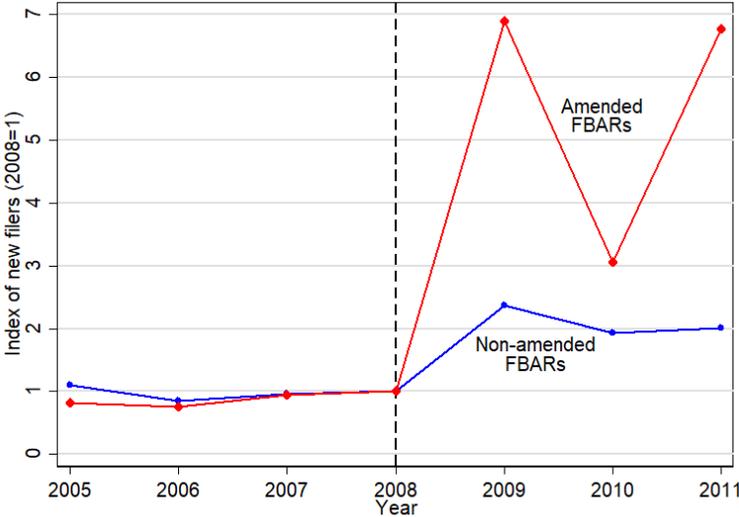


Appendix Tables and Figures (Online Appendix)for "Taxing Hidden Wealth: The Consequences of US Enforcement Initiatives on Evasive Foreign Accounts."

Niels Johannesen, Patrick Langetieg, Daniel Reck, Max Risch, and Joel Slemrod

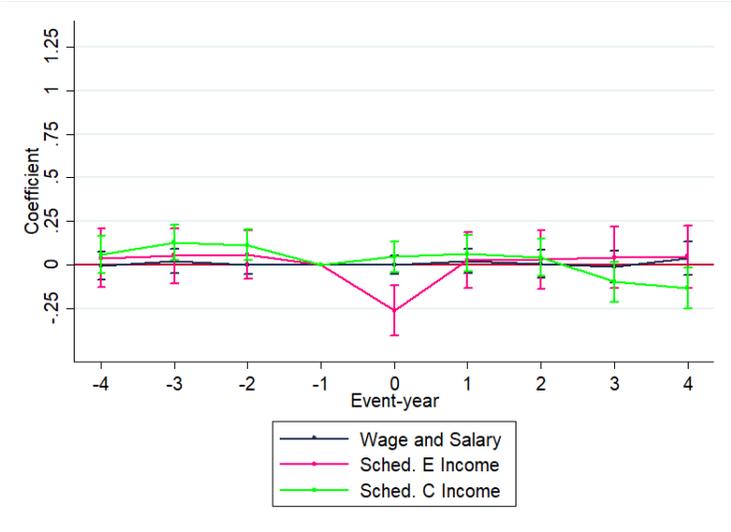
Figure A.1: First-time FBAR filers, amended vs. non-amended, 2005-2011



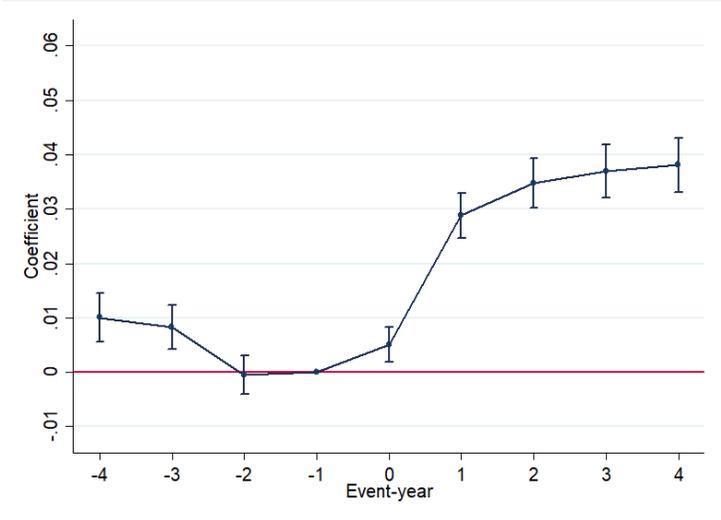
Notes: This figure plots the number of “first-time FBAR filers” in year t (defined as taxpayers that file an FBAR in year t and did not file an FBAR in years t-1, t-2 and t-3) by year and by whether the new filer also filed late/amended FBARs for prior years. OVD participants and non-US address filers are excluded from the tabulations. The series are normalized by the 2008 level. The overall number of late/amended FBARs is small, but we observe an enormous increase in late/amended FBARs in relative terms in 2009. The 2008 levels are 1,092 for amending filers and 37,619 for non-amending filers.

**Figure A.2: Event Study of Reported Income for OVD Participants**

**Figure A.2.A: Other Income Sources**



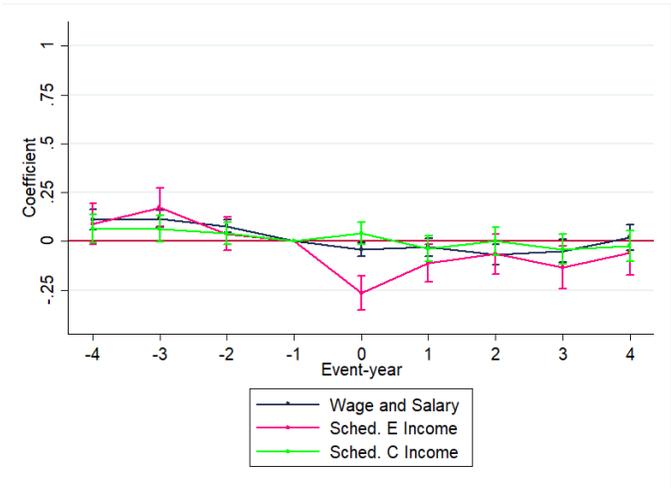
**Figure A.2.B: Propensity to Report Positive Capital Income**



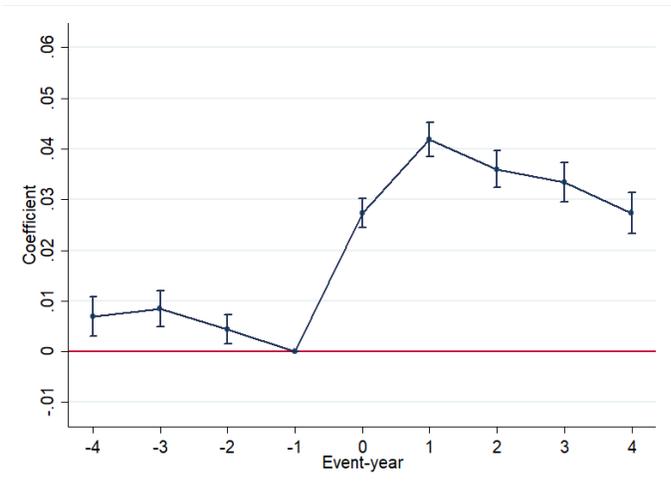
Notes: The figure illustrates how individuals participating in the OVD in 2009 changed the reporting of various types of capital income around participation. The sample includes OVD participants as well as a comparison group of non-participants that filed FBARs continuously from 2006 to 2009 and reported the same number of accounts on their FBARs in each of these years. We illustrate the results from four separate regressions where the dependent variables are reported wage / salary income, Schedule C income (from sole-proprietorships) and Schedule E income (from pass-through businesses) (Panel A) and a dummy indicating whether the individual reported any capital income (Panel B) respectively. The first three dependent variables are transformed with the inverse hyperbolic sine function. The explanatory variables are individual fixed effects; a full set of interactions between calendar year dummies and four age group dummies; and a set of event-year dummies indicating the year relative to OVD participation (coded zero for the comparison group). The figure illustrates the estimated coefficients on the event-year dummies as well as 95% confidence intervals (based on standard errors clustered at the individual level).

**Figure A.3: Event Study of Reported Income for First-Time FBAR Filers**

**Figure A.3.A: Other Income Sources**



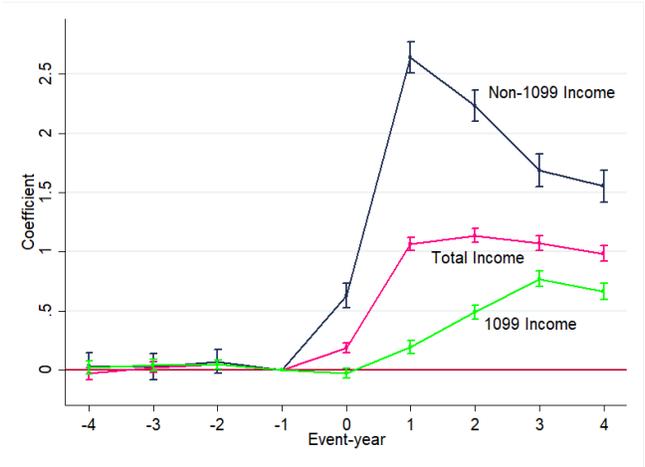
**Figure A.3.B: Propensity to Report Positive Capital Income**



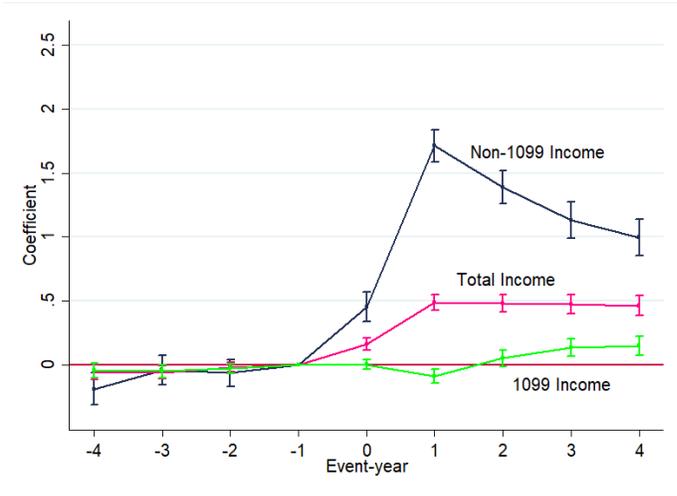
Notes: The figure illustrates how “first-time FBAR filers” in 2009 changed the reporting of various types of capital income around first-time filing. The sample includes “first-time FBAR filers” in 2009 as well as a comparison group that filed FBARs continuously from 2006 to 2009 and reported the same number of accounts on their FBARs in each of these years. We illustrate the results from four separate regressions where the dependent variables are reported wage / salary income, Schedule C income (from sole-proprietorships) and Schedule E income (from pass-through businesses) (Panel A) and a dummy indicating whether the individual reported any capital income (Panel B) respectively. The first three dependent variables are transformed with the inverse hyperbolic sine function. The explanatory variables are individual fixed effects; a full set of interactions between calendar year dummies and four age group dummies; and a set of event-year dummies indicating the year relative to first-time filing (coded zero for the comparison group). The figure illustrates the estimated coefficients on the event-year dummies as well as 95% confidence intervals (based on standard errors clustered at the individual level).

**Figure A.4: Decomposing Reported Income in Event Study of OVD Participants**

**Figure A.4.A: Interest**

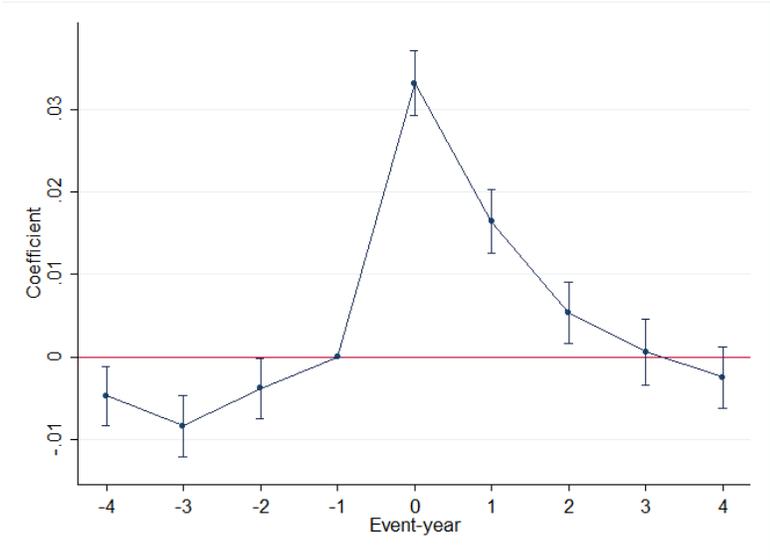


**Figure A.4.B: Dividends**



Notes: The figure illustrates how individuals participating in the OVD in 2009 changed the reporting of various types of capital income around participation. The sample includes OVD participants as well as a comparison group of non-participants that filed FBARs continuously from 2006 to 2009 and reported the same number of accounts on their FBARs in each of these years. We illustrate the results from six separate regressions where the dependent variables measure interest income (Panel A) and dividend income (Panel B) respectively. In both cases, there are separate regressions for income reported by domestic financial institutions (on Forms 1099-INT and 1099-DIV); income reported by the taxpayer but not by domestic financial institutions; and total income. The dependent variables are transformed with the inverse hyperbolic sine function. The explanatory variables are individual fixed effects; a full set of interactions between calendar year dummies and four age group dummies; and a set of event-year dummies indicating the year relative to first-time filing (coded zero for the comparison group). The figure illustrates the estimated coefficients on the event-year dummies as well as 95% confidence intervals (based on standard errors clustered at the individual level).

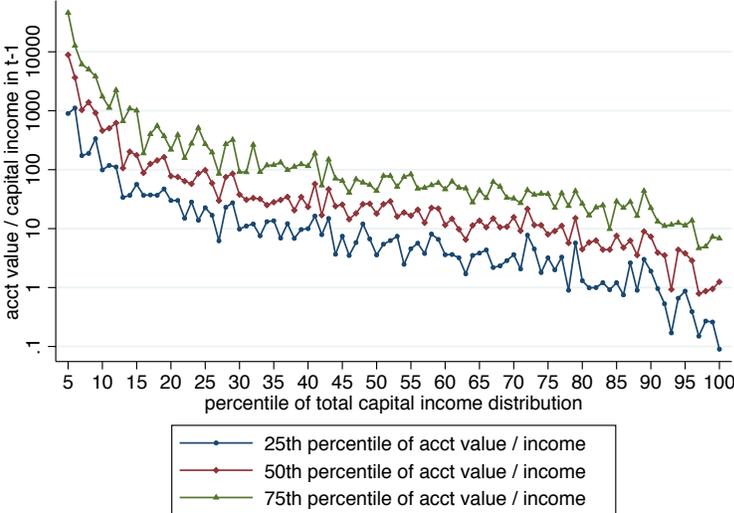
Figure A.5: Probability of Amending Returns Relative to First-Time Filing



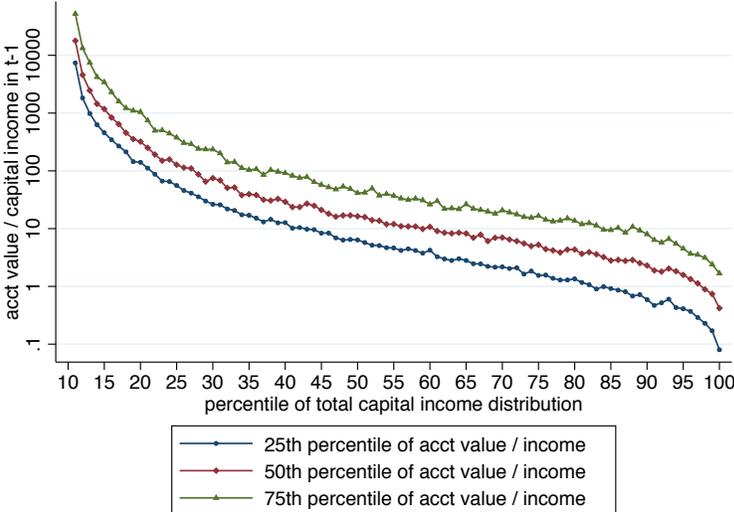
Notes: The figure illustrates how “first-time FBAR filers” in 2009 changed their amendment behavior around first-time filing. The sample includes “first-time FBAR filers” in 2009 as well as a comparison group that filed FBARs continuously from 2006 to 2009 and reported the same number of accounts on their FBARs in each of these years. We illustrate the results from a regression where the dependent variable is an indicator for amending a tax return from one of the previous four fiscal years in year  $t$ . The explanatory variables are individual fixed effects; a full set of interactions between calendar year dummies and four age group dummies; and a set of event-year dummies indicating the year relative to first-time filing (coded zero for the comparison group). The figure illustrates the estimated coefficients on the event-year dummies as well as 95% confidence intervals (based on standard errors clustered at the individual level).

**Figure A.6: The Ratio of Account Value to Previously Reported Capital Income**

**Figure A.6.A OVD Participants**



**Figure A.6.B First-Time Filers**



Note: This table reports quantiles of the ratio of total FBAR account value to capital income in the year before disclosure, by rank in the total capital income distribution. We rank individuals according to their rank among OVD participants or first-time filers rather than the entire population, for simplicity. To obtain total FBAR account value, we add across accounts if the individual reported multiple accounts. Results are very similar when using the maximum account value. Individuals with zero capital income in the prior year are excluded from the analysis.

**Table A.1. Event Study of Reported Income for OVD Participants**

VARIABLES	(1) Interest	(2) Dividends	(3) Capital Gains/Losses	(4) Total Capital Income	(5) Wage and Salary Income	(6) Schedule C Income	(7) Schedule E Income	(8) Report Any Capital Income
Treat*Event time -4	-0.029175 (0.026707)	-0.057727* (0.030120)	0.016821 (0.032029)	0.037654* (0.022605)	-0.007327 (0.040473)	0.058100 (0.055647)	0.038931 (0.085228)	0.010047*** (0.002312)
Treat*Event time -3	0.021958 (0.023203)	-0.059572** (0.026812)	0.005719 (0.028097)	0.039458** (0.019315)	0.021428 (0.034816)	0.128868** (0.051529)	0.050949 (0.080403)	0.008329*** (0.002055)
Treat*Event time -2	0.044765** (0.018988)	-0.019143 (0.020620)	-0.024690 (0.022403)	0.011432 (0.015774)	-0.000479 (0.026628)	0.113871** (0.044487)	0.056469 (0.070746)	-0.000465 (0.001786)
Treat*Event time 0	0.185001*** (0.020885)	0.162393*** (0.023374)	0.042006* (0.024557)	0.165828*** (0.017236)	-0.001025 (0.026585)	0.046455 (0.044802)	-0.262716*** (0.072467)	0.005046*** (0.001665)
Treat*Event time 1	1.061388*** (0.028153)	0.485858*** (0.031864)	0.210601*** (0.031042)	0.753838*** (0.023409)	0.019130 (0.035218)	0.065406 (0.052750)	0.026733 (0.082196)	0.028829*** (0.002099)
Treat*Event time 2	1.134727*** (0.030936)	0.480929*** (0.035515)	0.241685*** (0.034463)	0.799247*** (0.026278)	0.005162 (0.041065)	0.042808 (0.055308)	0.029695 (0.085322)	0.034735*** (0.002310)
Treat*Event time 3	1.071524*** (0.032937)	0.470303*** (0.038258)	0.281265*** (0.037223)	0.754004*** (0.028474)	-0.010627 (0.045553)	-0.098829* (0.058041)	0.042438 (0.089809)	0.036872*** (0.002496)
Treat*Event time 4	0.982369*** (0.033911)	0.461347*** (0.039553)	0.336528*** (0.038973)	0.712861*** (0.028882)	0.037769 (0.049007)	-0.133514** (0.059603)	0.045213 (0.091928)	0.038090*** (0.002524)
Observations	478,350	478,350	478,350	478,350	478,350	478,349	478,289	478,350
R-squared	0.761839	0.842375	0.838480	0.815430	0.851059	0.582259	0.550560	0.540362

Standard errors clustered at the individual-level

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: This table reports the regression coefficients plotted in Figure 9 and Figure A.2.

**Table A.2 Event Study of Reported Total Financial Capital Income for OVD Participants, Alternative Specifications**

VARIABLES	(1) Inverse Hyperbolic Sine, main specification	(2) Inverse Hyperbolic Sine, exclude zeros in t-1	(3) Inverse Hyperbolic Sine, drop all zeros	(4) Natural log, drop all zeros	(5) Inverse Hyperbolic Sine, balanced sample	(6) Natural log, balanced sample
Treat*Event time -4	0.037654* (0.022605)	0.005081 (0.020643)	-0.029644* (0.016643)	-0.029395* (0.016659)	-0.037224** (0.016167)	-0.037178** (0.016177)
Treat*Event time -3	0.039458** (0.019315)	0.018690 (0.017439)	-0.010703 (0.014151)	-0.010569 (0.014165)	-0.022539* (0.013045)	-0.022546* (0.013048)
Treat*Event time -2	0.011432 (0.015774)	-0.009314 (0.014017)	0.012446 (0.010792)	0.012590 (0.010805)	-0.011175 (0.009432)	-0.011215 (0.009439)
Treat*Event time 0	0.165828*** (0.017236)	0.127633*** (0.014508)	0.125404*** (0.012373)	0.125334*** (0.012384)	0.115259*** (0.010952)	0.115256*** (0.010954)
Treat*Event time 1	0.753838*** (0.023409)	0.636726*** (0.019300)	0.556000*** (0.017120)	0.556174*** (0.017134)	0.503996*** (0.016135)	0.504088*** (0.016141)
Treat*Event time 2	0.799247*** (0.026278)	0.676470*** (0.022319)	0.581748*** (0.018853)	0.582241*** (0.018866)	0.527037*** (0.018056)	0.527267*** (0.018060)
Treat*Event time 3	0.754004*** (0.028474)	0.634043*** (0.024925)	0.529969*** (0.019898)	0.530541*** (0.019914)	0.483549*** (0.019104)	0.483821*** (0.019111)
Treat*Event time 4	0.712861*** (0.028882)	0.609308*** (0.025562)	0.455921*** (0.021384)	0.456233*** (0.021408)	0.421575*** (0.020807)	0.421801*** (0.020820)
Observations	478,350	461,787	455,201	455,201	370,521	370,521
R-squared	0.815430	0.799785	0.854775	0.854481	0.847574	0.847410

Standard errors clustered at the individual-level

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: This table reports several alternative specifications of the estimation of equation (1) on the impact of disclosure on reported total financial capital income. Column (1) is identical column (4) of Table A.1. Column (2) drops zeros in event year -1, as these individuals are also excluded from the analysis in Table A.8. Column (3) drops all observations of zero financial capital income. Columns (4) is similar to column (3), but use a traditional logarithmic transform instead of an inverse hyperbolic sine transform. In columns (5) and (6) we estimate the regression on a balanced panel of taxpayers using the inverse hyperbolic sine transformation and natural log of the outcome, respectively.

**Table A.3. Event Study of Reported Income for First-Time FBAR Filers**

VARIABLES	(1) Interest	(2) Dividends	(3) Capital Gains/Losses	(4) Total Capital Income	(5) Wage and Salary Income	(6) Schedule C Income	(7) Schedule E Income	(8) Report Any Capital Income
Treat*Event time -4	-0.055918*** (0.019564)	-0.042793** (0.021372)	0.018690 (0.022413)	-0.020675 (0.017233)	0.111576*** (0.026812)	0.064331* (0.037355)	0.090001* (0.053483)	0.006922*** (0.001942)
Treat*Event time -3	-0.017580 (0.017347)	-0.032300* (0.018763)	-0.007597 (0.019421)	0.000033 (0.015299)	0.114827*** (0.022848)	0.064385* (0.033960)	0.173038*** (0.050408)	0.008481*** (0.001802)
Treat*Event time -2	0.026820** (0.013662)	-0.012978 (0.014861)	-0.008248 (0.015861)	0.020076* (0.012129)	0.077914*** (0.017451)	0.042086 (0.028885)	0.038655 (0.043218)	0.004350*** (0.001470)
Treat*Event time 0	0.319700*** (0.014178)	0.112550*** (0.015046)	0.026411* (0.015909)	0.282919*** (0.012689)	-0.043702** (0.017543)	0.040283 (0.028532)	-0.264761*** (0.043614)	0.027352*** (0.001484)
Treat*Event time 1	0.615175*** (0.017974)	0.199839*** (0.019377)	0.097733*** (0.019496)	0.487019*** (0.015594)	-0.029693 (0.023151)	-0.038166 (0.033502)	-0.110621** (0.049170)	0.041902*** (0.001713)
Treat*Event time 2	0.599319*** (0.019890)	0.208778*** (0.022310)	0.124829*** (0.021873)	0.448476*** (0.017546)	-0.067314** (0.027108)	0.000180 (0.036470)	-0.064777 (0.052511)	0.036002*** (0.001854)
Treat*Event time 3	0.561062*** (0.021647)	0.229531*** (0.024515)	0.138683*** (0.023986)	0.407835*** (0.019426)	-0.050795* (0.030109)	-0.041437 (0.038618)	-0.135222** (0.055485)	0.033437*** (0.001995)
Treat*Event time 4	0.549502*** (0.022800)	0.231005*** (0.025752)	0.168012*** (0.025396)	0.372131*** (0.020432)	0.019500 (0.032584)	-0.024127 (0.040694)	-0.060041 (0.058237)	0.027288*** (0.002062)
Observations	829,533	829,533	829,533	829,533	829,533	829,529	829,396	829,533
R-squared	0.768602	0.840233	0.837671	0.814067	0.811797	0.544995	0.524623	0.555718

Standard errors clustered at the individual-level

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: This table reports the regression coefficients plotted in Figure 10 and Figure A.3.

**Table A.4. Decomposing Reported Income in Event Study of OVD Participants**

VARIABLES	(1) Non-1099 Interest	(2) 1099 Interest	(3) Total Interest	(4) Non-1099 Dividends	(5) 1099 Dividends	(6) Total Dividends
Treat*Event time -4	0.031721 (0.059001)	0.017593 (0.028420)	-0.029175 (0.026707)	-0.190026*** (0.064532)	-0.046174 (0.029697)	-0.057727* (0.030120)
Treat*Event time -3	0.027553 (0.056360)	0.037893 (0.024938)	0.021958 (0.023203)	-0.043539 (0.058376)	-0.052621** (0.025717)	-0.059572** (0.026812)
Treat*Event time -2	0.070952 (0.051329)	0.045496** (0.019601)	0.044765** (0.018988)	-0.065139 (0.054460)	-0.029641 (0.019067)	-0.019143 (0.020620)
Treat*Event time 0	0.628838*** (0.054244)	-0.027716 (0.020194)	0.185001*** (0.020885)	0.451373*** (0.059206)	0.001383 (0.019670)	0.162393*** (0.023374)
Treat*Event time 1	2.640293*** (0.065537)	0.192859*** (0.028203)	1.061388*** (0.028153)	1.712129*** (0.065330)	-0.088023*** (0.027385)	0.485858*** (0.031864)
Treat*Event time 2	2.232641*** (0.067445)	0.487279*** (0.031344)	1.134727*** (0.030936)	1.386312*** (0.065920)	0.049200 (0.032772)	0.480929*** (0.035515)
Treat*Event time 3	1.684172*** (0.069902)	0.767485*** (0.033668)	1.071524*** (0.032937)	1.130801*** (0.071590)	0.133530*** (0.035728)	0.470303*** (0.038258)
Treat*Event time 4	1.551593*** (0.069096)	0.663944*** (0.036205)	0.982369*** (0.033911)	0.996238*** (0.072524)	0.147849*** (0.038685)	0.461347*** (0.039553)
Observations	478,341	478,341	478,350	478,340	478,341	478,350
R-squared	0.576671	0.767779	0.761839	0.568226	0.861470	0.842375

Standard errors clustered at the individual-level

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: This table reports the regression coefficients plotted in Figure A.4.

**Table A.5. Decomposing Reported Income in Event Study of First-Time FBAR Filers**

VARIABLES	(1) Non-1099 Interest	(2) 1099 Interest	(3) Total Interest	(4) Non-1099 Dividends	(5) 1099 Dividends	(6) Total Dividends
Treat*Event time -4	0.109163*** (0.037077)	-0.070468*** (0.021219)	-0.055918*** (0.019564)	-0.213678*** (0.039639)	-0.036008* (0.020701)	-0.042793** (0.021372)
Treat*Event time -3	0.050156 (0.034487)	-0.043082** (0.018749)	-0.017580 (0.017347)	-0.130187*** (0.035523)	-0.019542 (0.017736)	-0.032300* (0.018763)
Treat*Event time -2	0.020062 (0.030984)	-0.004187 (0.014507)	0.026820** (0.013662)	-0.066999** (0.032061)	-0.012213 (0.013382)	-0.012978 (0.014861)
Treat*Event time 0	0.749249*** (0.031612)	0.049669*** (0.014572)	0.319700*** (0.014178)	0.269119*** (0.033294)	-0.064529*** (0.013266)	0.112550*** (0.015046)
Treat*Event time 1	1.215824*** (0.037404)	0.259789*** (0.019562)	0.615175*** (0.017974)	0.339037*** (0.035280)	-0.003119 (0.018205)	0.199839*** (0.019377)
Treat*Event time 2	1.139670*** (0.038324)	0.297143*** (0.021409)	0.599319*** (0.019890)	0.322458*** (0.037248)	0.047191** (0.021780)	0.208778*** (0.022310)
Treat*Event time 3	1.127410*** (0.040379)	0.283152*** (0.022850)	0.561062*** (0.021647)	0.376952*** (0.041276)	0.090953*** (0.023776)	0.229531*** (0.024515)
Treat*Event time 4	1.101122*** (0.041184)	0.303910*** (0.024423)	0.549502*** (0.022800)	0.297557*** (0.042471)	0.110638*** (0.025432)	0.231005*** (0.025752)
Observations	829,532	829,533	829,533	829,531	829,533	829,533
R-squared	0.607445	0.746965	0.768602	0.603660	0.851211	0.840233

Standard errors clustered at the individual-level

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Note: This table reports the regression coefficients plotted in Figure 11.

**Table A.6. Probability of Amending Returns Relative to First-Time Filing**

VARIABLES	(1) Amend
Treat*Event time -4	-0.004717*** (0.001799)
Treat*Event time -3	-0.008348*** (0.001888)
Treat*Event time -2	-0.003798** (0.001850)
Treat*Event time 0	0.033132*** (0.002020)
Treat*Event time 1	0.016392*** (0.001960)
Treat*Event time 2	0.005307*** (0.001892)
Treat*Event time 3	0.000590 (0.002070)
Treat*Event time 4	-0.002472 (0.001889)
Observations	829,533
R-squared	0.160275

Standard errors clustered at the individual-level

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: This table reports the regression coefficients plotted in Figure A.5.

**Table A.7: Estimates of the Total Effect of IRS Enforcement Initiatives (Direct Method)**

	coefficient (t+1)	Change in Total Reported Capital Income (millions)	Tax Rate	Revenue Estimate (millions)
<b>OVD Participants</b>				
Interest	1.06	403	0.35	141
Dividends	0.49	218	0.15	33
Capital Gains	0.21	70	0.15	11
<b>Total</b>		<b>691</b>	<b>0.27</b>	<b>184</b>
<b>First-time Filers</b>				
Interest	0.62	2,573	0.35	901
Dividends	0.20	970	0.15	146
Capital Gains	0.10	37	0.15	6
<b>Total</b>		<b>3,580</b>	<b>0.29</b>	<b>1,052</b>

Notes: This table constructs the estimate of the total effect on reported capital income and tax revenues using the “direct method” described in the text, i.e. assuming a uniform treatment effect. The first column reports the coefficient from the event study for each type of capital income for year  $t+1$ . The change in total reported capital income (col. 2) is derived by applying these coefficients uniformly to the reported log interest, dividends and capital gains of each first-time filer and OVD participant and aggregating across individuals. We assume for simplicity that realized capital gains and dividends are taxed at the preferred rate, which was 15 percent in the top tax bracket in the period we study. The last column multiplies the total change in reported income by the tax rate.

**Table A.8: Estimate of the Total Effect (Indirect Method)**

	Coefficient (t+1)	Average Percent Change in Reported Capital Income	$E[V_i/y_i]$ (trimmed 95th ptile)	$E[d*r]$	Total Reported Assets (millions)	Change in Total Reported Capital Income (millions) (total reported assets * $E[d*r]$ )
<b>OVD Participants</b>	0.75	1.13	51.26	0.022	20,700	454
<b>First-Time Filers</b>	0.49	0.63	46.17	0.014	114,467	1,568

Notes: This table constructs the estimate of the total effect on reported capital income and tax revenues using the “indirect method” described in the text. We first convert the coefficient from total financial capital income in the event studies (col. 1) to the implied percent change in income (col. 2). We then use Eq. (4) to estimate  $E[d_i r_i]$  from the reported statistics in the second and third columns. We apply this via Eq. (2) to the total reported assets (as shown in Figure 3.B and reported in col. 4) to estimate the total effect on reported income.

**Table A.9: Estimated Rates of Return on Foreign Assets**

	<b>Total Reported Assets (millions)</b>	<b>Change in Total Reported Capital Income (millions)</b>	<b>E[d*r]</b>	<b>E[r]</b>	<b>E[d]</b>
<b>OVD Participants</b>					
Direct Method	20,700	691	0.033	0.033	1
Indirect Method	20,700	454	0.022	0.022	1
<b>First-Time Filers</b>					
Direct Method	114,467	3,580	0.031	0.033	0.94
Indirect Method	114,467	1,568	0.014	0.022	0.62

Notes: This table considers the implications of our results using the direct or indirect method (Tables 3, A.7 and A.8) for rates of return on foreign wealth. The first two columns report the total assets and total change in reported capital income. The third column estimates the compliance-adjusted rate of return. For the direct method, this is calculated by dividing the change in reported capital income by total reported assets; for the indirect method, it is calculated using Eq. (4). In the last two columns, we decompose the compliance adjusted rate of return into the actual rate of return for previously non-compliant account, and the fraction of accounts that are non-compliant, under the assumption that 1) all OVD participants were previously non-compliant, and 2) the rate of return was the same for OVD participants and first-time filers.