all regressors are available. The likelihood ratio chi-square statistic (5.306, \( p < .623 \)) indicates that the overall model for new filers is not significant; that is, the regressors do not help explain subsequent filing by this group. This result confirms the descriptive statistics in Panel B of Table 3 that show virtually no difference between the new filers who subsequently file and those who do not subsequently file. However, the likelihood ratio chi-square statistic (18.486, \( p < .01 \)) indicates that the overall model for amending filers is significant. The coefficient on MARRIED is positive and significant, whereas the coefficient on INCOME is positive and marginally significant. The coefficients on the other control variables are not reliably different from zero. Again, the regression results are similar to the descriptive statistics for this group reported in Panel B of Table 3.

Not surprisingly, the logit model results yield marginal probabilities of subsequent filing that are not much different than the simple descriptive statistics in Table 2. Evaluated at the mean of all regressors,
this probability is 0.692 for new filers and 0.907 for amending filers. Evaluated at the typical value of each regressor (indicator variables are set to zero if the mean is less than 0.5), these probability estimates are 0.718 for new filers and 0.934 for amending filers. Both sets of estimates indicate that the probability of subsequent filing for new filers is less than that for amending filers by about 20 percentage points. This difference is similar to the univariate results in Table 2 and suggests that the differing characteristics of the two groups do not explain their differing probability of subsequent filing.\textsuperscript{22}

\textbf{Revenue Estimates}

Estimating the long–term revenue effects of the Michigan amnesty is not the primary objective of this study mainly because no tax return data of the amnesty participants for future years are available to us. However, we are able to make a few inferences from a comparative analysis of amnesty participants who subsequently file in addition to the previous discussion of known versus unknown new filers.

Participants filing new returns during the amnesty who subsequently filed for TY86 paid significantly less on average

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|}
\hline
\textbf{Variable} & \textbf{Coefficient} & \textbf{Pr > Chisq} & \textbf{Variable} & \textbf{Coefficient} & \textbf{Pr > Chisq} \\
\hline
Constant & 2.274 & 0.035 & Constant & –4.710 & 0.200 \\
INCOME & –0.177 & 0.147 & INCOME & 0.599 & 0.112 \\
MARRIED & 0.054 & 0.816 & MARRIED & 1.214 & 0.009 \\
DEPS & 0.026 & 0.767 & DEPS & –0.021 & 0.928 \\
HOMEOWN & 0.067 & 0.789 & HOMEOWN & –0.594 & 0.259 \\
PREPARE & –0.119 & 0.493 & PREPARE & –0.487 & 0.388 \\
PREPAY & 0.317 & 0.111 & PREPAY & 0.483 & 0.393 \\
DOT–LTR & 0.199 & 0.337 & DOT–LTR & –0.226 & 0.846 \\
\hline
N & 653 & –2 Log Likelihood & 214 & N & 158.315 \\
(Probability of chi–square) & 0.623 & (Probability of chi–square) & 0.01 \\
\hline
\end{tabular}
\caption{Logit Regression Results of Subsequent Filing by New and Amending Filers in the Michigan Amnesty}
\label{tab:logit_results}
\end{table}

\textsuperscript{1}The dependent variable is an indicator of “subsequent filing” and is set to 1 if the taxpayer files a Tax Year 1986 tax return, and 0 otherwise.

\textsuperscript{2}The explanatory variables are defined as follows:

\begin{itemize}
\item INCOME is the natural log of AGI plus ten;
\item MARRIED is an indicator for filing status, coded 1 if married filing jointly and 0 otherwise;
\item DEPS is the number of dependents;
\item HOMEOWN is an indicator coded 1 if taxpayer is a homeowner and 0 otherwise;
\item PREPARER is an indicator coded 1 if taxpayer uses a paid–preparer and 0 otherwise;
\item PREPAY is an indicator coded 1 if any taxes are prepaid either through withholding or estimated payments and 0 otherwise; and
\item DOT–LTR is an indicator coded 1 if taxpayer attached a letter from the DOT that was sent to suspected non–filers and 0 otherwise.
\end{itemize}

\textsuperscript{22} We also repeated our tests with tax year 1984 data to examine sensitivity of our results to a single year. As mentioned before, TY83 returns provided the largest sample size for any single year in the Michigan amnesty, with TY84 returns being the second largest of the years represented in the database. The TY84 subsequent filing rates are 71.6 percent overall, 66.5 percent for new filers and 91.8 percent for amending filers. The profile of subsequent filers as well as the regression results with TY84 data is very similar to those for TY83. Apart from the slightly larger spread in the subsequent filing rates between new and amending filers (25 percentage points v. 20 in 1983), the only difference we observed is that five times as many participants attached the MI–DOT letter in 1984 than in 1983 (24.5% v. 4.6%). It is likely that more of these letters were sent out for tax year 1984, which was closer to the amnesty.
Evidence on Subsequent Filing from the State of Michigan’s Income Tax Amnesty

than those who did not ($319 vs. $471, t = 2.76). We observe little if any difference in the average payments made by amending filers ($243 vs. $305, t = 0.60). We estimate the total tax paid by the 73.1 percent of participants who subsequently filed for TY86 (as shown in Table 2) to be $2.2 million, which is 64 percent of the $3.4 million paid by all participants.

It is possible that the net new revenue collected might in fact be even lower. For instance, it is reasonable to assume that some or all of the taxes due from taxpayers that were (or could have been) known to the tax system would have been collected anyway. Further, the revenue estimate does not consider the penalties abated as a result of the amnesty or future interest and penalties that might also have been collected in the absence of an amnesty. As mentioned earlier, the difference between the dollar-weighted subsequent filing rates for new and amending filers is also relevant for revenue estimation. Our results suggest that future revenue estimates based on the “new” revenue of $3.4 million from amnesty participants would be over-stated by 56 percent if not corrected for the subsequent filing rate of new vs. amending participants. Finally, cost outlays associated with promoting and administering the amnesty would reduce the net revenue even further.

CONCLUSIONS

Based on individual taxpayer-level data from participants in Michigan’s amnesty program and federal income tax return data for Michigan residents, we find that about two-thirds of the new filers that came forward in Michigan’s amnesty filed a state income tax return subsequently. In comparison, nearly nine out of ten taxpayers who had previously filed a regular return but amended that return under amnesty stayed in the tax system, which is similar to the subsequent filing rate for federal returns by Michigan filers. These results hold after controlling for observable differences between the new filers and the amending filers. Thus, while the amnesty certainly was not successful in keeping all of the new filers in the system (or even at the same rate as the population in general), it appears to have succeeded in keeping a sizable number in the system, at least shortly after the amnesty. Moreover, the amnesty participants who stayed in the system have higher incomes and prepaid most of their taxes. Finally, the higher subsequent filing rate for amending filers relative to the federal rate suggests that the state’s threat of enhanced enforcement may indeed have been credible.

In terms of the downsides of amnesties, our results show that new filers who did not stay in the system differ little from those who did, making outreach and enforcement efforts aimed at nonfilers more difficult. Moreover, nearly two-thirds of the nonfilers were already known (or could have been known) by the tax authorities, which makes identifying true nonfilers less significant. Not surprisingly, therefore, the amnesty’s impact on revenues appears negligible. The roughly 5,500 new taxpayers added to Michigan’s tax rolls implied by our results added only about $3.4 million in new gross revenue or about 0.1 percent of Michigan’s personal income tax revenues.

As previously discussed, our inferences and conclusions are limited in a number of ways. First, because states have almost always concurrently enacted enhanced enforcement, our inferences are limited to the joint effect of the amnesty and the increased enforcement mechanisms. Second, our inferences are conditional on participation in the amnesty, although the subsequent filing rates for Michigan taxpayers who did not participate in the amnesty would avoid the self-selection problem. These limitations notwithstanding, our new evidence on subsequent filing corroborates conclusions reached in
prior research on other aspects of tax amnesties that such amnesties at the state–level have little if any positive impact on compliance or revenues.

Acknowledgments

We have benefited from comments of workshop participants at George Mason University, the Universities of British Columbia, Georgia and Houston, attendees at the Western Regional Meeting of the American Accounting Association, three anonymous reviewers and the research assistance of Robert Gary, Tom Schultz, and Viswanath U. Trivedi. We owe special gratitude to the tireless advice of Stuart Low and the generous financial support from the Ernst & Young Foundation under their Tax Research Grant Program.

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