Uncovering Strategic Wealth Tax Evasion through Auditing Announcements

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Abstract

This paper reveals how a sequence of auditing announcements in the Netherlands inadvertently triggered large increases in declared assets and properties, predominantly held by the wealthiest segments of society, in unexpected sections of the tax returns. Using detailed administrative data from the Netherlands Tax and Customs Administration, the main behavioural insight from this study is that taxpayers make strategic contingency plans when declaring previously hidden wealth. The paper adds to existing literature by showing how loopholes and overlaps across sections of the tax returns contribute to tax avoidance and evasion, in particular among the wealthy.

1   Introduction

A longstanding literature on tax evasion considers taxpayers' static and dynamic responses to random audits and audit letter nudges (Kleven et al., 2011; Slemrod, 2019). More recent literature exploiting offshore account data leaks and tax amnesties shifts focus to taxes evaded and paid by the wealthiest (Alstadsæter et al., 2019; Leenders et al., 2023). This literature has grown in conjunction with that on behavioural responses to wealth taxes (Scheuer and Slemrod, 2021; Zoutman, 2018). Several well-known insights emerge from this body of literature: tax evasion most often occurs on items not verified by third-party information; taxpayers overestimate their probability of being audited relative to traditional rational expectation models; and the top quantiles of the wealth distribution are responsible for the largest amount of evaded taxes in absolute numbers.

What is less well understood is how loopholes and overlaps across sections of the tax returns contribute to tax avoidance and evasion, in particular among the wealthy. This paper exploits an unusual series of auditing announcements in the Netherlands to show how taxpayers strategically declare previously evaded wealth in order to avoid scrutiny. In January of each year, the Netherlands Tax and Customs Administration announce to the public – through radio, television, newspaper and internet announcements – a specific topic in the tax reports of the previous fiscal year which will be subject to intense auditing.

Drawing from existing empirical insights and using administrative longitudinal data covering 2002-2008 from the Netherlands Tax and Customs administration, our study focuses on the announcements concerning the tax years 2005 and 2007.

Since 2001, the Dutch tax system separates tax declarations into three categories, or Boxes. Broadly speaking, Box 1 relates to wages, profits, social security benefits and pensions, Box 2 represents income from a substantial business interest and Box 3 includes income from savings and investments. The 2005 announcement targeted *income from freelance work* which is listed in Box 1, one of three Boxes, or sections, of the Dutch tax reports. If, in the tax form, taxpayers fill in declarations for *income from freelance work* they are also directed to fill in an additional entry which elicits declarations from a second category in Box 1: *profits from assets made available*. When filling in the additional entry, taxpayers are required to list their Box 1 returns concerning three topics: *other assets*, *other property* and *debts*. These topics include profits from rented property other than a person's first or second home, a large array of dividends and capital gains, and mortgages and other obligations. Besides their ambiguous definition, these three items are unique in that they can be declared in any of Box 1, Box 2 and Box 3. Above a relatively low monetary threshold, the tax rates in Box 1 are higher than in Boxes 2 and 3.

The 2007 announcement concerned all items in Box 3.

The spotlight announcement auditing threat is not cheap talk. The auditing campaign for the 2005 topic involved a thorough preliminary screening of all people liable, through

third-party information or self-declaration, for taxes on income from freelance work and a full audit of 25% of these declarations. The auditing campaign in 2007 went through stricter preliminary screening than in other years and saw a hundred-fold increase in the number of full audits for Box 3 topics. Where misreporting is detected, taxpayers may receive fines up to 100% of the evaded sum.[1]

We reveal how these two announcements inadvertently triggered large increases in declared assets and properties, shown to be held by the wealthiest segments of society, in unexpected sections of the tax returns. Our results further expand on the behavioural insights and optimisation decisions learnt from these strategic shifts.

2 Data

The analysis uses longitudinal data from the Netherlands Tax and Customs Administration covering 2002-2008, which include annual individual tax declarations as well as individual socio-demographic and employment characteristics.[2]

For the analysis, we draw a representative sample of 49,486 individuals from the pool of taxpayers declaring positive or negative returns in the linked Box 1 category of *profits from assets made available*. For comparison, we also collect the same longitudinal information for all people selected in yearly random audits. Online appendix B provides tables describing and comparing these two samples. Most importantly, concerning wealth, 34% (11%) of individuals in the analysis sample earn more than €60,000 (€120,000) a year through their main employment, compared to 4.9% (0.6%) in the random audit sample. Notably, 43% of individuals in our analysis sample work in finance, as compared to 13% in the random audit sample and 83% of these taxpayers file reports with the assistance of tax advisors, as compared to 18% in the random sample. Unsurprisingly, individuals in the analysis sample are also far more likely to make declarations in all overlapping categories of Boxes 2 and 3, including declarations of *other property* (28% vs. 3%), *other assets* (4.9% vs. 0.8%), and *debts* (43% vs. 5%).

3 Model and Identification

Because all taxpayers are exposed to the spotlight announcements, we cannot formulate separate treatment and control groups. Instead, we take the approach of an interrupted time series by modeling the baseline declarations in all years from 2002-2008 other than 2005 and 2007, and estimating the effect of announcements in 2005 and 2007 as year specific bumps in declarations. More precisely, for taxpayer $i = 1, \ldots, N$ in year $t =$

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[1]Online appendix A describes in more detail the Dutch tax system, timelines and the choice of spotlight announcements.

[2]The Dutch tax system was overhauled in 2001, so that year is exclude as an unusual learning year of the new tax code. Furthermore, the financial crisis hit the Netherlands most seriously in 2009 which severely affected the trend in categories related to wealth.

$1, \ldots, T$, we model the tax declarations on a topic y_{it}, in logs, by,

$$y_{it} = \alpha_i + \beta_{2005} \cdot \mathbb{1}(year = 2005) + \beta_{2007} \cdot \mathbb{1}(year = 2007) + f(t) + u_{it} \qquad (1)$$

We are interested in the parameters β_{2005} and β_{2007} which approximate the average percentage change in tax declarations in years 2005 and 2007 relative to the baseline individual trend given by $\alpha_i + f(t)$. α_i is an individual specific intercept while $f(t)$ in our main specification is a third degree polynomial in time. We do not include time varying demographic or employment covariates since these may be bad controls endogenous to evasion.

Our base assumption is that the baseline trend adequately captures the expected counterfactual declarations for 2005 and 2007, and that no other policy changes occurred simultaneously in 2005 and 2007. Speaking to these assumptions, anticipation effects are unlikely since the spotlight topics are only announced internally one-to-two months prior to their public release. Announcements in other years also concerned tangential topics unlikely to affect those under study.[3]

Additionally, our model ignores some types of long run announcement effects in post-announcement years. In particular, the salience (Chetty et al., 2009) of announcements may induce a set of negligent taxpayers to apply greater effort in understanding their true tax liability, an effect which may be long-lasting. Rectified under-reporting due to negligence would lead to underestimating the magnitude of β_{2005} and β_{2007}. These parameters would also be underestimated if the threat effect of the announcements were persistent past the initial announcement year as shown for audit effects in Boning et al. (2023). Other post-announcement-year effects are integral to our study. These include 'crater' effects, whereby individuals sharply increase their evaded taxes after announcement years. A final problem is that announcement effects will still underestimate misreporting since we cannot capture undeclared funds from fraudulent taxpayers who never react to announcements and keep returns hidden in all years.

4   Results

Our main results for the analysis sample are summarised in Figure 1. We estimate our main model using a first difference estimator which accounts for the high serial correlation between declaration years, as shown in online appendix C.1. The figure presents point estimates and 95% confidence intervals of β_{2005} and β_{2007} for each of the listed tax topics. We see that upon the 2005 announcement, taxpayers in our sample do not significantly change their declarations of the (inadvertently) targeted topics in Box 1. We do see, however, a jump in declarations in Box 2 and for the topics in Box 3 - *other property*, *other assets*. We see no significant effect on *debts* possibly due to two counteracting

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[3]Listed and discussed in online appendix A.

forces, as argued in Klepper and Nagin (1989), which we expand on in online appendix C.2.
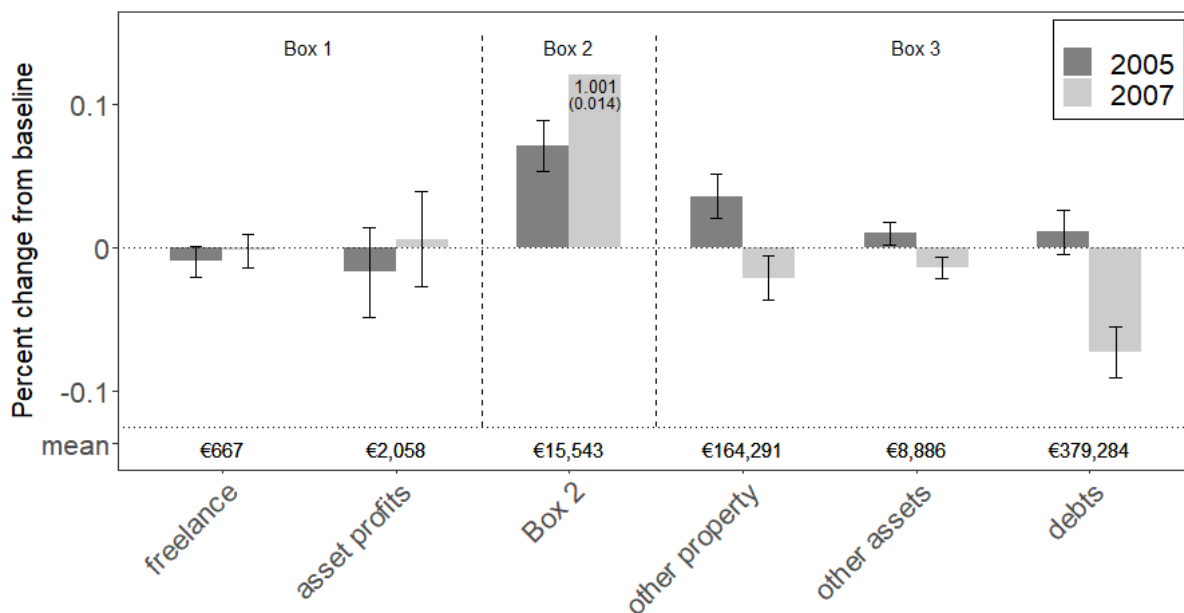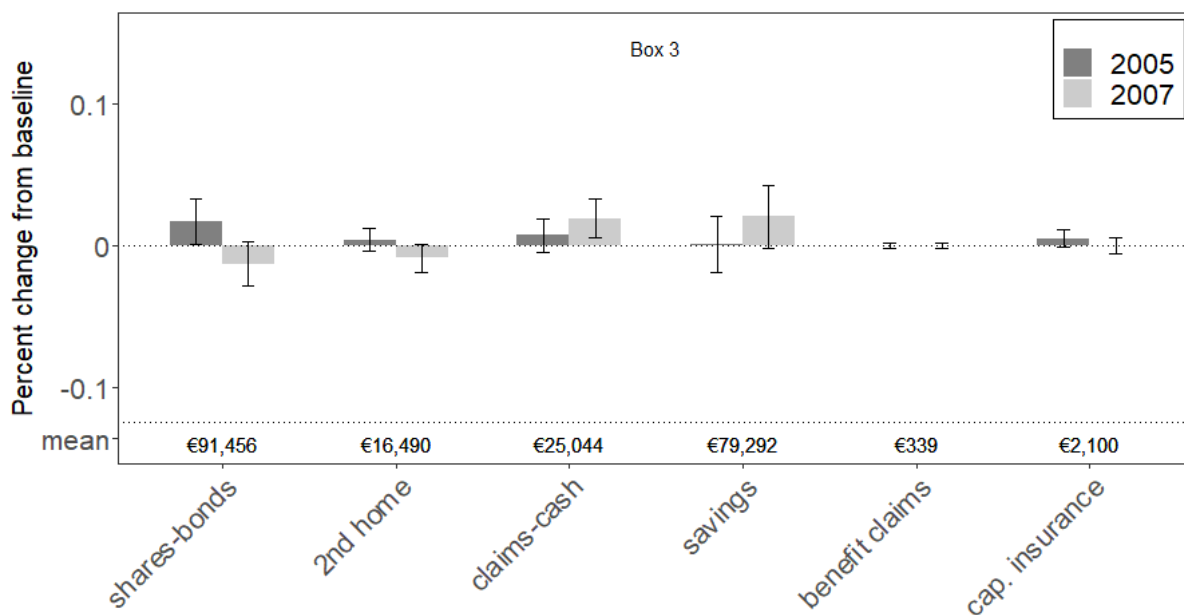
Figure 1: Substitution patterns in 2005 and 2007

Figure 2: Placebo check on substitution patterns

The reactions to the Box 3 announcement of 2007 reinforce these findings. We see a decrease in all three topics in Box 3 which overlap with Boxes 1 and 2. Because of the lower tax rate in Box 2 than in Box 1, there only appears to be a jump in Box 2 declarations

in 2007 (100.1 percent increase). This shifting behaviour is not only avoidance since, aggregating the changes in declarations, we find a net jump of previously undeclared taxable wealth of €76 million in 2005 and €142 million in 2007.

Figure 2 further verifies through a placebo check that the shifting behaviour only concerns the three topics overlapping Boxes 1, 2 and 3. Besides *claims and clash* declarations which directly increase due to the 2007 announcement, other wealth items in Box 3 which can be cross-checked by third-party information are unaffected by both years' announcements. In a last inspection, Table 1 shows correlations in shifting behaviour at the individual level for Box 2 and *Box3PAD= other property + other assets − debts*. We see that taxpayers who decreased their Box 3 declarations in 2007 are more likely to have increased their Box 3 declarations in 2005 and their Box 2 declarations in 2007. Similar patterns apply to taxpayers who increased their Box 2 declarations in 2007.

Table 1: Correlation table of Box 2 and Box 3 substitution effects

	$\Delta_{07}\text{Box3PAD}|\Delta_{07}\text{Box3PAD} < 0$	$\Delta_{07}\text{Box2}|\Delta_{07}\text{Box2} > 0$
$\Delta_{05}\text{Box3PAD}$	-0.26**	0.10**
$\Delta_{07}\text{Box3PAD}$	1	-0.07**
$\Delta_{07}\text{Box2}$	-0.07**	1
N obs.	5953	9247

* $p < 0.05$, ** $p < 0.01$.

5 Discussion

The main behavioural insight from this study is that taxpayers make contingency plans when declaring previously hidden wealth. Because of uncertainty as to the increased likelihood of an audit in announcement years, taxpayers declare previously evaded wealth items. However, instead of declaring these assets and property profits in the spotlight topic of the announcement year, which could trigger an audit, they declare these funds in other sections of the tax form. These results validate the theory put forward in Slemrod et al. (2001). By declaring these funds in other sections, taxpayers, if audited, can claim to have lawfully declared their taxes in that year, and possibly avoid scrutiny for previous years. The tax evasion and avoidance behaviour we describe is different from Alstadsæter et al. (2022) who, when studying a tax amnesty program in Norway, found no strong substitution between evasion and avoidance. This difference likely arises because, in contrast to revealing wealth in response to tax amnesties, taxpayers caught for evasion in our setting would be liable to additional fines for previous years of evasion.

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ONLINE APPENDIX

A Dutch tax system and yearly announcements

Since 2001, the Dutch tax system separates tax declarations into three categories, or Boxes, as described in Table A1. About 70% of the Dutch population files taxes yearly and the tax is levied on the income minus any deductibles within each Box. Box 1 relates to wages, profits, social security benefits and pensions. It follows a progressive tax over four tax brackets which in 2005 had cutoffs at €16,893, €30,357 and €51,762. The income in each bracket is taxed at 1.80%, 9.35%, 42% and 52%. For income under €30,357 there is also a 32.60% flat rate for social security contributions. The second category, Box 2, represents income from a substantial business interest which most often denotes a shareholding of at least 5% in a company. Box 2 income is subject to a flat tax of 25%.[4] Finally, Box 3 combines income from savings and investments. The total amount in this Box can be allocated optimally between fiscal partners. Individually declared income in Box 3 over €19,522 is subject to a 30% flat tax which is taken on a fixed assumed return of 4% of the average yearly net value of the assets minus any liabilities.

The 2005 announcement targeted a category listed in Box 1: *income from freelance work* (*IFW*). However, in the tax form, if taxpayers fill in declarations from *IFW* they are also required to fill in an additional category which bundles *IFW* returns with declarations of a second category in Box 1: profits from assets made available (*PAA*). Even if this second topic was not directly targeted in the 2005 announcement, it would be brought to the attention of any taxpayers inquiring into *IFW* returns upon hearing the announcement. This second category includes earnings or profits from assets rented or made available to a fiscal partner, a blood relative or a substantial business interest.[5] The 2007 announcement concerned all items in Box 3.

The motivation for choosing spotlight topics varies each year. The Netherlands Tax and Customs Administration may select topics where they suspect high levels of fraud but they also intend to educate the public on complex tax topics. The announcement campaign always follows a strict timeline. The spotlight theme for fiscal year t, which follows the calendar year, is announced to the public in the first days of January in year $t + 1$. Notifications of the spotlight topic are spread over newspapers, magazines, radio, television and internet announcements, and are made evident on the front page of the tax authorities website. For the 2005 announcement, in addition to the widespread

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[4]2007 was a slightly unusual year as there was a reduced tax rate of 22% on the first €250,000 in Box 2. To ensure this change is not influencing our results, we compared effects in our results for people who previously had above €250,000 in savings to those with below €250,000 in savings, but we do not find substantial differences in tax shifting behaviour (not presented in tables). In addition, this lower tax rate cannot explain the higher aggregate wealth declared in 2007 as discussed in our results.

[5]A substantial business interest is defined here in the same way as in Box 2.

Table A1: Income Tax in the Netherlands for 2005

Category	Bracket (€)	Tax Rate
Box 1: Income from home and work		
- profits from business or professional activities, income from main employment, income from other activities.	0-30,357 if aged < 65	32.60%
	0-16,893	1.80%
- income in the form of periodic payments (pensions, life annuity).	16,893-30,357	9.35%
- capital income from owner occupied dwelling and mortgage debt.	30,357-51,762	42%
- negative expenses for income provisions, negative personal deduction.	51,762-	52%
- deductions: commuting costs, childcare expenses, other work related expenditures, expenses for income provisions, mortgage debt on home.		
Box 2: Income from substantial interest		
- dividends and capital gains if taxpayer, either solely or with his or her partner, holds 5% of the issued capital in a company, directly or indirectly[1].	total share value	25%
Box 3: Income from savings and investments[2]		
- bank and savings accounts (national and foreign).		
- stocks and other shares.	max { 0,	
- second home.	(total - 19,522) * 4% }	30%
- rental income, interest income and endowment insurance policy (other than that declared in Box 1 and Box 2).		
- deductions: interest on debt, educational expenses, charitable contributions.		

[1] If the fiscal partner of a taxpayer holds a substantial business interest above 5% then any individual shares constitute a substantial interest, even if they do not amount to 5%. For instance, if a taxpayer holds a substantial business interest of 3% and the fiscal partner holds a substantial business interest of 7% then both taxpayers will be taxed at 25%. On the other hand, if one has a holding of 3% and the other has a holding of 4%, neither of them will be taxed in Box 2.
[2] Income in Box 3 can be reallocated between fiscal partners but the final tax is levied on individual declarations.

campaign, letters were sent to the $181,551$ taxpayers who declared IFW income in 2004. The letter informed people to take particular care in filling their returns for income from secondary sources such as freelance work income which come under Box 1. The Box 3 announcement in 2007 emphasized the categories of additional property, personal assets, savings and investments.

In our analysis we must exclude any intervening effects from other announcements between 2002-2008. This is likely to hold. The 2002 announcement concerned uncommon expenditures and the 2003-2004 announcements concerned pension annuity payments, neither of which overlap with the topics we study. The 2006 announcement concerned a specific type of deductible on mortgage debt for people who sell a house and buy a new one within the same fiscal year. This announcement may overlap slightly with some of the property sub-items targeted in the 2005 and 2007 announcements but, if unaccounted for, would likely lead to an underestimate of our misreporting effects. The influence of the 2006 announcement is unlikely to be large since it affects only a small fraction of house buyers in 2006. The 2008 announcement concerned charitable donations which are separate from the topics we study in Box 1 and Box 3.

Anyone liable to pay taxes for year t in the Netherlands is supposed to fill in their declarations by April 1st of year $t + 1$. If people do not send any tax declarations, these are filled in automatically using available third-party information which includes income, property, bank and other financial information. Some components of third party information, such as savings in national banks, are regular while others, such as information

on offshore bank accounts, may vary year-to-year depending on international banking agreements. The tax authorities then analyze the tax declarations starting beginning July of year $t + 1$ and generate audit flags. Flags are based on some characteristics of the returns, previous flags and differences between declarations and third-party information. It takes some time before the letters are sent out to the people whose tax declarations will be subject to audit. In most years, these letters are sent out between October of year $t + 1$ and September of year $t + 2$.[6] When an auditor detects misreporting, the taxpayer is required to pay the full outstanding sum. If the underreporting is seen as intentional cheating then there can be an additional fine varying between 50%-100% of the evaded value. For underreporting due to negligence, the fine is 25%.

B   Data

The analysis uses longitudinal data from the Netherlands Tax and Customs Administration covering years 2002-2008 and include yearly individual tax declarations. We also observe each taxpayer's gender, age, nationality, whether they had a partner, the number of children, overall income, work sector, whether someone is self-employed, an indicator for whether someone's taxes are filed by tax professionals and the postcode.

Table A2: Declarations by individual characteristics

	PAA Sample	Rand. Sample	IFW Sample
All:	100%	100 %	100%
Gender:			
Female	21.0%	41.9 %	53.8%
Male	79.0%	58.1 %	46.2%
Partner:			
Single	18.3%	34.4 %	26%
Partner	81.7%	65.6 %	74.0%
Migrant:			
Dutch	97.5%	95.6 %	96.5%
Foreign	2.5%	4.4 %	3.5%
Children:			
0	28.1%	42.6 %	32.5%
1	14.7%	17.3 %	15.3%
2	38.2%	30 %	36.0%
3+	19.0%	10.1 %	16.2%
Age:			
-30	3%	13 %	10.8%
30-50	49.9%	40.4 %	46.3%
50-65	37.0%	27.3 %	33.3%
65+	10.1%	19.3 %	9.6%
N ind.	49,486	68,681	33,639
N obs.	346,402	480,767	235,473

We collect data on two samples of taxpayers subject to the subcategories targeted or affected by the 2005 and 2007 announcements. The first group focuses on declarations concerning *profits from assets made available (PAA)*, the focus of our main analysis. We

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[6]For the 2007 topic, the sample of people due for audit was initially too big to handle. As a result, letters were sent out after mid-April 2009.

draw a representative random sample of 49,486 individuals from the pool of taxpayers declaring positive or negative returns in the *PAA* category over 2002-2008. For each of these taxpayers we then append the tax information for all other years. To see the direct effect of the 2005 announcement, and to assess the robustness of our estimation approach in appendix C.1, we similarly draw a representative sample of individuals declaring *income from freelance work* (*IFW*), resulting in a total of 33,639 individuals. This sample is not the focus of our main analysis. In a last step we collect information for a random audit sample. This group includes individuals who were randomly selected for audit between 2002 and 2008. The tax authorities conduct random audits to gain an overview of evasion and other types of misreporting. Different populations were selected for fiscal years 2003, 2005, 2006 and 2007. For each sampled year we again collected information on each individual's declarations from 2002 to 2008. Although this group excludes people registered as self-employed, it still provides a baseline upon which to compare the declarations and composition of our two samples of interest.

Table A3: Declarations by employment characteristics

	PAA Sample	Rand. Sample	IFW Sample
All:	100%	100%	100%
Total income:			
0-30,000	31.1%	67.7%	67.6%
30,000-60,000	35.1%	27.4%	22.7%
60,000-120,000	22.8%	4.3%	7.7%
120,000+	11.0%	0.6%	2.0%
Employment:			
other (N)	16.9%	35.0%	38.5%
prim. (N)	66.5%	63.9%	50.6%
other (E)	0.5%	0.1%	0.5%
prim. (E)	16.1%	1.0%	10.4%
Tax advisor:			
no advisor	17.0%	82%	45.5%
advisor	83.0%	18.0%	34.5%
Job sector:			
land	1.8%	1.1%	1.2%
industry	4.1%	7.4%	3.4%
instal	3.8%	3.7%	1.4%
wholesale	5.6%	4.3%	2.0%
retail	6.7%	5.4%	4.3%
transport	1.9%	3.1%	1.3%
finance	43.4%	13.2%	11.9%
service	5.8%	17.9%	23.0%
unknown	27.0%	43.9%	51.5%
N ind.	49,486	68,681	33,639
N obs.	346,402	480,767	235,473

The *Employment* category omits observations in 2002 since these have no information concerning entrepreneur status. Job sector categories: land=agriculture and fisheries ; industry=industry and mineral extraction; instal=construction, installation and utilities; wholesale=wholesale and intermediate trade; retail=retail, catering and repair; transport=transport, storage and communication; finance=banking, insurance and business services; service=other services.

Summary statistics for each sample are presented in Table A2. We show separate statistics for the *PAA* sample, the sample of random audits and the *IFW* sample. The first column presents the respective shares of individuals in the *IFW* sample by individual

Table A4: Summary statistics (in €)

	PAA sample		Rand. sample		IFW sample	
	avg.	frac.	avg.	frac.	avg.	frac.
Box 1 total	45,717 (380,889)	96.2%	24,927 (51,384)	92.5%	24,890 (37,696)	90.9%
IFW	667 (16,663)	6.6%	125 (1,732)	3.1%	2,894 (10,564)	55.9%
PAA	2,058 (375,875)	59.8%	12 (920)	0.4%	40 (3,654)	1.5%
Box 2 total	15,543 (203,546)	9.5%	157 (12,542)	0.2%	937 (32,001)	0.8%
Box 3 total	9,057 (41,667)	51.1%	899 (4,848)	23.4%	1,672 (23,715)	23.4%
other property	164,291 (1,195,008)	28.2%	3,947 (70,884)	2.6%	13,703 (383,738)	5.5%
other assets	8,886 (234,146)	4.9%	504 (10,013)	0.8%	1,069 (24,676)	1.3%
debts	379,284 $(1.43 * 10^8)$	42.7%	3,266 (47,867)	5.2%	15,011 (778,824)	9.8%
shares, bonds, etc.	91,456 (700,002)	34.6%	9,429 (67,877)	13.6%	23,217 (1,157,113)	16.0%
2nd home	16,490 (173,017)	6.7%	1,154 (17,004)	1.0%	2,922 (31,326)	2.1%
other claims & cash	25,044 (280,202)	16.3%	1,349 (22,233)	2.4%	2,929 (38,857)	4.2%
savings	79,692 (386,967)	61.1%	18,691 (64,422)	27.3%	21,575 (112,199)	28.2%
benefits claims	339 (40,202)	0.3%	27 (1,493)	0.1%	51 (4,523)	0.1%
capital insurance	2,100 (52,300)	4.9%	131 (3,701)	1.0%	340 (12,906)	1.5%
N ind.	49,486		68,681		33,639	
N obs.	346,402		480,767		235,473	

Standard deviations in parenthesis.

characteristics. The second column shows these same shares for the random sample and the last one shows the shares for the *IFW* sample.

Table A3 categorizes declarations by employment characteristics. We split the statistics on employment into four categories: entrepreneur (E) or not entrepreneur (N), and declaring primary earnings (prim.) or not (other). The entrepreneur category includes people who registered as 'independent without personnel' or small firms.[7] Registering as an entrepreneur does not prevent people from being employed for someone else but requires filing taxes as a self-employed.

Table A4 presents the declarations of tax items in other sections of the tax forms for the three samples. For each sample, the first column presents the average yearly declarations of items in the different Boxes. The second column presents the average yearly share of declarations larger than €100 or lower[8] than -€100 for each item.

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[7]Small firms are those with fewer than 5 employees.

[8]The topics that can be negative are Box 1, Box 2, IFW, PAA and savings. If the subtopics in Box 3 sum up to a negative amount, the overall declaration is set to 0.

C   Results

C.1   Specification and 2005 announcement direct effects

Table A5 presents results which are not discussed in the main paper but serve to justify our chosen specification. The results in this table concern the direct effect of the 2005 announcement on *income from freelance work* and *profits from assets made available* in the *IFW* sample and the *PAA* sample separately. In the estimation we take the logarithm of *IFW* or *PAA* declarations as the dependent variable to account for the right-skew in declarations. With a logarithmic specification, β should be interpreted as the proportional causal effect of the announcement and letters sent. We correct the declarations close to zero based on the observed densities of the declarations by imputing a minimal absolute value of 100. We present results using different specifications and conclude that those in column 3, with a first difference and 3rd degree polynomial specification, are the most conservative while remaining robust.

Table A5: 2005 announcement effect on *IFW* and *PAA* declarations

	(1) FE lin.	(2) FD lin.	(3) FD 3deg. poly.	(4) Rand. Trend	(5) FD Cluster
IFW (B1)					
05 announce.	0.063** (0.013)	0.051** (0.013)	0.040** (0.014)	0.051** (0.013)	0.045** (0.016)
t	0.612** (0.033)	0.057** (0.003)	-0.929 (0.535)	0.057** (0.000)	cl
t^2			7.757* (3.604)		cl
t^3			-1.961* (0.801)		cl
R^2 overall	0.002	0.000	0.000	0.000	0.009
N ind.	33,639	33,639	33,639	33,639	33,639
N obs.	235,473	201,834	201,834	201,834	201,834
PAA (B1)					
05 announce.	0.084** (0.015)	0.005 (0.015)	-0.018 (0.016)	0.005 (0.015)	0.008 (0.013)
t	0.542** (0.035)	0.041** (0.004)	-0.884 (0.627)	0.041** (0.000)	cl
t^2			8.551* (4.212)		cl
t^3			-2.399** (0.934)		cl
R^2 overall	0.001	0.000	0.000	0.000	0.064
N ind.	49,486	49,486	49,486	49,486	49,486
N obs.	346,402	296,916	296,916	296,916	296,916

* $p < 0.05$, ** $p < 0.01$. Clustered standard errors. (1) linear t FE (2) linear t FD (3) $3rd$ degree polynomial t FD (4) Random Trend (5) Cluster FD with 40 'job sector x box 1 income bracket' time trends.

Extrapolating to the average yearly population declaring *income from freelance work*, the measured bump on *income from freelance work* is equivalent to underreported amounts of approximately €74 million a year. Looking deeper into this effect (tables not presented), we find that it is correlated with many characteristics suggesting quite independent profiles of taxpayers. We see that the jump is positively correlated to being single, male, between 30-50 years old, and without children. The jump is also more pronounced

for middle income taxpayers who are not self-employed and do not make use of tax professionals to file their returns. It also seems the misreporting occurs more often in the service sector, where jobs are often temporary, and in the industry sector, where specific crafts can be used for moonlighting activities.

C.2 Additional result explanations

As mentioned in the main results section, we see no significant effect on *debts* but this may be due to two counteracting forces. *Debts* enter negatively in tax returns and are known to be a topic very difficult to verify with third-party information. It may be that experienced taxpayers over-declare debts in normal years but reduce these when facing a higher probability of audit in 2005. At the same time, declarations in *other property* and *other assets* are often paired with mortgage payments or other forms of debts which would increase as taxpayers increase their declarations in the other two topics. Klepper and Nagin (1989) give similar arguments and more detailed explanations on how counteracting effects in the US TCMP tax data can explain declaration patterns for related tax topics. The fifth column shows an increase in declarations in 2005 for the topic *shares, bonds, etc.* This category, although not explicitly listed in Box 1 of the tax form, includes a wide array of financial products that could possibly be declared in different sections.

We also find a direct effect of the 2007 announcement on the tax item *other claims and cash*, which jumps up. This increase and that observed for income from freelance work suggest that, when there is no possibility to shift funds to reduce visibility, taxpayers will directly increase declarations for previously underreported income.