

Figure 1. TY 2014-2016 Tax Gap Map

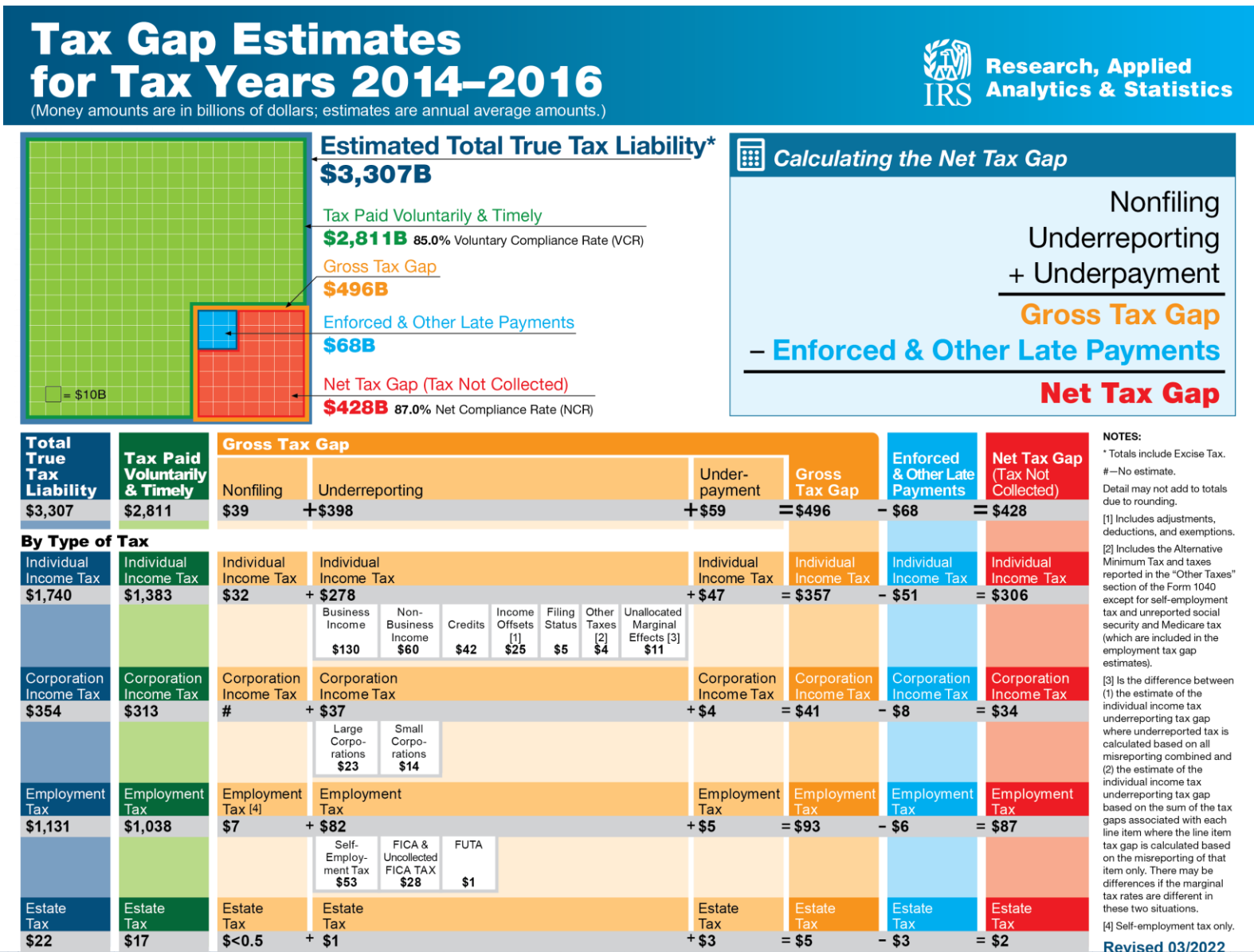
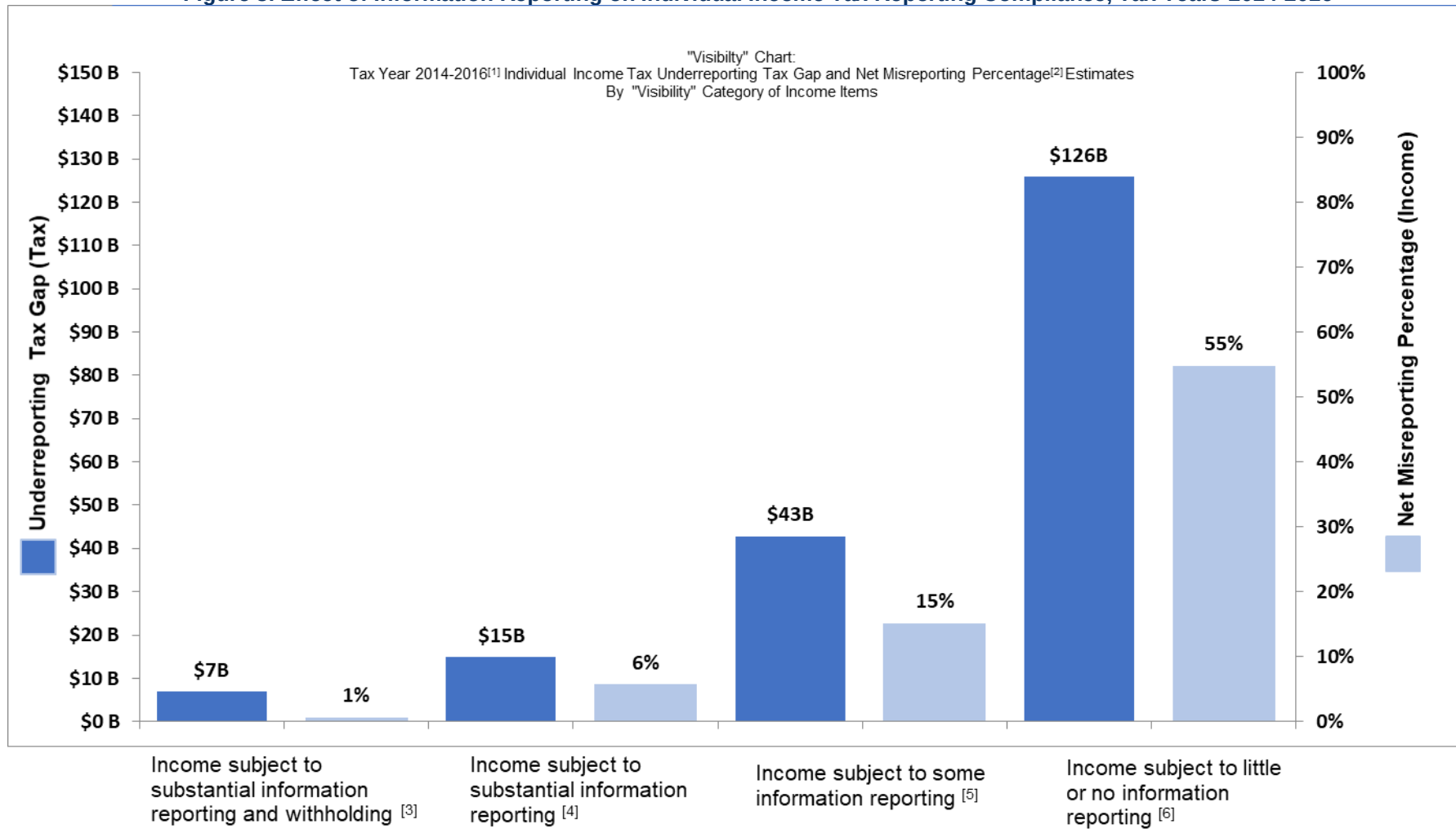


Figure 3. Effect of Information Reporting on Individual Income Tax Reporting Compliance, Tax Years 2014-2016

^[1] The TY 2014–2016 estimate is the annual average for the TY 2014, 2015, and 2016 timeframe. This chart displays the tax gap attributable to the underreported income category and the rate at which that income is misreported as measured by the Net Misreporting Percentage.

^[2] The Net Misreporting Percentage is the ratio of the net misreported amount to the sum of the absolute values of the amounts that should have been reported, expressed as a percentage. The net misreported amount for the items in this chart is understatements of income less overstatements of income. On net, income is understated.

^[3] Includes wages & salaries.

^[4] Includes pensions & annuities, unemployment compensation, dividend income, interest income, State income tax refunds, and taxable Social Security benefits.

^[5] Includes partnership/S corp. income, capital gains, and alimony income.

^[6] Includes nonfarm proprietor income, other income, rents and royalties, farm income, and Form 4797 income.

	Either Letter					
	Federal Taxable Income			MN Tax Liability		
	Treated	Control	Treated-Control	Treated	Control	Treated-Control
1994	\$26,927	\$26,940	\$-14	\$1,946	\$1,954	\$-8
1993	\$26,346	\$26,449	\$-103	\$1,919	\$1,934	\$-15
1994-1993	\$580	\$491	\$89(270)	\$27	\$20	\$7(22)
% with 94-93 increase	54.3	53.9	0.4	52.8	52.3	0.5
n	31,149	15,624		31,149	15,624	

Notes:

Number in parentheses is the standard error.

The mean of "Treated-Control" may differ from the mean of "Treated" minus the mean of "Control" due to rounding error.

Table 4

Average reported federal taxable income: differences in differences for the whole sample

Whole sample (weighted)			
	Treatment	Control	Difference
1994	23,781	23,202	579
1993	23,342	22,484	858
94 – 93	439	717	–278
S.E.			464
%w/increase	54.4%	51.9%	2.5%***
<i>n</i>	1537	20,831	
Low income			
	High opportunity		
	Treatment	Control	Difference
1994	7473	3992	3481
1993	971	787	183
94 – 93	6502	3204	3298
S.E.			2718
%w/increase	65.4%	51.2%	14.2%*
<i>n</i>	52	123	
Source: Slemrod et al. (2001), p.466			

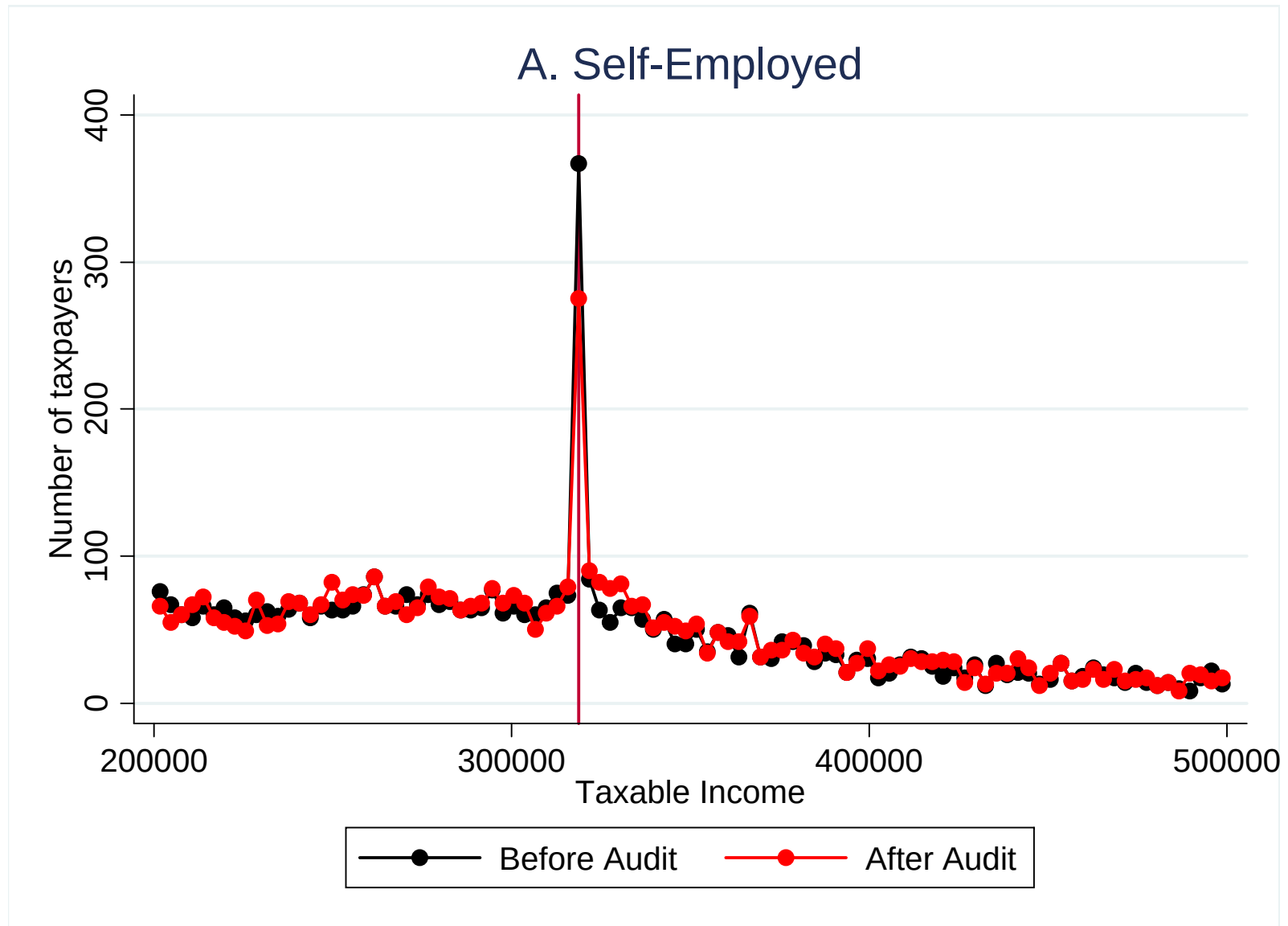
Self-Reported vs. Third-Party Reported Income

	Pre-audit net income			Under-reporting of income		
	Total	Third-party	Self-reported	Total	Third-party	Self-reported
Amount	206,038 (2,159)	195,969 (1,798)	10,069 (1,380)	4,255 (424)	536 (80)	3,719 (416)
Percent	98.38 (0.09)	98.57 (0.08)	38.18 (0.35)	8.39 (0.20)	1.72 (0.09)	7.28 (0.19)

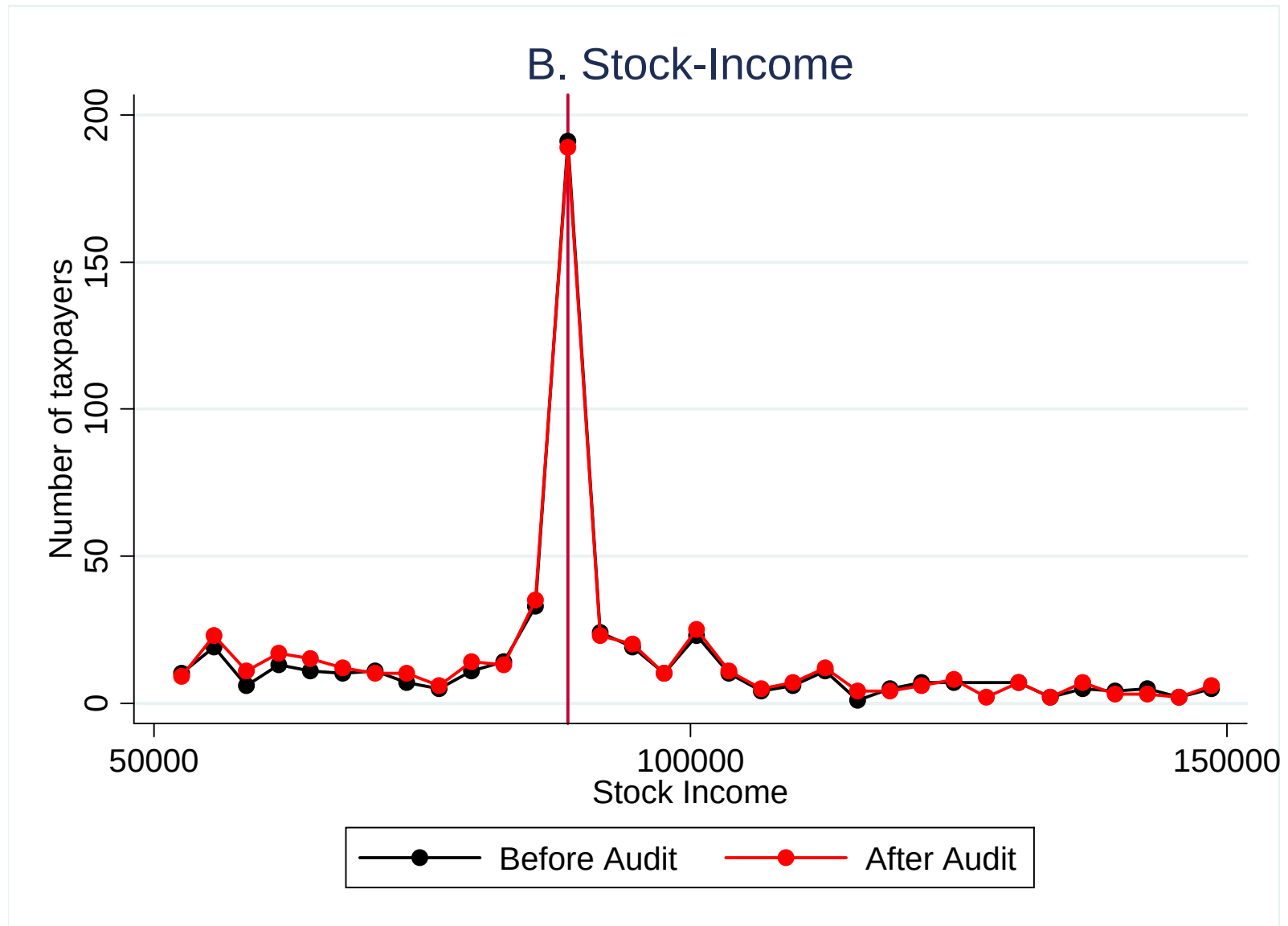
Determinants of the Probability of Audit Adjustment: Social, Economic, and Information Factors

	Social factors		Socio-economic factors		Information factors		All factors	
Constant	14.42	(0.64)	11.92	(0.66)	1.44	(0.25)	3.98	(0.62)
Female	-5.76	(0.43)	-4.45	(0.45)			-2.05	(0.41)
Married	1.55	(0.46)	-0.36	(0.48)			-1.64	(0.44)
Member of church	-1.98	(0.59)	-2.67	(0.58)			-1.19	(0.54)
Copenhagen	-0.29	(0.67)	1.20	(0.67)			1.00	(0.62)
Age above 45	-0.37	(0.45)	-0.35	(0.45)			0.10	(0.42)
Home owner			5.96	(0.48)			-0.35	(0.46)
Firm size below 10			4.43	(0.82)			2.97	(0.76)
Informal sector			3.25	(0.86)			-0.99	(0.79)
Self-Reported Income					9.47	(0.53)	9.72	(0.54)
Self-Reported Income > 20K					17.46	(0.91)	17.08	(0.92)
Self-Reported < -10K					14.63	(0.72)	14.53	(0.72)
Audit Flag					15.48	(0.59)	15.32	(0.60)
R-square	1.1%		2.1%		17.1%		17.4%	
Adjusted R-square	1.0%		2.1%		17.1%		17.4%	

Bunching at the Top Kink in the Income Tax



Bunching at the Kink in the Stock Income Tax



Effect of Audits on Subsequent Reporting

Amount of income change from 2006 to 2007

	Baseline audit adjustment amount	Difference: 100% vs. 0% audit group		
	Total income	Total income	Self-reported income	Third-party income
Net income	5629	2554	2322	232
	(497)	(787)	(658)	(691)
Total tax	2510	1377		
	(165)	(464)		

Effect of Audit Threats on Subsequent Reporting

Probability of adjusting reported income (in percent)

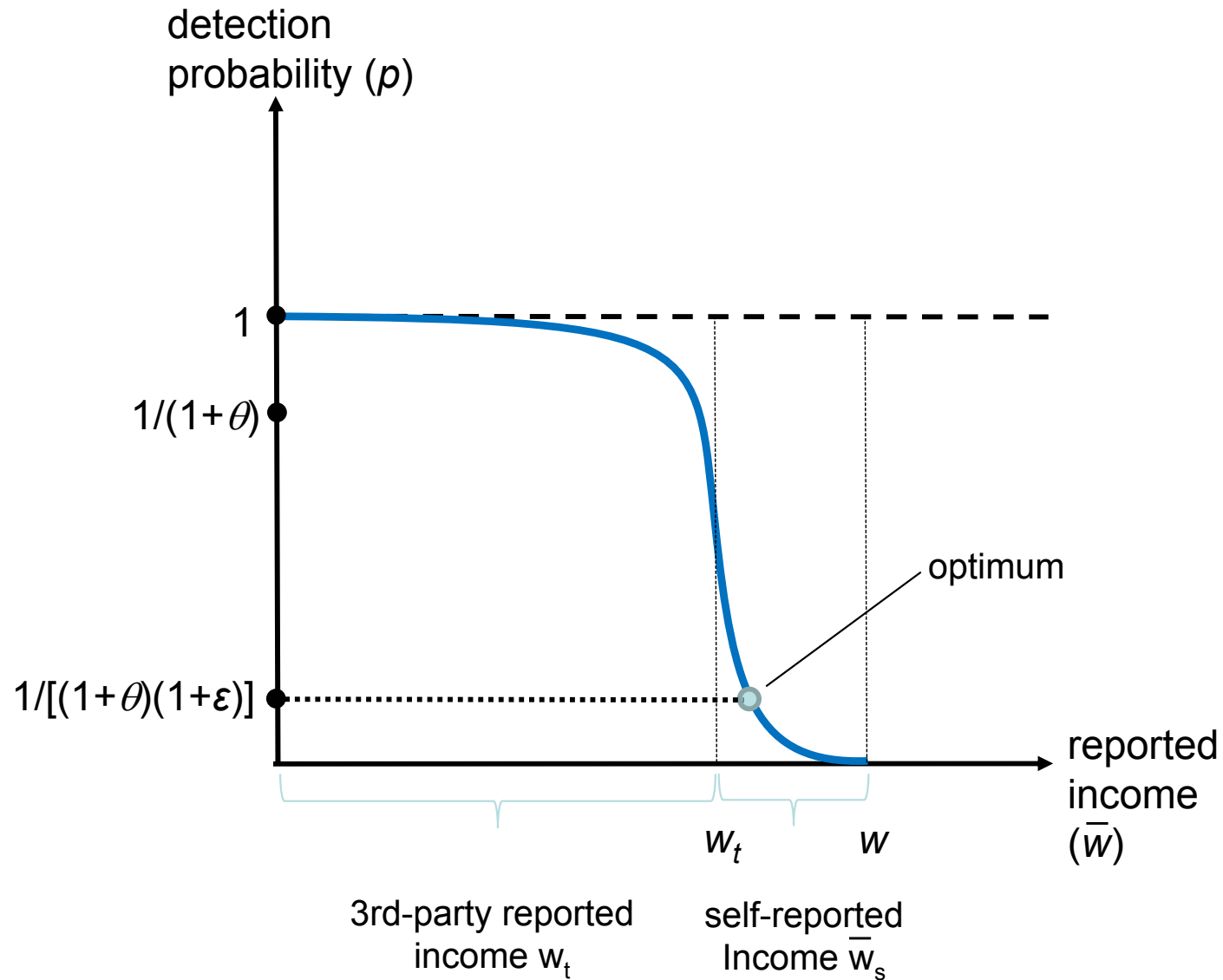
	Both 0% and 100% audit groups			
	No-letter group	Difference: letter group vs. no-letter group		
		Any adjustment	Upward adjustment	Downward adjustment
	Baseline			
Net income	13.37	1.65	1.51	0.13
	(0.35)	(0.47)	(0.28)	(0.40)
Total tax	13.67	1.56	1.54	0.01
	(0.35)	(0.48)	(0.28)	(0.40)

Effect of Audit Threats on Subsequent Reporting

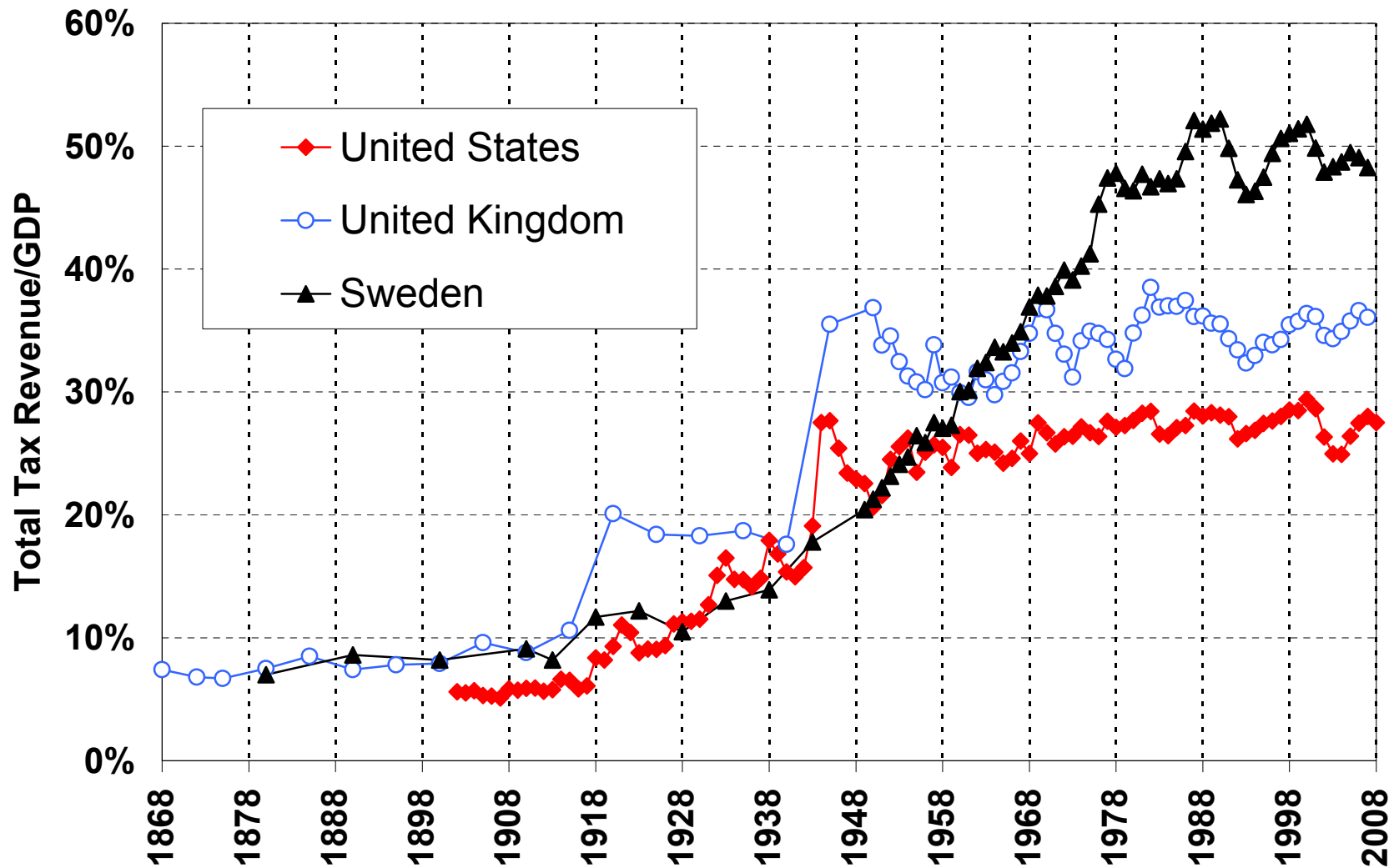
Probability of upward adjustment in reported income (in percent)

	Both 0% and 100% audit groups		
	Letter – No Letter	50% Letter – No Letter	100% Letter – 50% Letter
Net income	1.51	1.04	0.95
	(0.28)	(0.33)	(0.33)
Total tax	1.54	0.99	1.10
	(0.28)	(0.33)	(0.33)

Figure 1: Probability of Detection under Third-Party Reporting

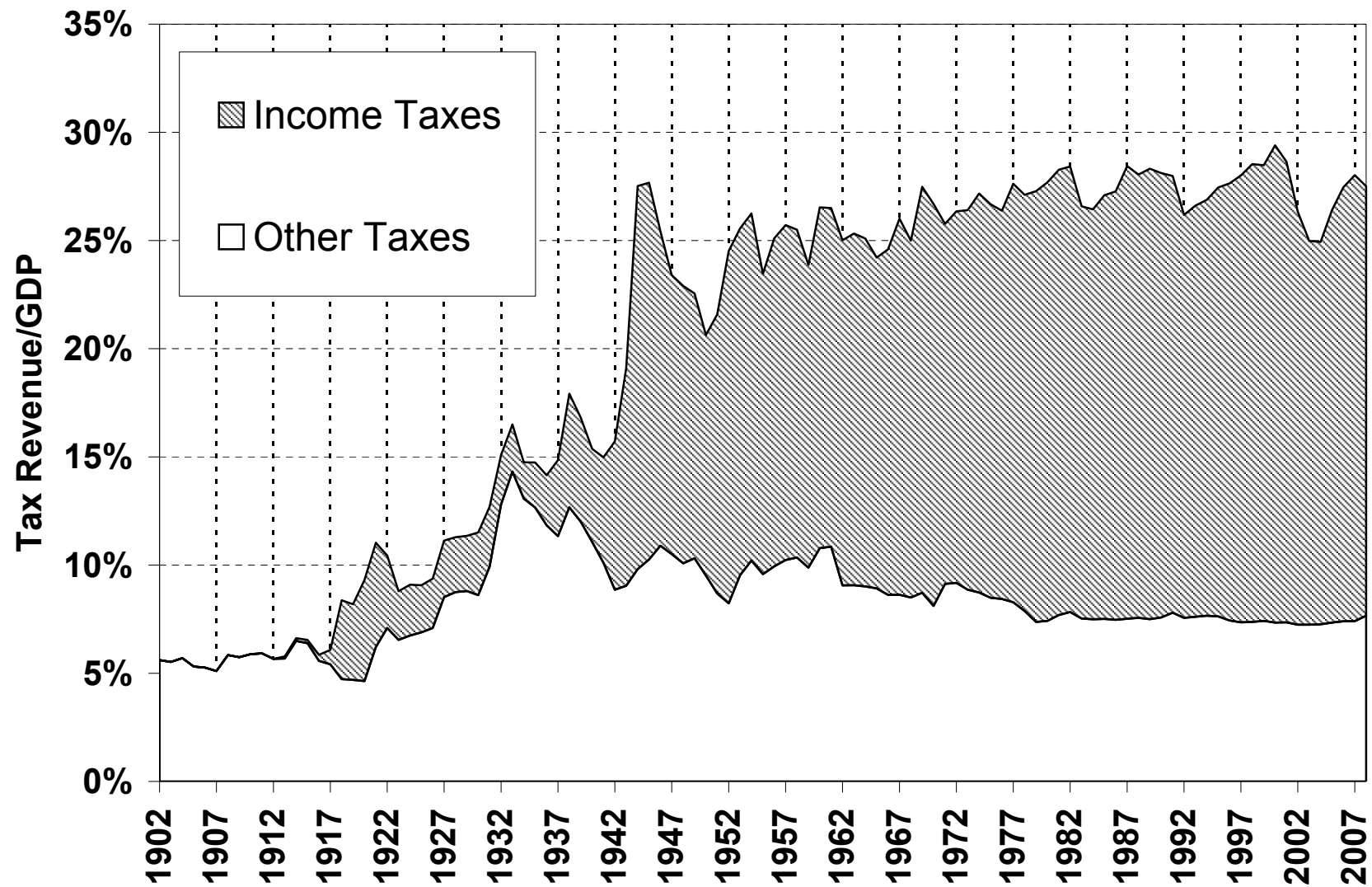


2A. Tax revenue/GDP in the US, UK, and Sweden



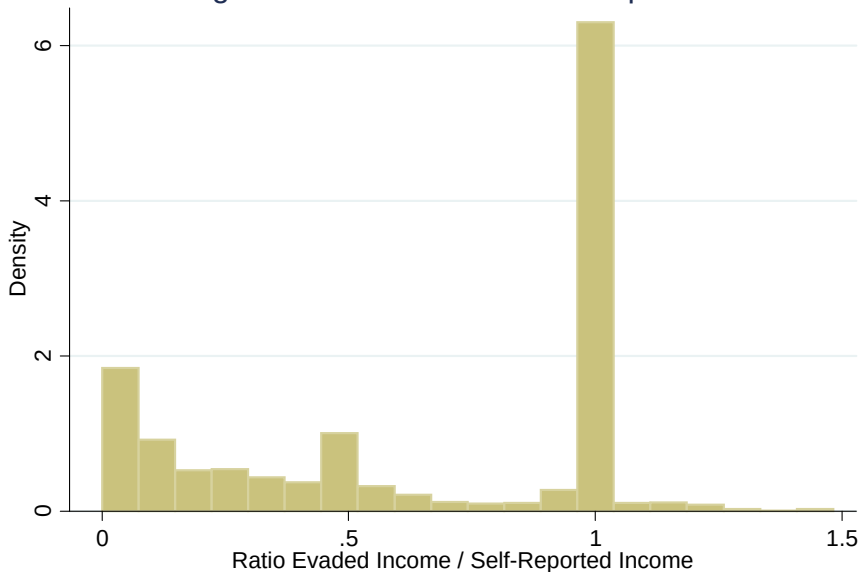
Source: statistics computed by the author

2B. US Tax Composition, 1902-2008



Source: statistics computed by the author

A. Histogram Evaded Income/Self-Reported Income



B. Evasion by Fraction Income Self-Reported

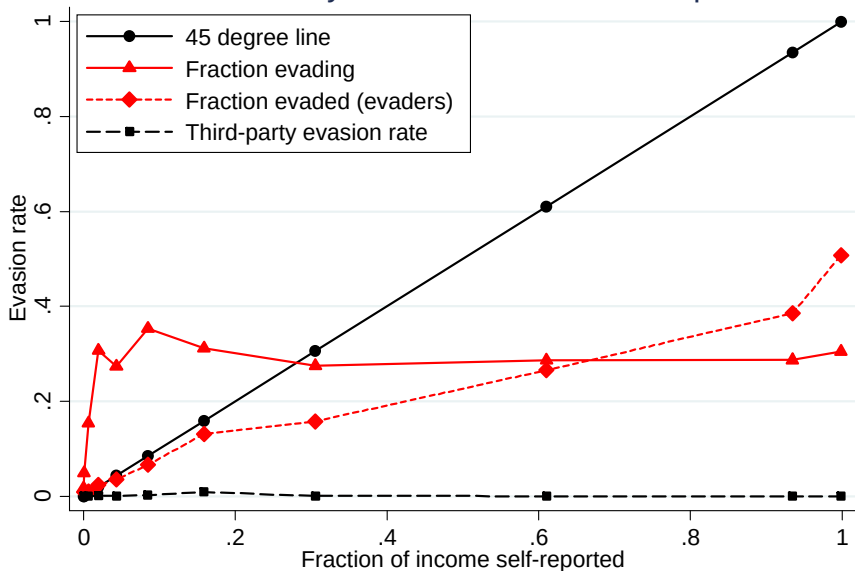


Figure 3. Anatomy of Tax Evasion

Panel A displays the density of the ratio of evaded income to self-reported income (after a

Source: Pomeranz '11

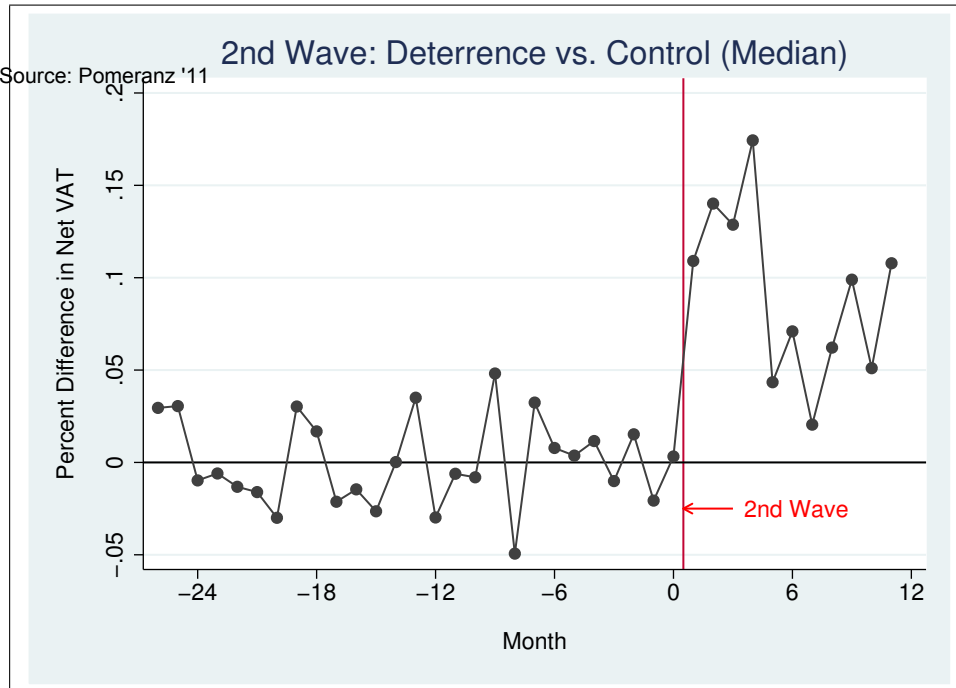


Figure A5: Impact of Deterrence Letter: Second Wave of Mailing

Notes: This figure plots the monthly percent difference between the medians of the treatment and the control group of the deterrence letter for the second wave of mailing: (median VAT treatment group - median VAT control group) / (median VAT control group), normalizing pre-treatment percent difference to zero. The y-axis indicates time, with monthly observations, and zero indicates the last month before the mailing of the letters. The vertical line marks mailing of the letters. The figure shows the first wave of mailing. Since the second wave of mailing is much smaller than the first, these figures show a much more noisy pattern.

FIGURE 1

Effect of Notch on Taxpayer Behavior

Panel A: Bunching at the Notch

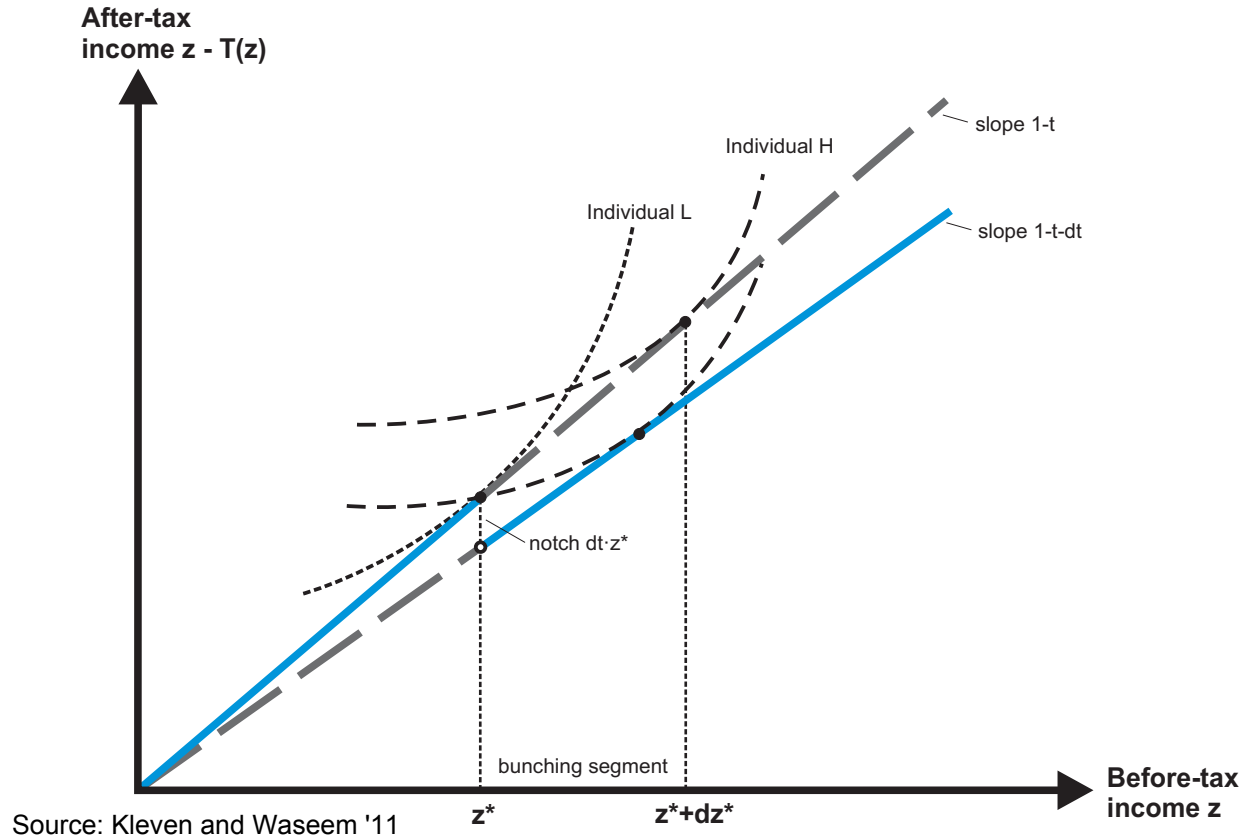


FIGURE 2

Effect of Notch on Density Distribution

Panel A: Theoretical Density Distributions

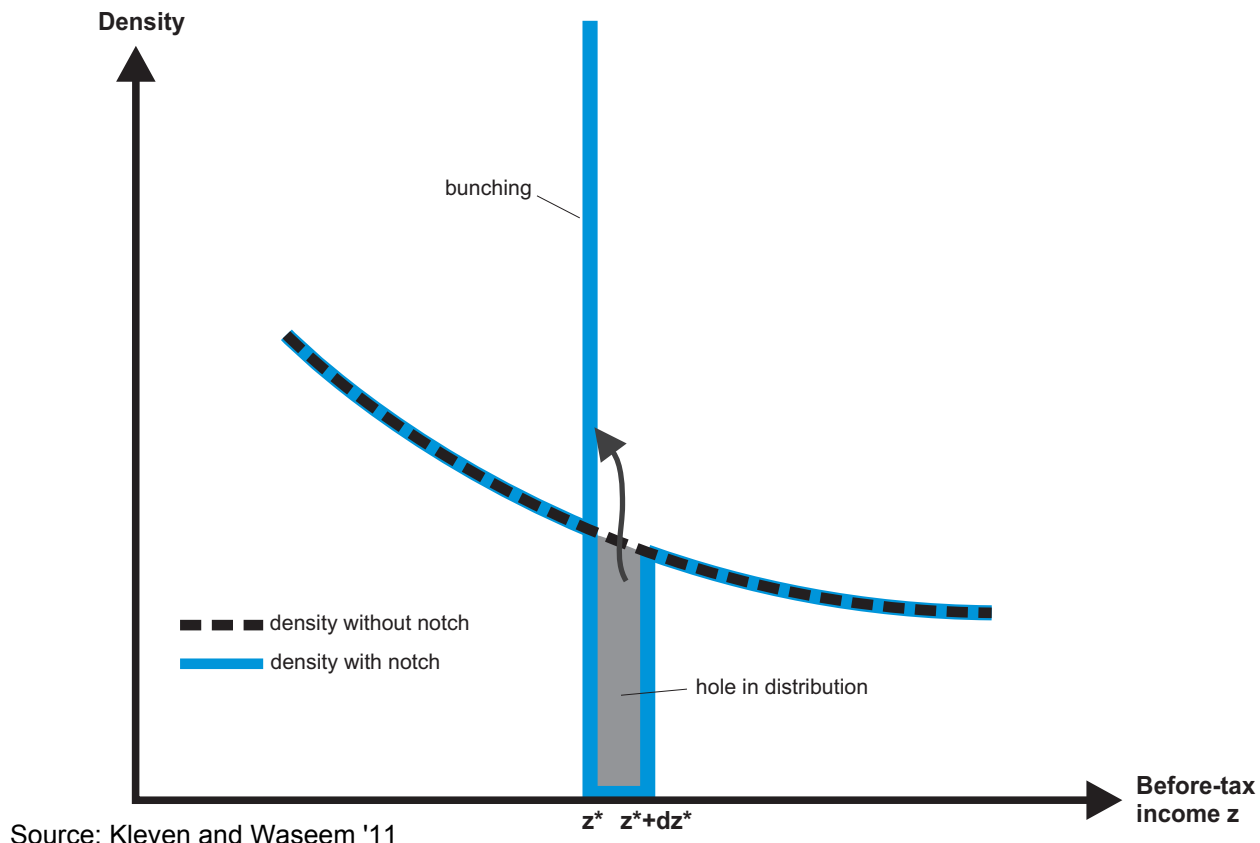
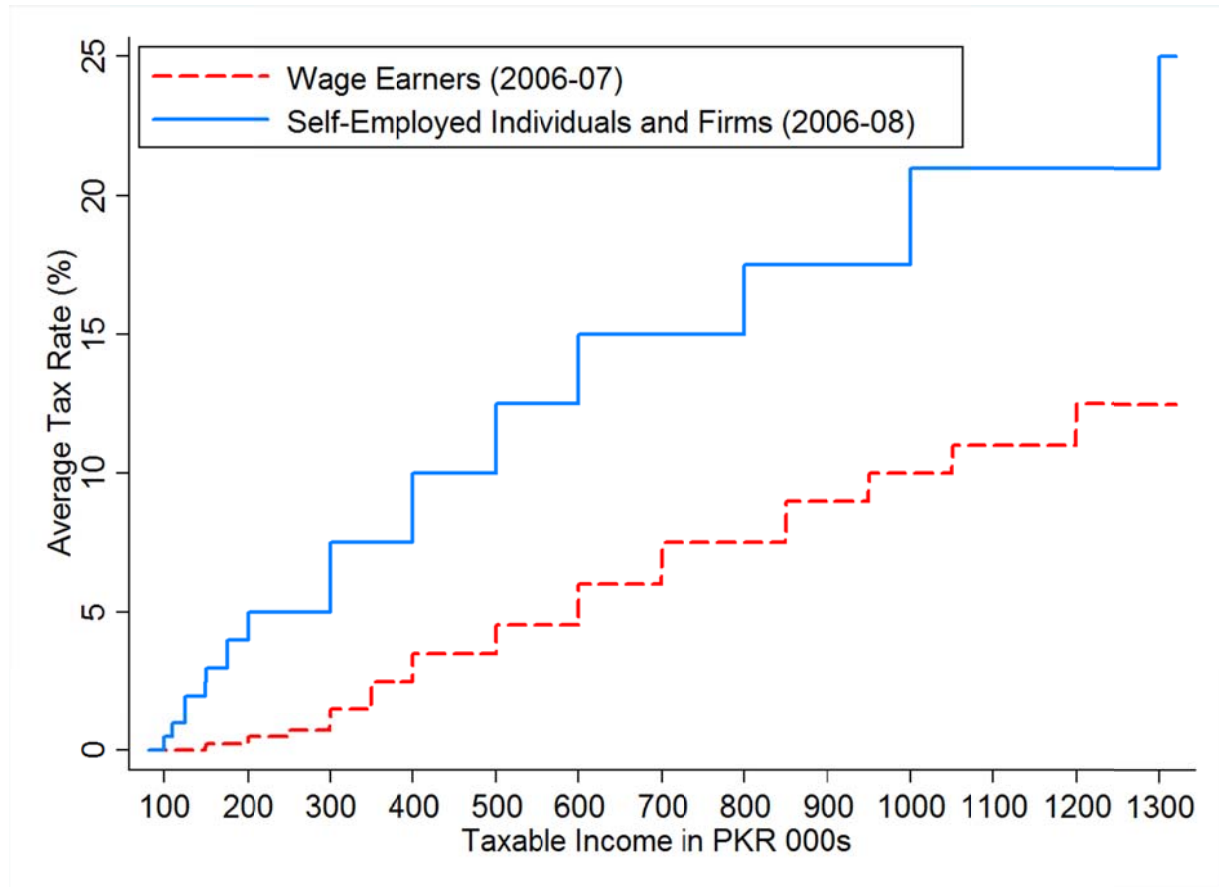
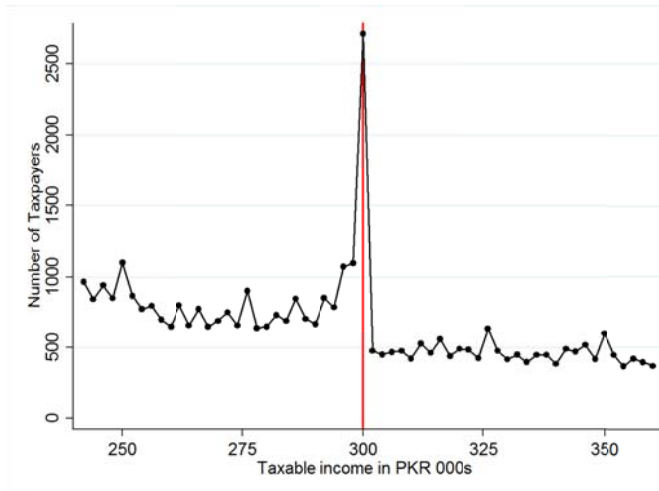
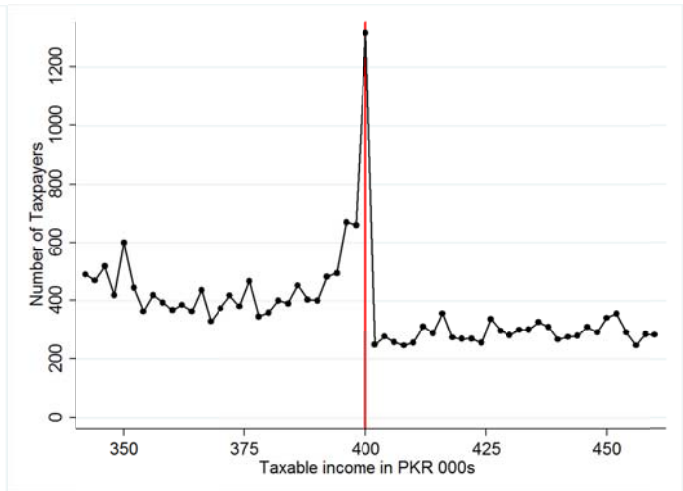
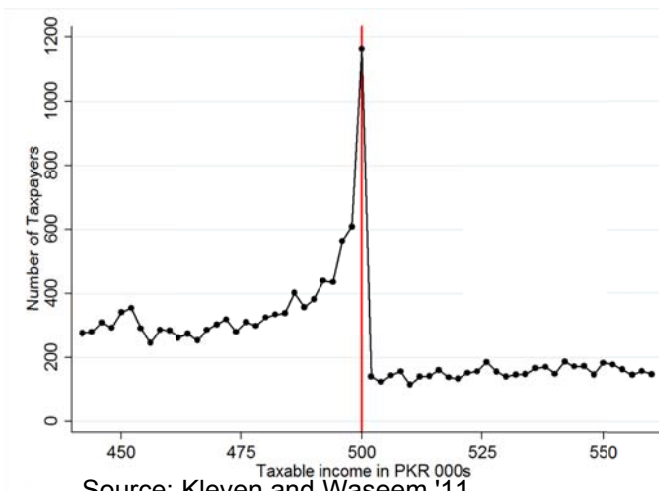
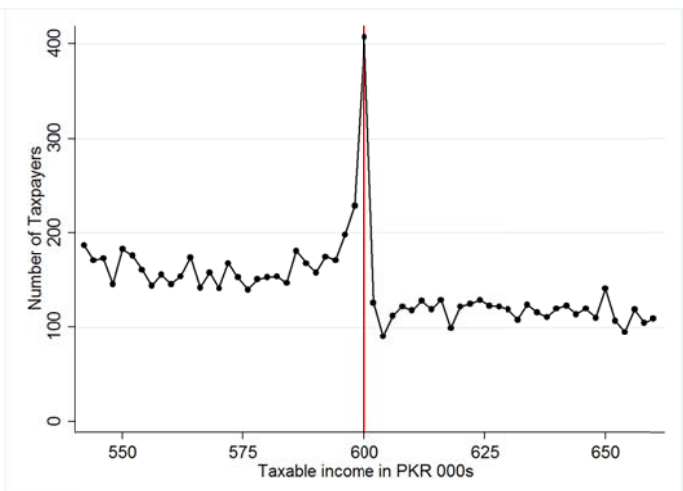


FIGURE 3**Personal Income Tax Schedules in Pakistan**

Notes: the figure shows the statutory (average) tax rate as a function of annual taxable income in the personal income tax schedules for wage earners (red dashed line) and self-employed individuals and unincorporated firms (blue solid line), respectively. Taxable income is shown in thousands of Pakistani Rupees (PKR), and the PKR-USD exchange rate is around 85 as of April 2011. The schedule for the self-employed applies to the full period of this study (2006-08), while the schedule for wage earners applies only to 2006-07 and was changed by a tax reform in 2008. The tax system classifies individuals as either wage earners or self-employed based on whether income from wages or self-employment constitute the larger share of total income, and then taxes total income according to the assigned schedule. The tax schedule for self-employed individuals and firms consists of 14 brackets, while the tax schedule for wage earners consists of 21 brackets (the first 14 of which are shown in the figure). Each bracket cutoff is associated with a notch, and the cutoff itself belong to the tax-favored side of the notch.

FIGURE 5

Density Distribution around Middle Notches:
Self-Employed Individuals and Firms (Sophisticated Filers)

Panel A: Notch at 300k**Panel B: Notch at 400k****Panel C: Notch at 500k****Panel D: Notch at 600k**

Source: Kleven and Waseem '11

Deterrence vs. Control (Median)

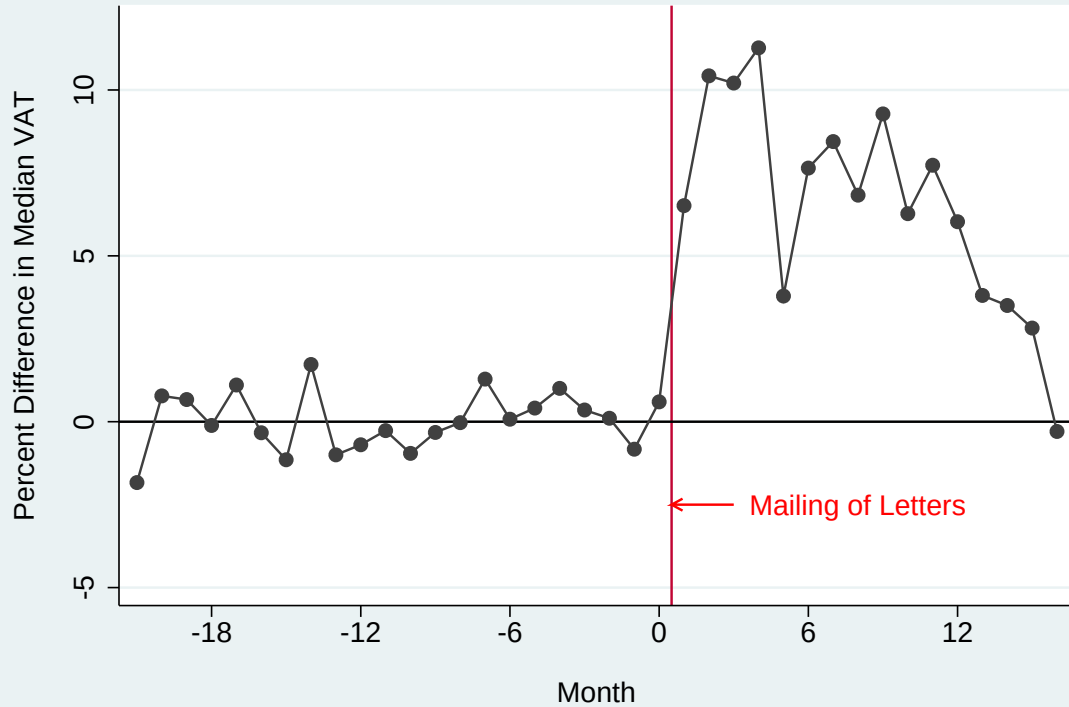


Table 4: Letter Message Experiment: Intent-to-Treat Effects on VAT Payments by Type of Letter

	(1) Mean VAT	(2) Median VAT	(3) Percent VAT > Previous Year	(4) Percent VAT > Predicted	(5) Percent VAT > Zero
Deterrence letter X post	-1,114 (2,804)	1,326*** (316)	1.40*** (0.12)	1.42*** (0.10)	0.53*** (0.09)
Tax morale letter X post	-1,840 (6,082)	262 (666)	0.40 (0.25)	0.30 (0.22)	0.44** (0.20)
Placebo letter X post	835 (6,243)	383 (687)	-0.11 (0.26)	-0.19 (0.23)	-0.14 (0.20)
Constant	268,810*** (1,799)	17,518*** (112)	47.50*** (0.07)	48.27*** (0.07)	67.30*** (0.06)
Month fixed effects	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	No	Yes	Yes	Yes
Treatment Assignment	No	Yes	No	No	No
Number of observations	7,892,076	1,221,828	7,892,076	7,892,076	7,892,076
Number of firms	445,734	445,734	445,734	445,734	445,734
Adjusted R^2	0.40		0.14	0.28	0.47

Notes: Column (1) shows a regression of the mean declared VAT on treatment dummies, winsorized at the top and bottom 0.1% to deal with extreme outliers. Column (2) shows a median regression of average VAT before treatment and in 4 months after each treatment wave. Columns (3)-(5) show linear probability regressions of the probability of an increase in declared VAT compared to the same month in the previous year, the probability of declaring more than predicted and the probability of declaring any positive amount. Observations are monthly in Columns (1) and (3)-(5) for ten months prior to treatment and four months after each wave of mailing. The four months after the second wave excludes firms treated in the first. Coefficients and standard errors of the linear probability regressions are multiplied by 100 to express effects in percent. Monetary amounts are in Chilean pesos, with 500 Chilean pesos approximately equivalent to 1 USD. Standard errors in parentheses, robust and clustered at the firm level for Columns (1) and (3)-(5). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5: Impact of Deterrence Letter on Different Types of Transactions

	(1) Percent Sales > Previous Year	(2) Percent Input Costs > Previous Year	(3) Percent Intermediary Sales > Previous Year	(4) Percent Final Sales > Previous Year
Deterrence letter X post	1.17*** (0.22)	0.16 (0.21)	0.12 (0.19)	1.33*** (0.21)
Constant	55.39*** (0.13)	53.25*** (0.13)	38.37*** (0.12)	45.04*** (0.12)
Month fixed effects	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
Number of observations	2,392,529	2,392,529	2,392,529	2,392,529
Number of firms	133,156	133,156	133,156	133,156
Adjusted R^2	0.25	0.22	0.30	0.32

Notes: Regressions of the probability of the line item (total sales, total input costs, intermediary sales, and final sales) being higher than in the same month the previous year. Sample of firms that have both final and intermediary sales in the year prior to treatment. The four months after the second wave excludes firms treated in the first wave. Coefficients and standard errors are multiplied by 100 to express effects in percent. Robust standard errors in parentheses, clustered at the firm level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6: Interaction of Firm Size and Share of Sales to Final Consumers

Panel A:	Percent VAT > Previous Year				
	(1)	(2)	(3)	(4)	(5)
Deterrence letter X final sales share	1.61*** (0.26)			1.48*** (0.27)	1.43*** (0.26)
Deterrence letter X size category		-0.17*** (0.04)		-0.10*** (0.04)	
Deterrence letter X log employees			-0.45*** (0.11)		-0.29** (0.12)
Deterrence letter	0.68*** (0.16)	2.63*** (0.29)	1.66*** (0.13)	1.49*** (0.35)	0.92*** (0.19)
Constant	47.53*** (0.08)	48.87*** (0.08)	47.50*** (0.08)	48.89*** (0.08)	47.53*** (0.08)
Final sales share X post	Yes	No	No	Yes	Yes
Size measure X post	No	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Month dummies	Yes	Yes	Yes	Yes	Yes
Observations	7,308,631	7,116,590	7,340,994	7,084,823	7,308,631
Number of firms	406,834	396,135	408,636	394,367	406,834
Adjusted R^2	0.14	0.14	0.14	0.14	0.14

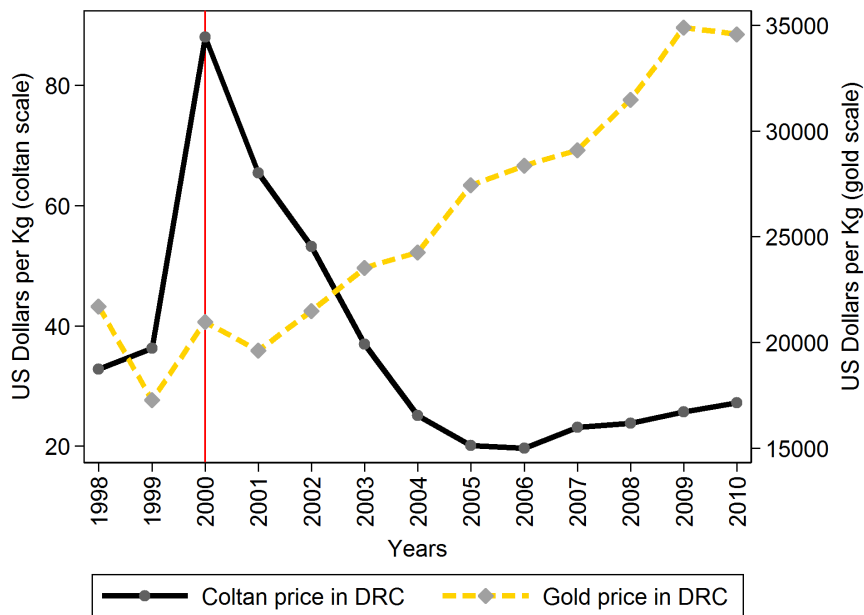
Source: Pomeranz AER'15

Table 7: Spillover Effects on Trading Partners' VAT Payments

	(1) Percent VAT > Previous Year	(2) Percent VAT > Predicted	(3) Percent VAT > Previous Year	(4) Percent VAT > Predicted	(5) Percent VAT > Previous Year	(6) Percent VAT > Predicted
Audit announcement X post	2.41** (1.14)	2.03* (1.11)				
Audit announcement X supplier X post			4.28*** (1.54)	3.92*** (1.50)	4.14*** (1.52)	3.83*** (1.52)
Audit announcement X client X post			-0.26 (1.64)	-0.28 (1.51)	-0.14 (1.67)	-0.28 (1.55)
Supplier X post			-0.64 (1.62)	0.34 (1.59)	-1.11 (1.67)	0.60 (1.64)
Constant	52.07*** (0.95)	49.06*** (0.94)	52.07*** (0.95)	49.06*** (0.94)	52.75*** (0.96)	50.11*** (0.96)
Controls X post	No	No	No	No	Yes	Yes
Controls X audit announcement X post	No	No	No	No	Yes	Yes
Month fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	45,264	45,264	45,264	45,264	44,288	44,288
Number of firms	2,829	2,829	2,829	2,829	2,768	2,768
Adjusted R^2	0.05	0.11	0.05	0.11	0.05	0.10

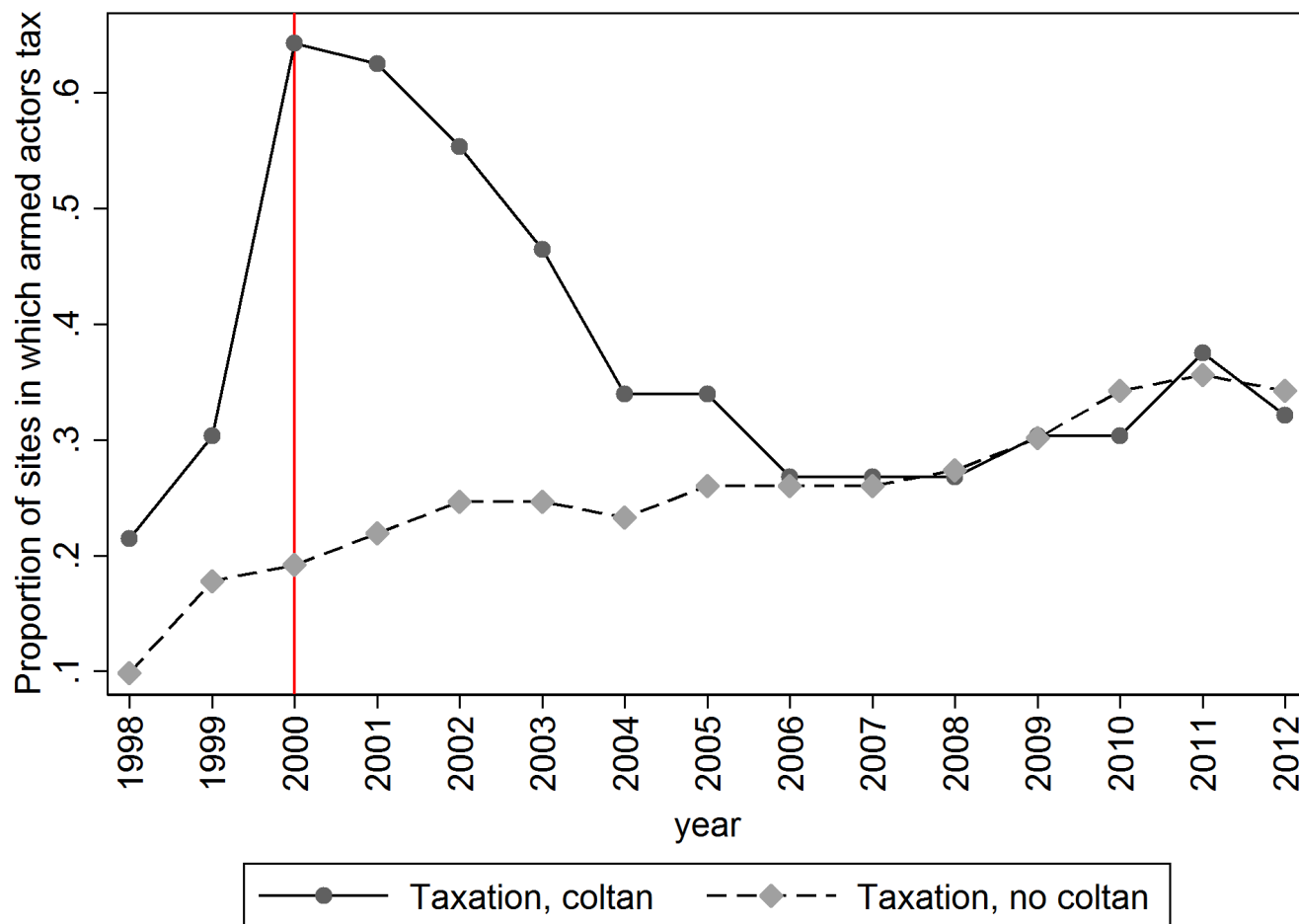
Notes: Regressions for trading partners of audited firms. Column (1), (3) and (5) shows the probability of an increase in declared VAT since the previous year, Column (2), (4) and (6) shows the probability of declaring more than predicted. The controls in Columns (5) and (6) are firm sales, sales/input-ratio, share of sales going to final consumers, and industry categorized as “hard-to-monitor.” Observations are monthly for ten months prior to treatment and six months after the audit announcements were mailed. Coefficients and standard errors are multiplied by 100 to express effects in percent. Robust standard errors in parentheses, clustered at the level of the audited firm. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure 2: Local prices of coltan and gold



Notes: This figure plots the yearly average price of gold and coltan in Sud Kivu, in USD per kilogram, as measured in the survey. The price of coltan is scaled on the left vertical axis and the price of gold in the right axis. Source: United States Geological Survey (2010).

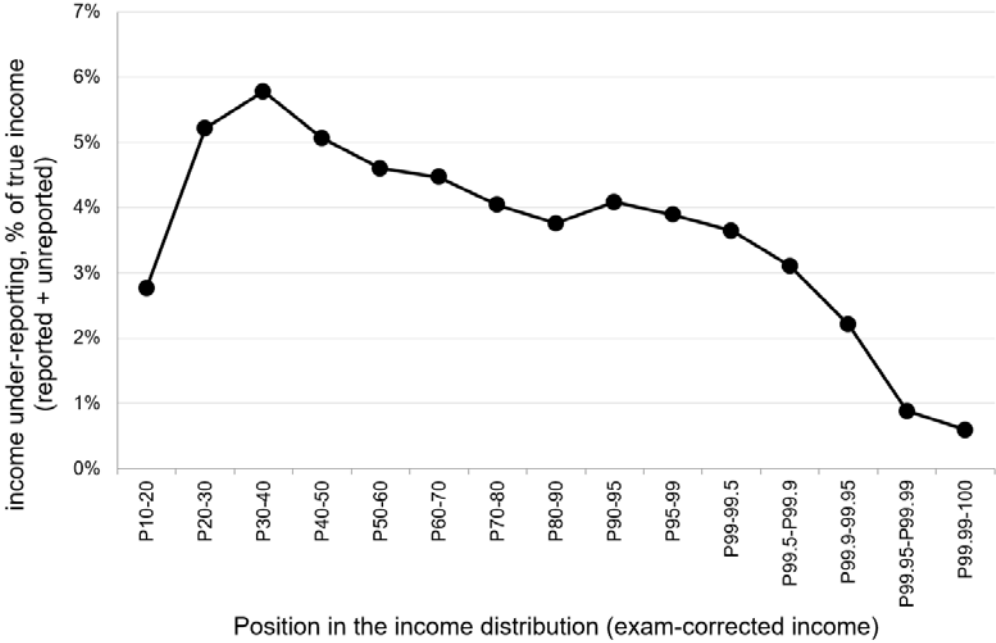
Figure 9: Demand shock for coltan and presence of taxation



Notes: This figure plots the average number of sites where an armed actor collects taxes regularly on years. I take this variable from the site survey, in which the specialists are asked to list past taxes in the site. Taxes by an armed actor are defined in the survey as a mandatory payment on mining activity which is regular (sporadic expropriation is excluded), stable (rates of expropriation are stable) and anticipated (villagers make investment decisions with knowledge of these expropriation rates and that these will be respected). The solid line graphs the average number of mining sites where an armed actor collects regular taxes for mining sites that are endowed with available coltan deposits, and the dashed line reports the same quantity for mining sites that are not endowed with coltan deposits.

FIGURE 1: UNREPORTED INCOME DETECTED IN RANDOM AUDIT DATA BEFORE DCE CORRECTION

(a) Unreported Income (% of True Income)



Source: Guyton, Langetieg, Reck, Risch, Zucman. (2021)

(b) Decomposition by Type of Income

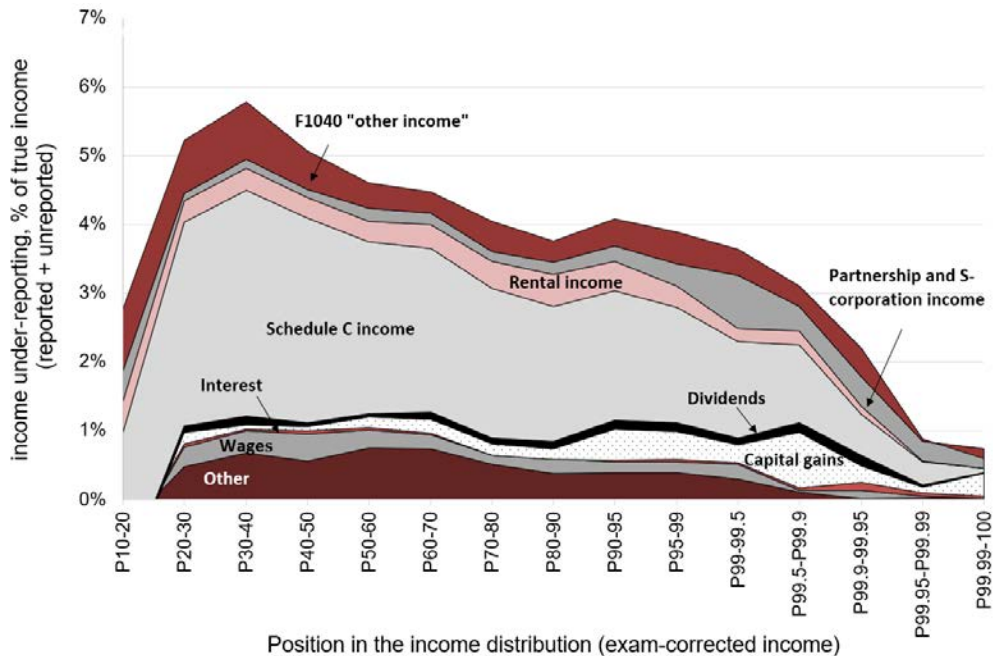
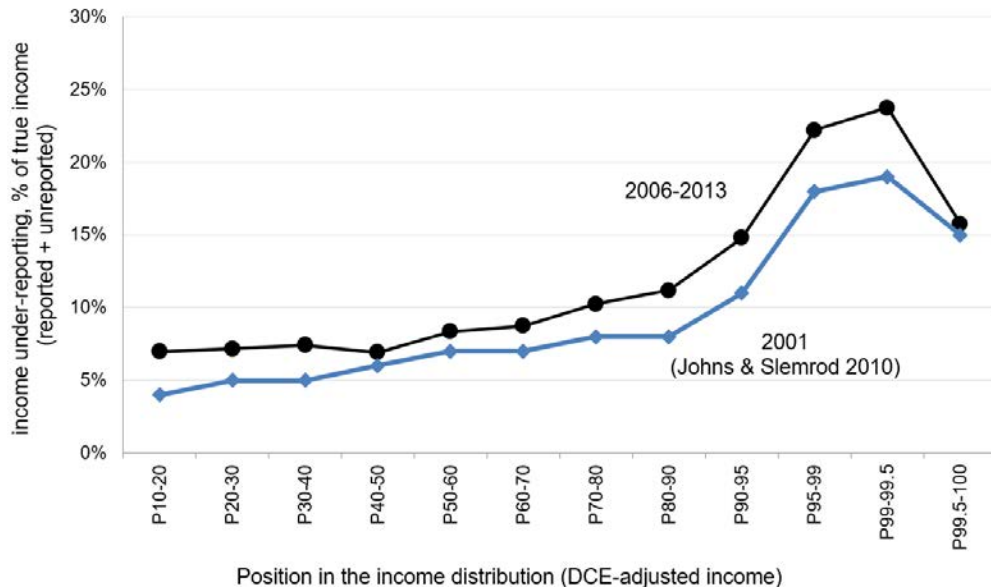


FIGURE 2: UNREPORTED INCOME IN RANDOM AUDIT DATA AFTER DCE CORRECTION

(a) Unreported Income (% of True Income)



(b) Decomposition by Type of Income (2006–2013)

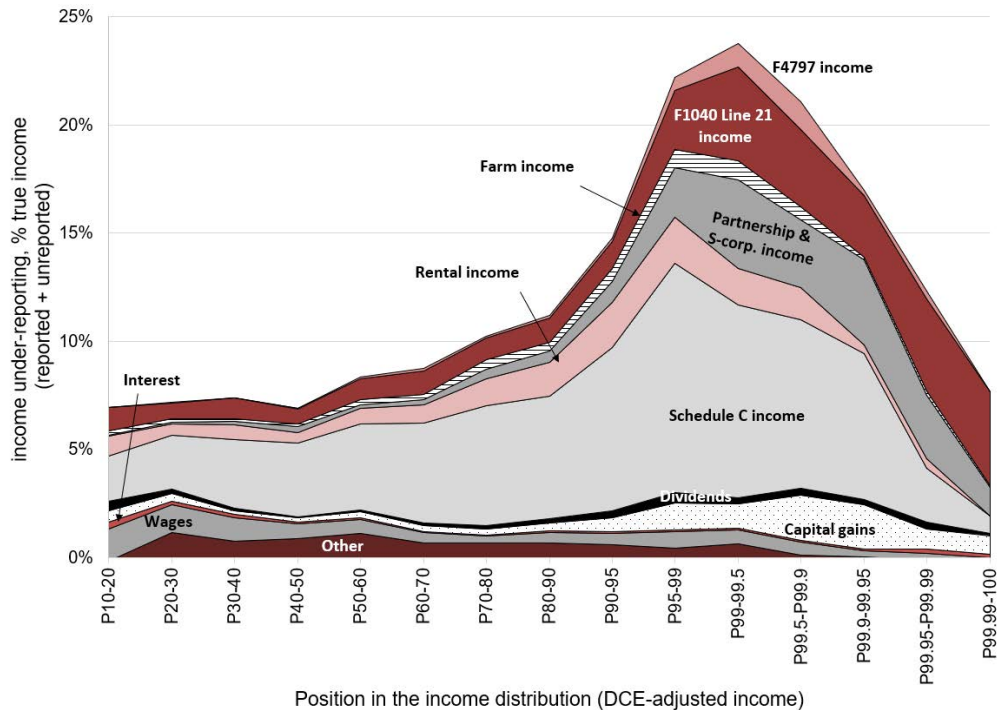


FIGURE 5: ACCOUNTING FOR UNDETECTED OFFSHORE FINANCIAL INCOME

(a) Unreported Income (% True Income)

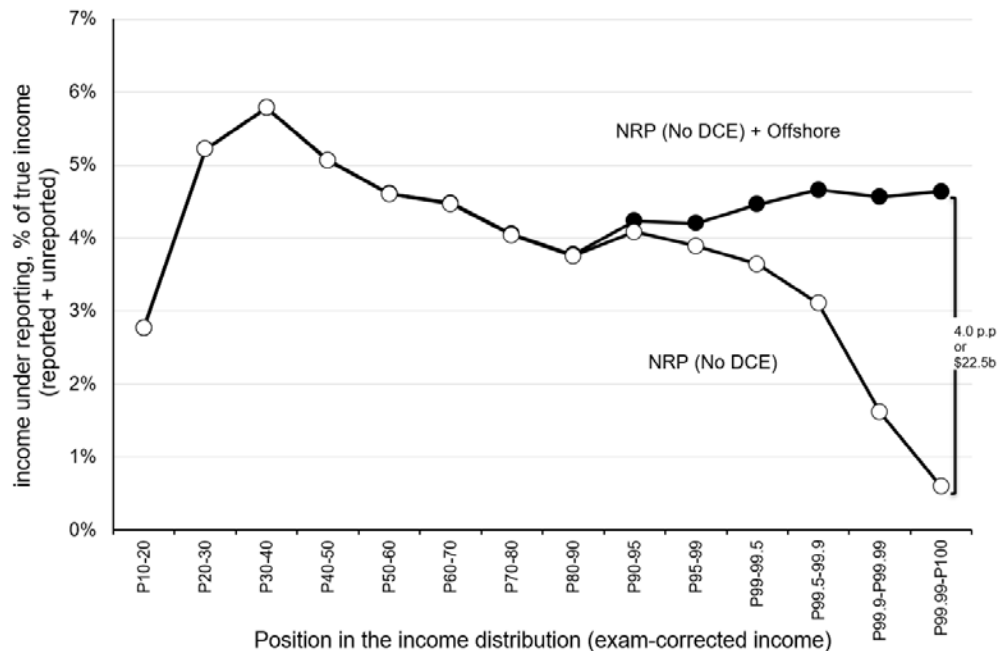


FIGURE 8: THE DISTRIBUTION OF NONCOMPLIANCE IN THE U.S.: BENCHMARK ESTIMATES

(a) Unreported Income (% True Income)

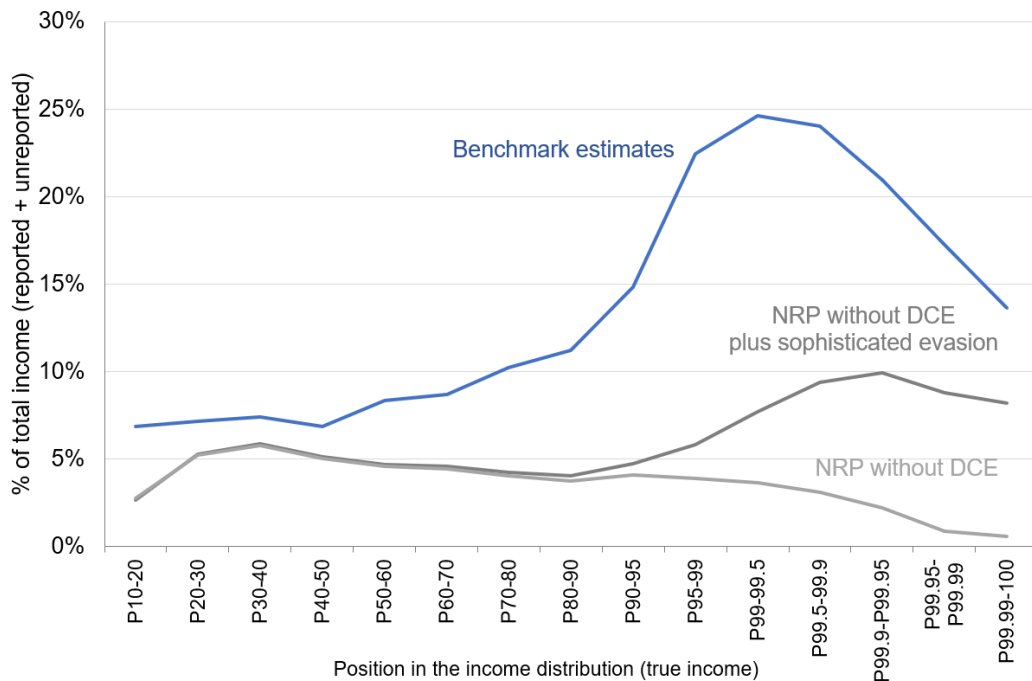


TABLE IV
EFFECTS OF THE CAMPAIGN ON PARTICIPATION

	Town hall meeting attendance (1)	Evaluation form submission (2)	Town hall or evaluation (3)	Town hall and evaluation (4)	Index (town hall & evaluation) (5)	Cost of participation (transport) (6)	Cost of participation (transport & opp.) (7)
Campaign	0.045** (0.020)	0.024** (0.012)	0.050*** (0.016)	0.027*** (0.009)	0.145*** (0.043)	0.050*** (0.017)	0.071*** (0.021)
Covariates	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stratum FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.068	0.055	0.071	0.039	0.073	0.054	0.058
Observations	1,934	2,913	2,913	2,913	2,913	2,913	2,913
Clusters	252	356	356	356	356	356	356
Control mean	0.17	0.099	0.16	0.035	-0.077	0.11	0.16
Dep. var.	Binary	Binary	Binary	Binary	Std. index	% Daily inc.	% Daily inc.
Rand. inf. p	.023	.058	.0048	.0048	.0022	.0072	.0022
Bonferroni p	.033	.067	N/A	N/A	N/A	N/A	N/A

Notes. *Town hall meeting attendance* is an indicator variable that equals 1 if an individual attended a town hall meeting. *Evaluation form submission* is an indicator variable that equals 1 if an individual submitted an evaluation. *Town hall or evaluation* indicates that an individual either attended a town hall meeting or submitted an evaluation. *Town hall and evaluation* indicates that an individual attended a town hall meeting and submitted an evaluation. *Index (town hall & evaluation)* is the standardized sum of *Town hall meeting attendance* and *Evaluation form submission*. *Cost of participation (transport)* and *Cost of participation (transport & opp.)* are the estimated transport costs, or transport plus opportunity costs (respectively), incurred by individuals to attend a town hall and/or submit an evaluation as a share of average daily household income. See [Section IV.B](#) for details on all variables. Covariates include gender, age, age squared, wealth, a business owner dummy, and the quality of public lighting in the neighborhood, as discussed in [Section IV.D](#). [Online Appendix](#) Section A4 shows other covariate regimes. The last two rows show p -values from randomization inference (with 5,000 iterations) and with Bonferroni adjustments, respectively. Data: endline survey merged with town hall attendance and submitted evaluation records as well as cost estimates from enumerator motorcycle taxi receipts. The sample size is smaller in column (1) because the government discontinued town halls after April 1 due to insecurity in Kananga. Endline respondents sampled after this date never had a chance to attend a meeting.

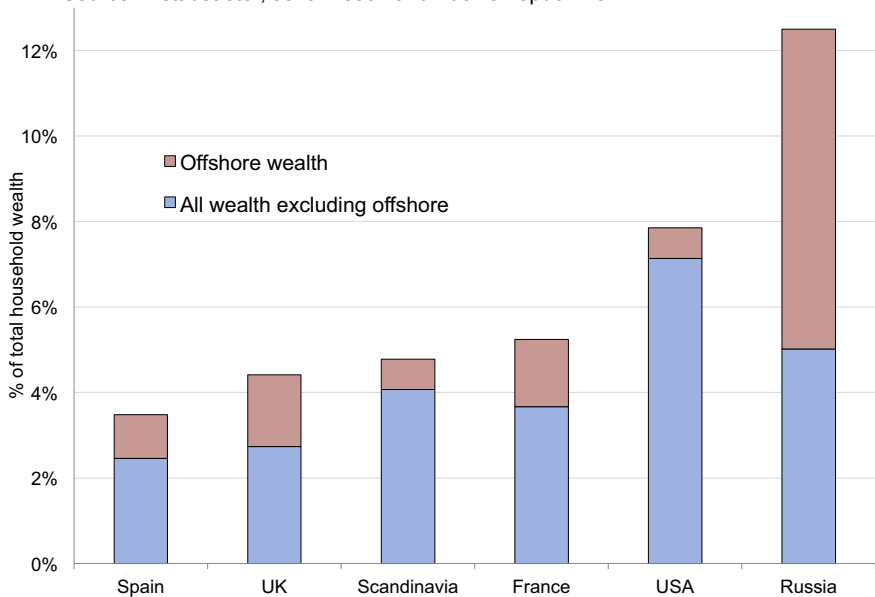
Source: Weigel QJE'20

TABLE III
EFFECTS OF THE CAMPAIGN ON COLLECTOR VISITS, TAXPAYER REGISTRATION,
PROPERTY TAX COMPLIANCE, AND REVENUES

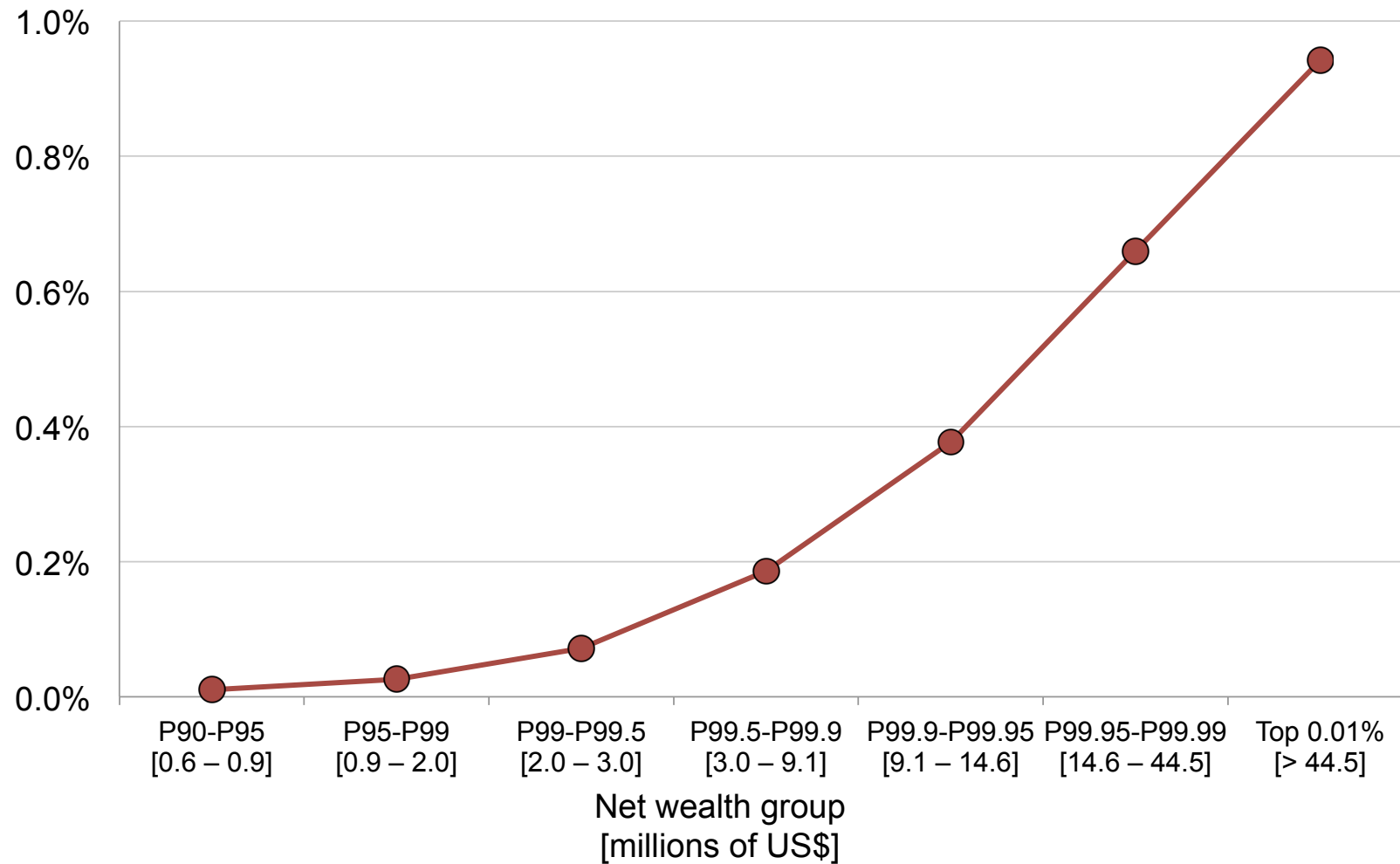
Dependent variable:	Visited by collector	Registered as taxpayer	Property tax compliance		Tax revenue per person
Unit:	Household	Household	Household	Neighborhood	Neighborhood
	(1)	(2)	(3)	(4)	(5)
Campaign	0.815*** (0.013)	0.788*** (0.009)	0.103*** (0.007)	0.115*** (0.009)	367.295*** (62.518)
Stratum FE	Yes	Yes	Yes	Yes	Yes
R^2	0.640	0.577	0.054	0.396	0.173
Observations	27,443	27,443	27,443	356	356
Clusters	356	356	356	N/A	N/A
Control mean	0.0499	0.0000	0.0006	0.0005	1.5683

Notes. *Visited by collector* is an indicator for households reporting at least one visit by tax collectors in 2016. *Registered as taxpayer* is an indicator for households that were registered by collectors and assigned a unique tax ID. *Property tax compliance* is an indicator for households that paid the property tax in 2016. *Tax revenue per person* is the total property tax receipts per neighborhood divided by the estimated number of nonexempt property owners. See [Section IV.B](#) for details on these variables. The unit of analysis in the first three columns is the individual household, and the data include the universe of potential taxpayers (excluding the commune of Nganza). The unit in the last two columns is the neighborhood, which reduces potential for measurement error in merging administrative data with household surveys to estimate tax compliance and revenues. Tax revenue is measured in Congolese francs. Data: midline survey merged with government tax database.

Top .01% wealth share and composition from 2000-2009
Source: Alstadsaeter, Johannesen and Zucman JpubE'18

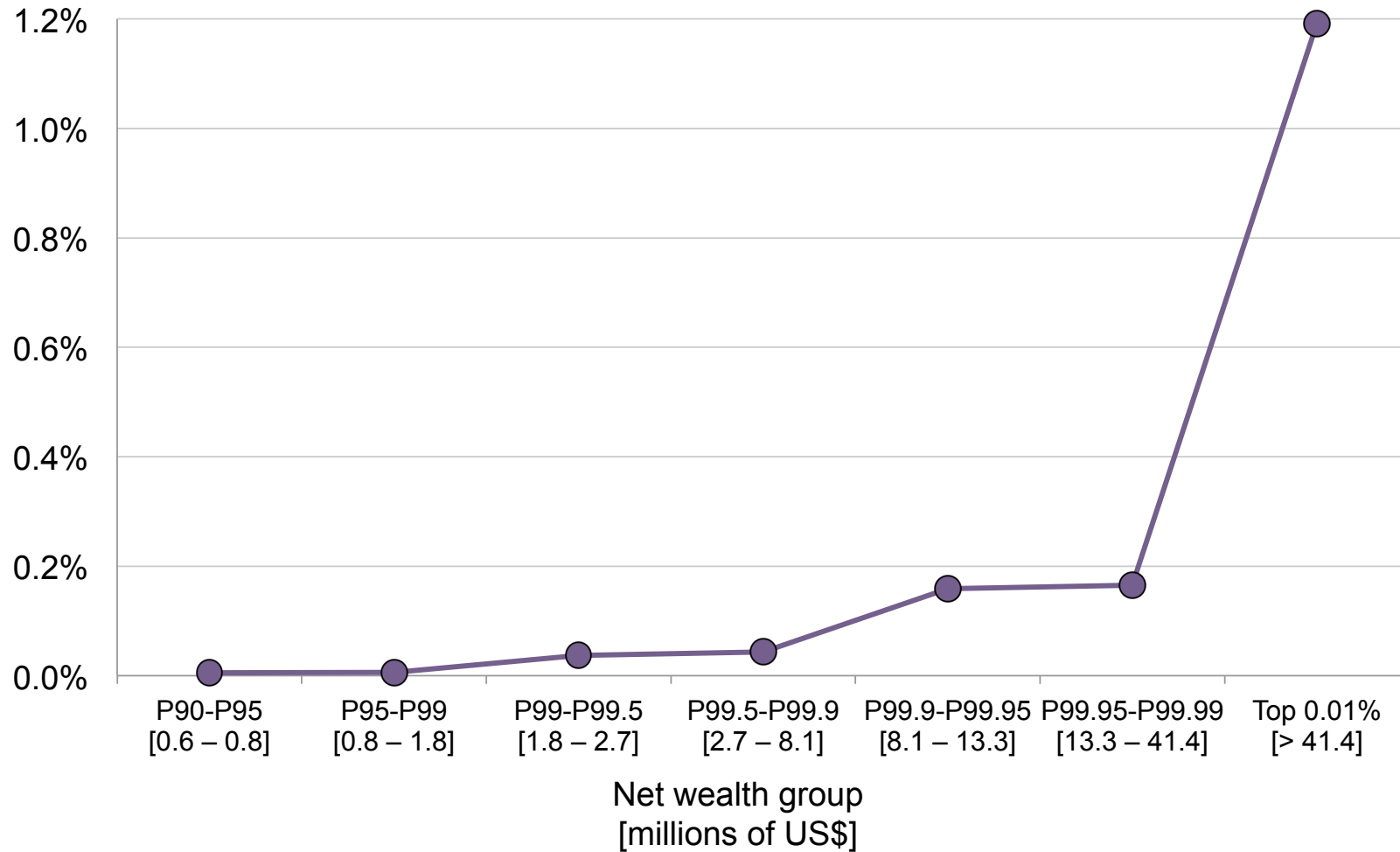


Probability to own an unreported HSBC account, by wealth group
(HSBC leak)



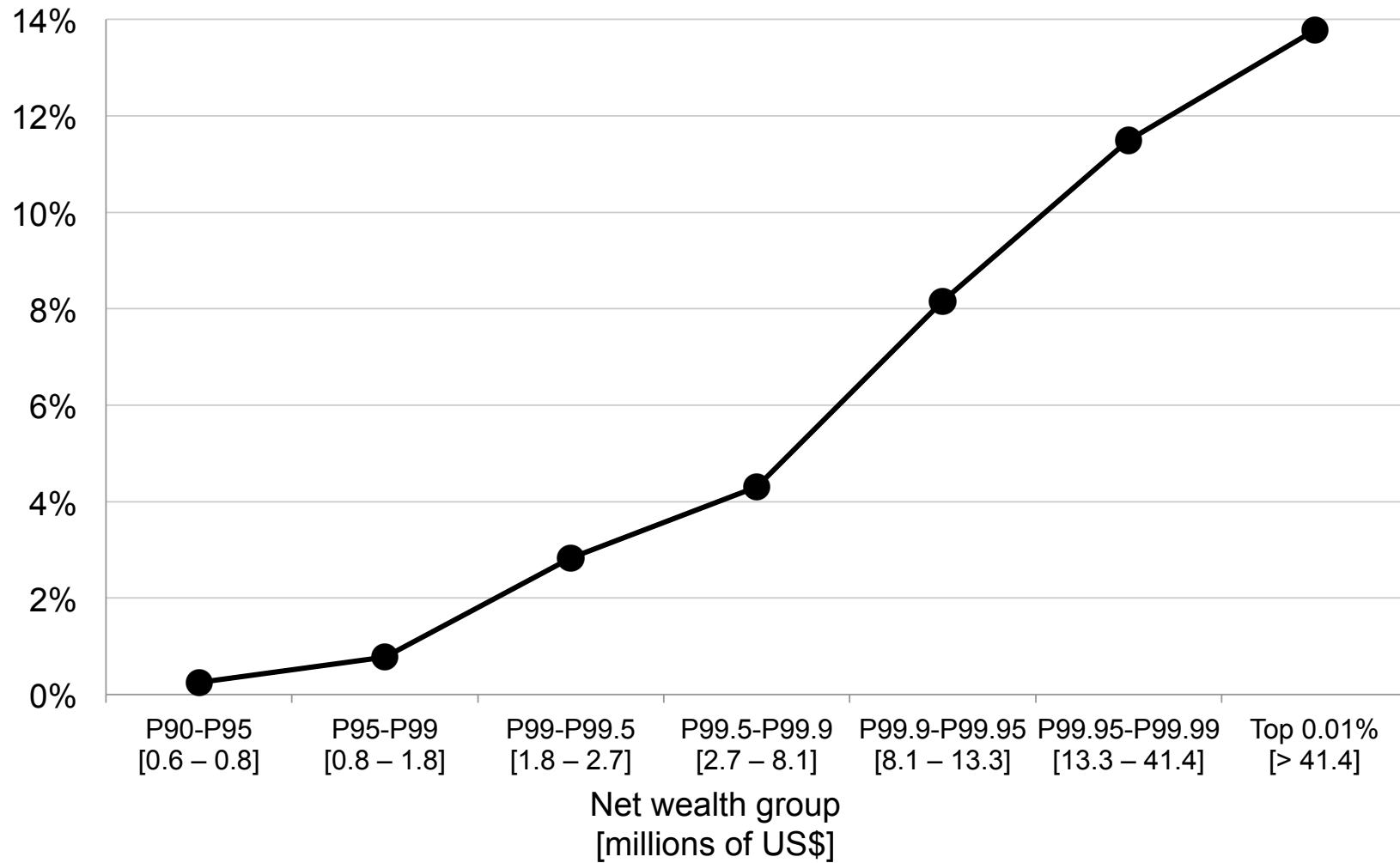
Source: Alstadsæter (2019)

Probability to appear in the "Panama Papers", by wealth group
(Shareholders of shell companies created by Mossack Fonseca)



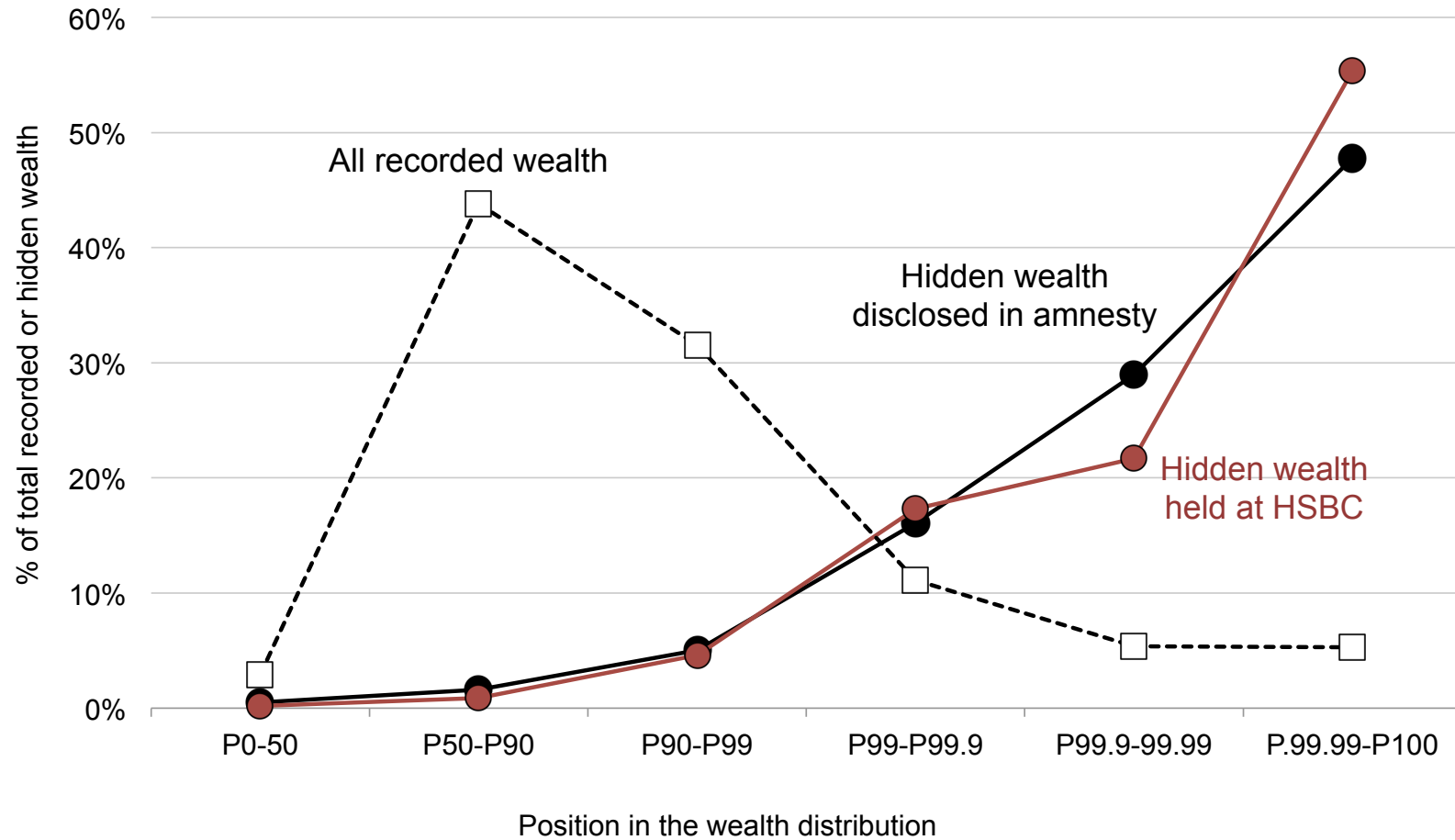
Source: Alstadsæter (2019)

Probability to voluntarily disclose hidden wealth, by wealth group
(Swedish and Norwegian tax amnesties)



Source: Alstadsæter (2019)

Distribution of wealth: recorded vs. hidden



Source: Alstadsæter (2019)

Global corporate tax rates (%)

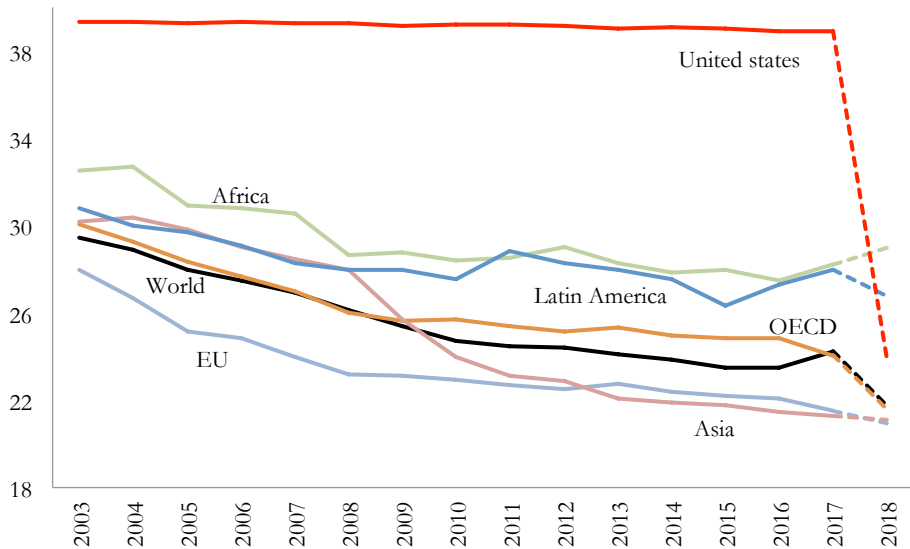


Figure 1

The Share of Profits Made Abroad in US Corporate Profits



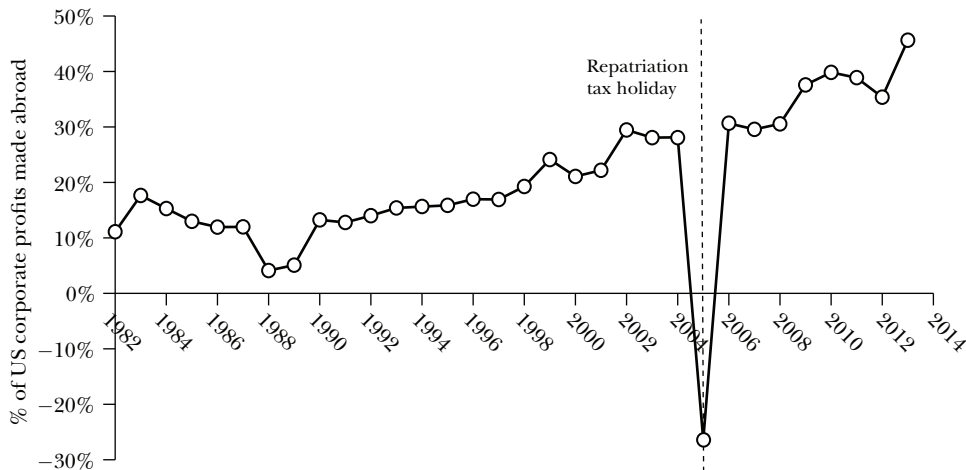
Source: Author's computations using National Income and Product Accounts data.

Notes: The figure reports decennial averages (that is, 1970-79 is the average for years 1970, 1971, through 1979). Foreign profits include dividends on foreign portfolio equities and income on US direct investment abroad (distributed and retained). Profits are net of interest payments, gross of US but net of foreign corporate income taxes.

Source: Zucman JEP 2014

Figure 4

US Corporate Profits Retained in Tax Havens



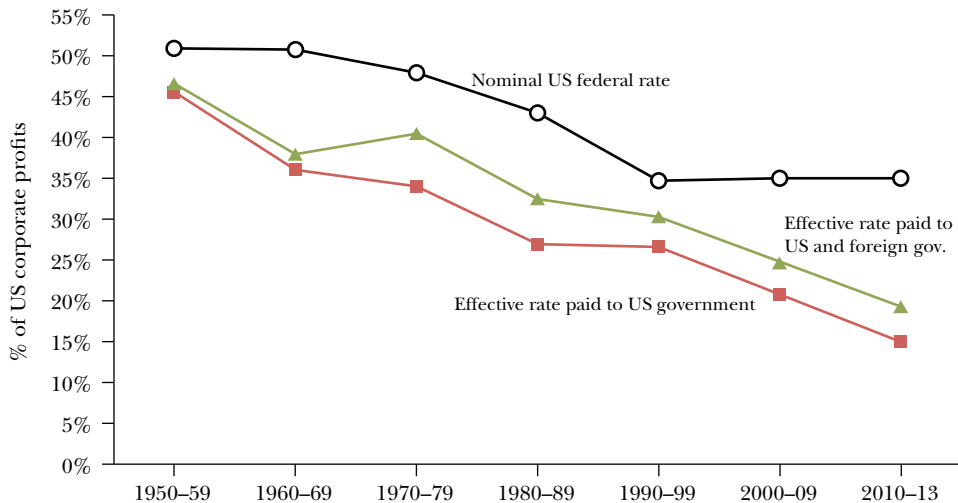
Source: Author's computations using balance of payments data. See online Appendix.

Notes: This figure charts the ratio of US direct investment income reinvested in the main tax havens (Netherlands, Ireland, Switzerland, Singapore, Luxembourg, Bermuda, and other Caribbean havens) to total US direct investment income abroad. The negative amount of reinvested earnings in 2005 means that, out of 2005 production, US firms repatriated more than 100 percent of the 2005 profits of their foreign affiliates (that is, the 2005 data point excludes repatriations from profits made prior to 2005).

Source: Zucman JEP 2014

Figure 5

Nominal and Effective Corporate Tax Rates on US Corporate Profits

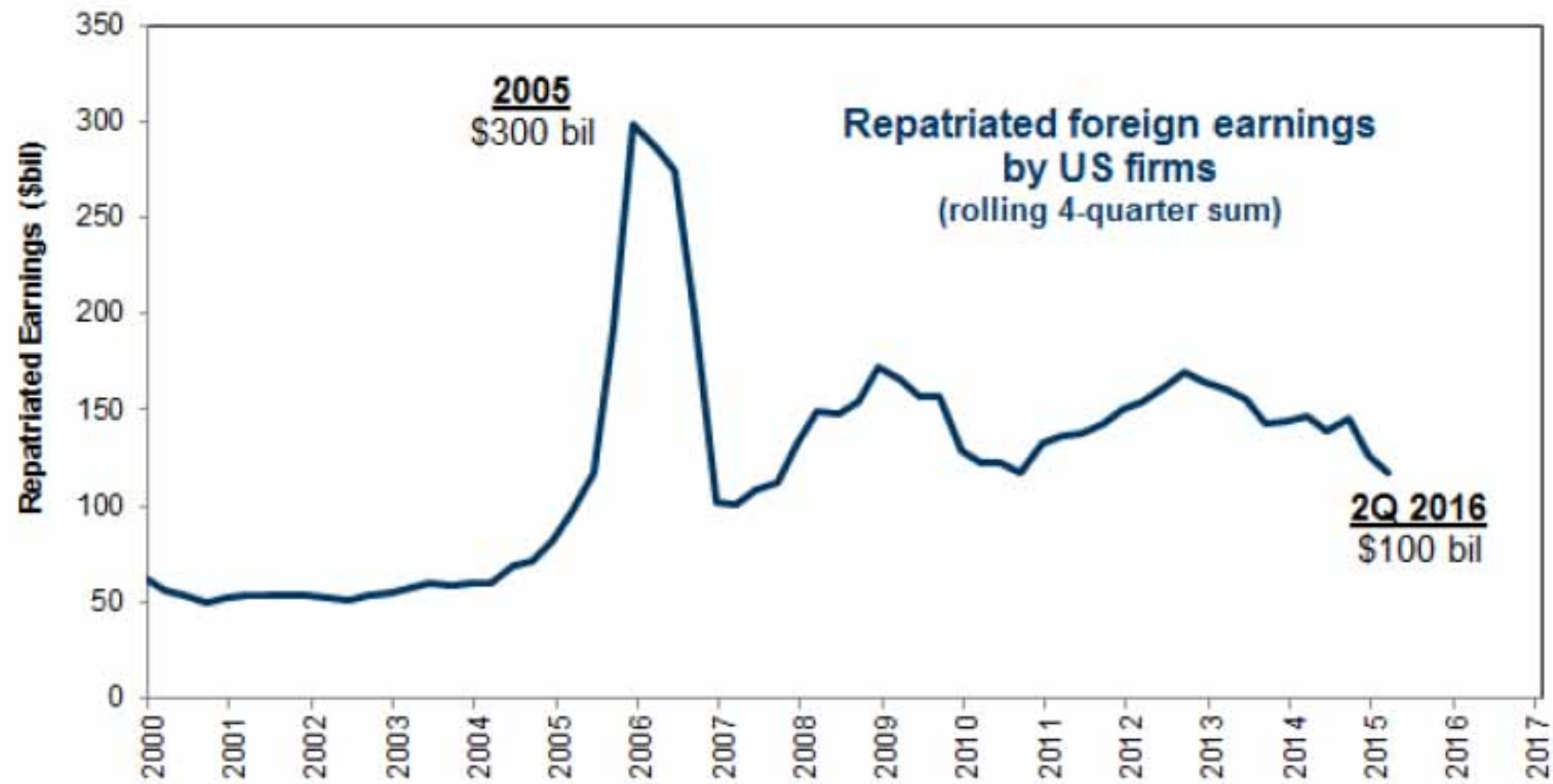


Source: Author's computations using National Income and Product Accounts data. See online Appendix.

Notes: The figure reports decennial averages (for example, 1970-79 is the average for years 1970, 1971 through 1979.) In 2013, over \$100 of corporate profits earned by US residents, on average \$16 is paid in corporate taxes to the US government (federal and states) and \$4 to foreign governments.

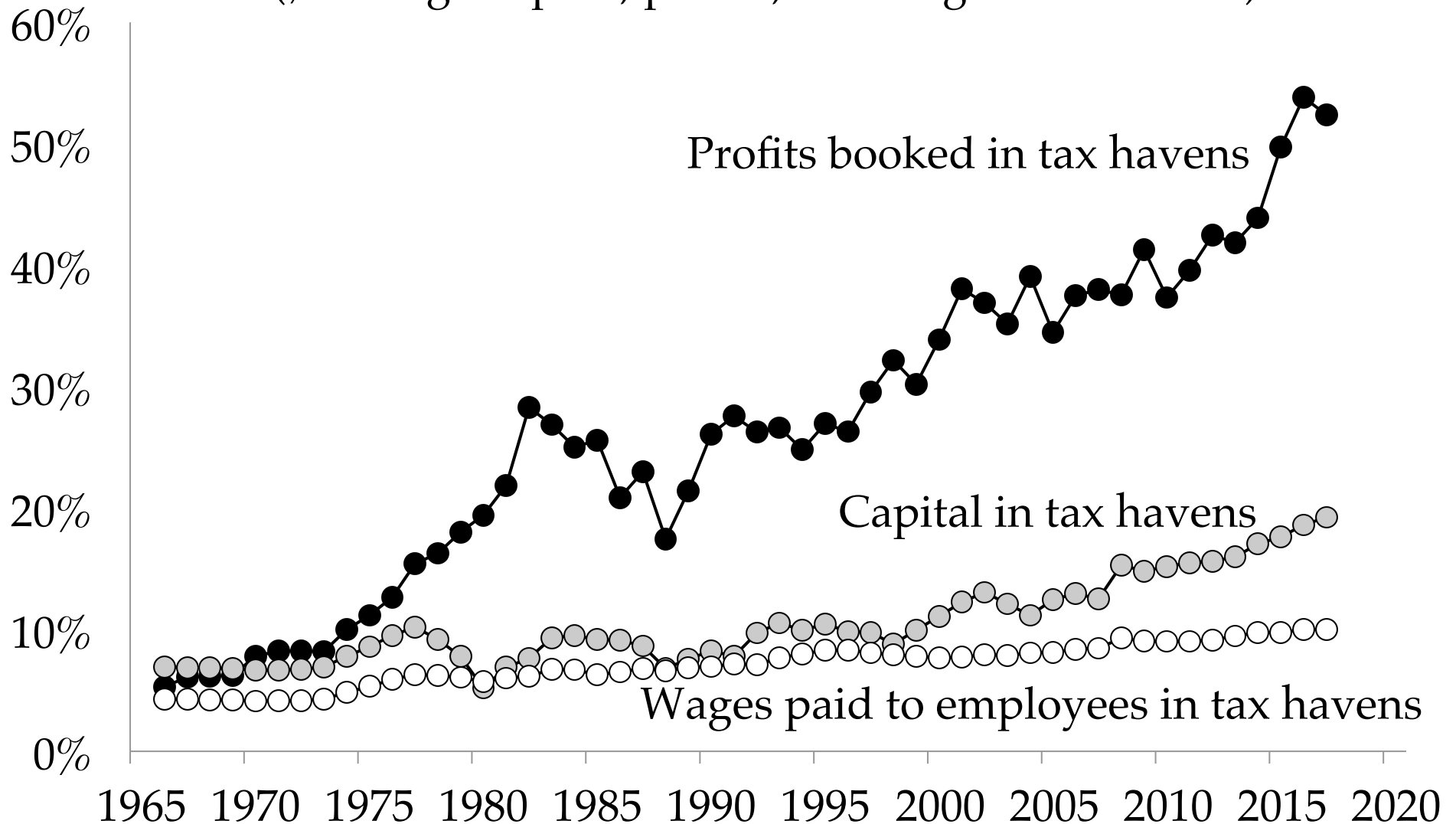
Source: Zucman JEP 2014.

Exhibit 5: Earnings repatriated by all US firms
as of 2Q 2016



Source: Bureau of Economic Analysis, Goldman Sachs Global Investment Research

Capital, profits & wages of US firms in tax havens (% foreign capital, profits, and wages of US firms)



Profits booked by US firms in tax havens (% of foreign profits of US firms)

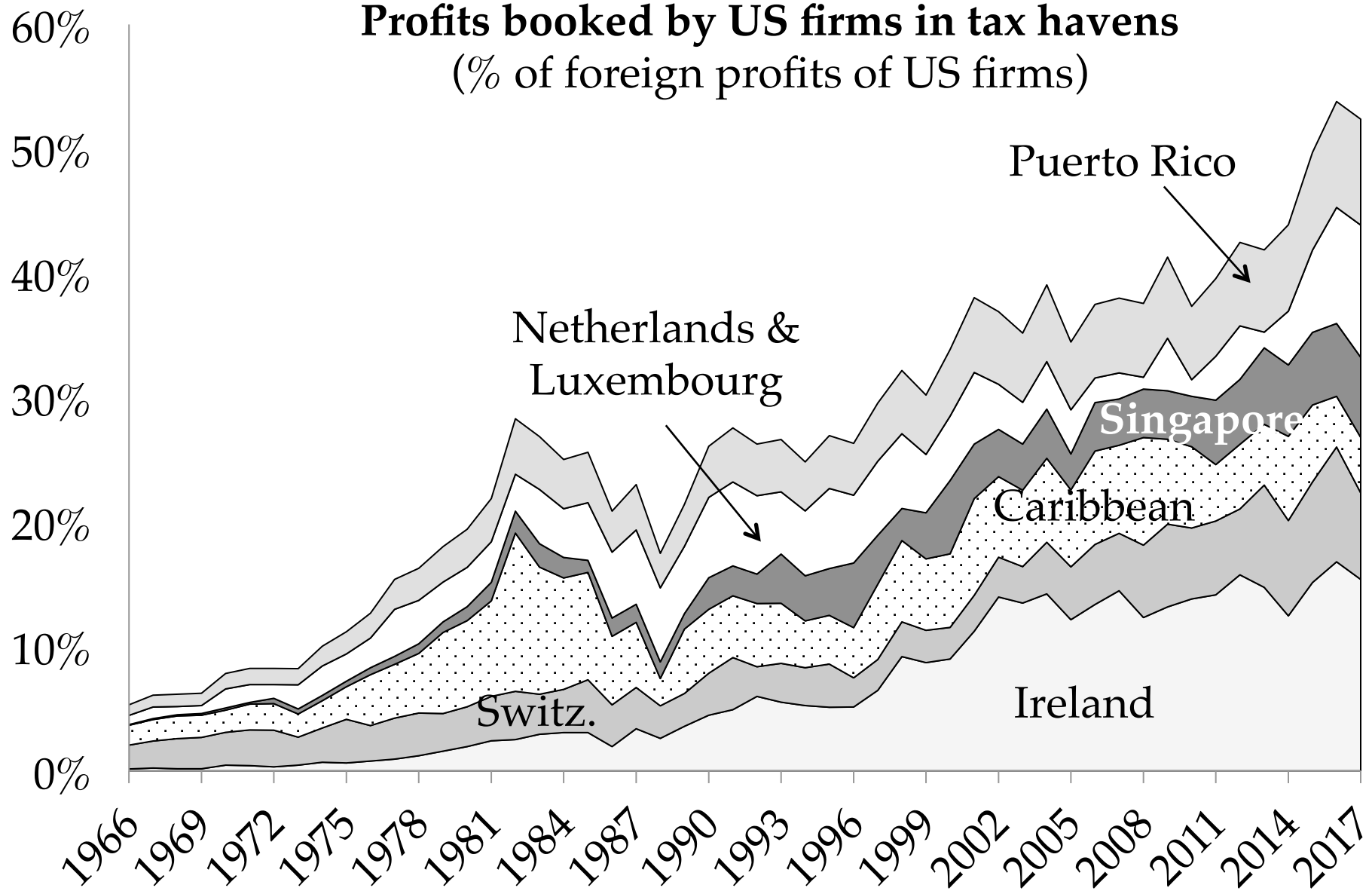
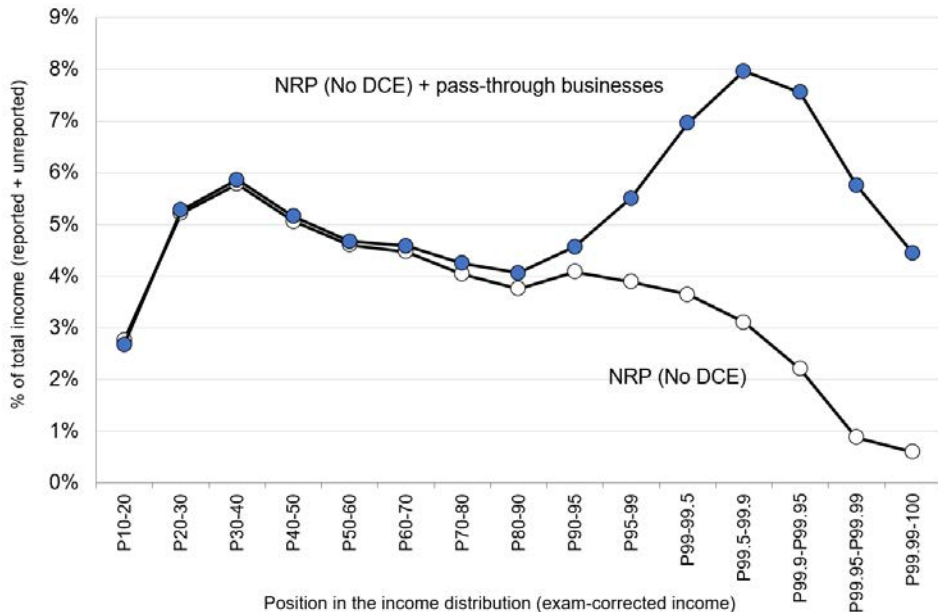
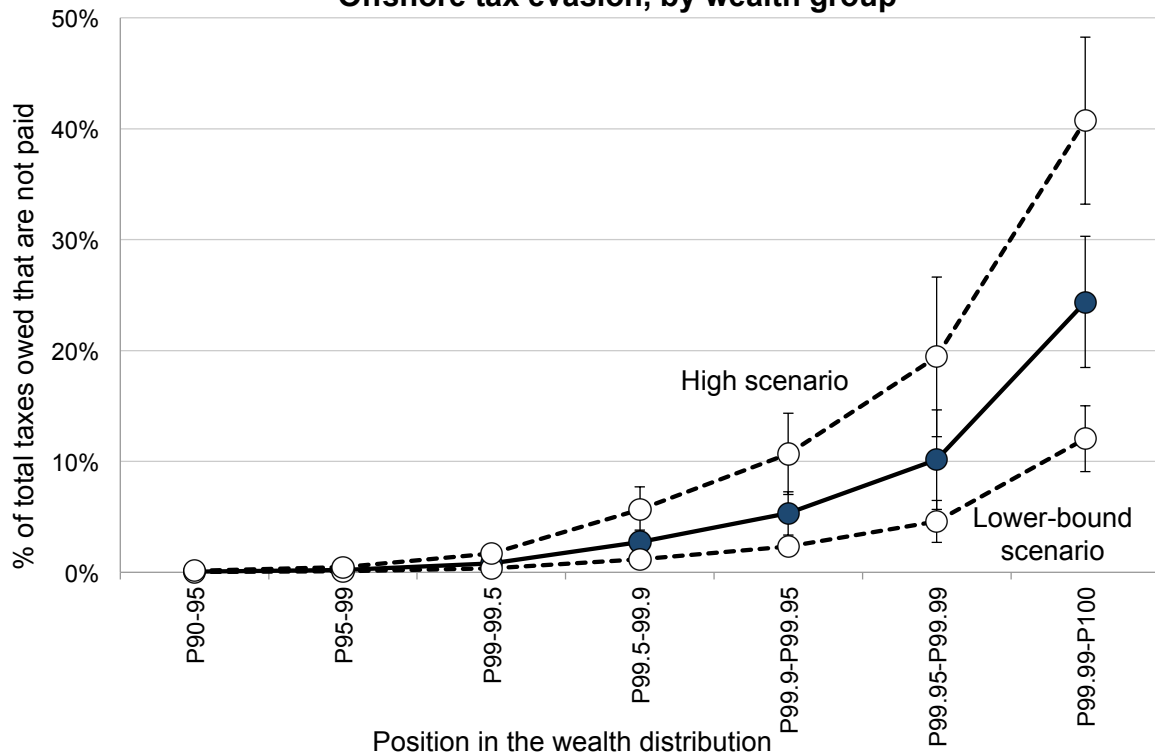


FIGURE 7: ACCOUNTING FOR PASS-THROUGH BUSINESS EVASION

(a) Unreported Income (% True Income)



Offshore tax evasion, by wealth group



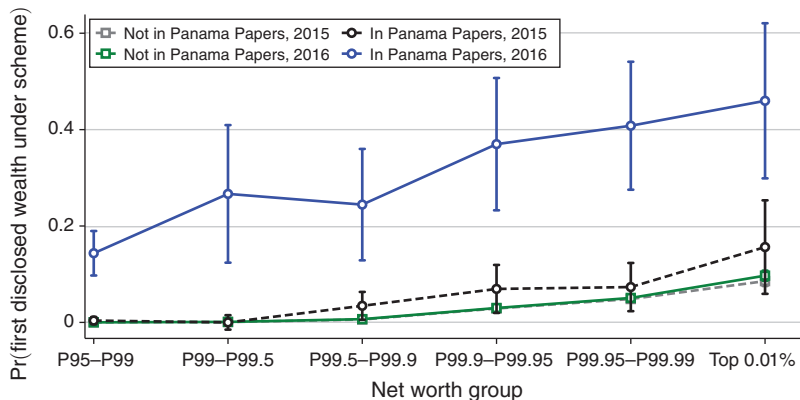
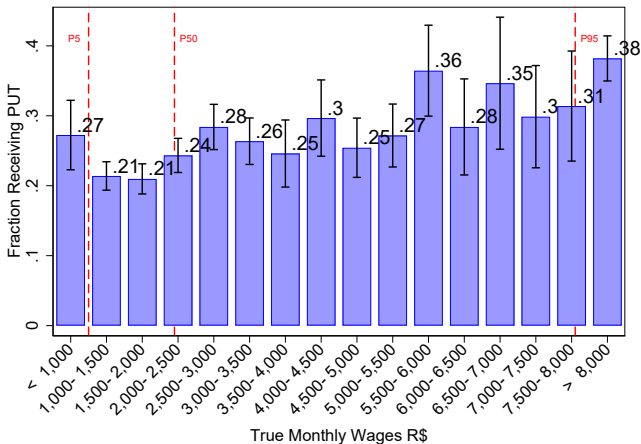


FIGURE 3. THE PANAMA PAPERS LEAK RAISED DISCLOSURES OF HIDDEN WEALTH

Notes: This figure presents the effect of the Panama Papers leak on disclosing wealth under Colombia's voluntary disclosure scheme. The markers plot raw means of the probability of first disclosing hidden wealth in 2015 (before the leak) and 2016 (after the leak) for taxpayers in the Panama Papers (round marker) and taxpayers not in the Panama Papers (square marker) by wealth group. The vertical lines represent the 95 percent confidence intervals. The Panama Papers leak in 2016 raised disclosures for those named in the leak. The sample is the universe of individuals filing income or wealth tax returns in 2015, 2016, or 2017, that is, 2,421,936 individuals—of which 1,167 appear named in the Panama Papers. Wealth groups are generated every year based on reported wealth including disclosures. The pre-leak differences in disclosures between taxpayers named versus not named in the Panama Papers are statistically significant (but economically negligible) for groups P99-P99.5 and P99.5-P99.9; they are not statistically significant for all other groups.

Evidence from our Survey - Distribution

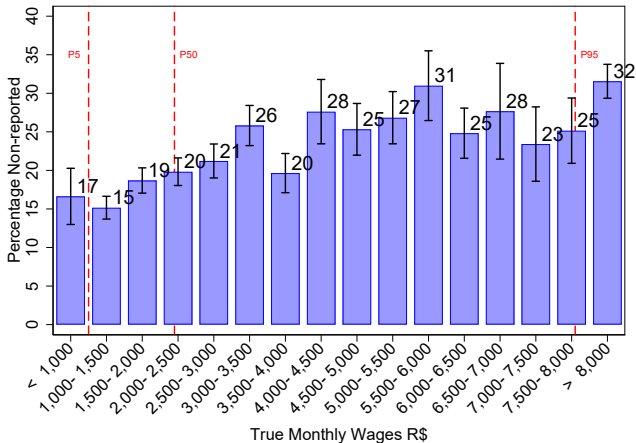
Fraction receiving PUT by wage group
(Only formal workers)



The proportion of non-reported wage increases as wage increases

Evidence from our Survey - Distribution

% Paid under the table by wage group
(Only PUT receivers)



The proportion of non-reported wage increases as wage increases

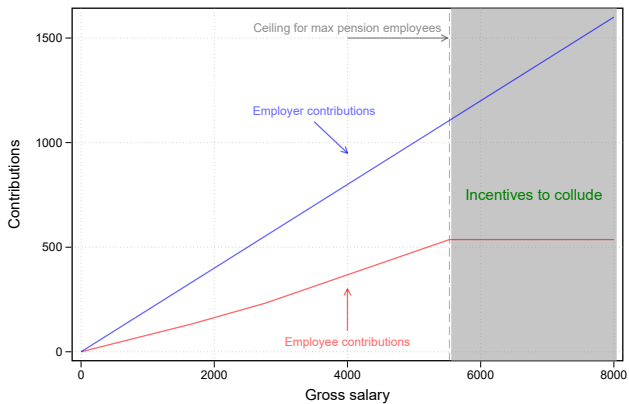
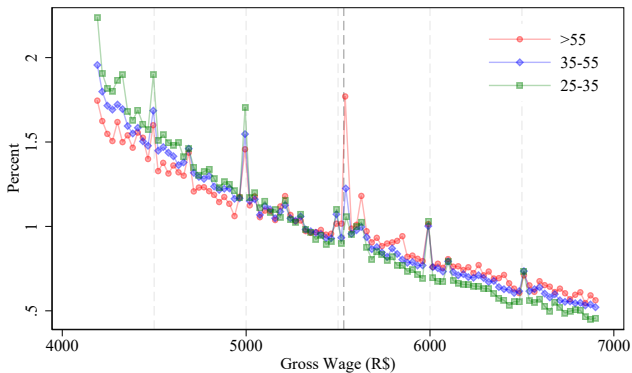


Figure: Ceiling and Incentives

[See Details](#)

Figure: Wage Distribution in 2017

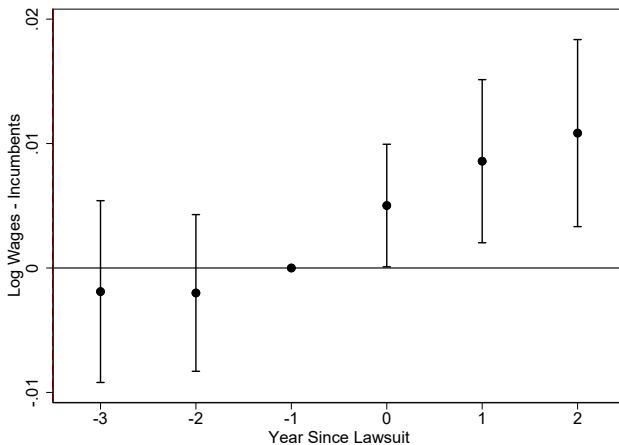


Old = 153793
Middle Age = 1106746
Young = 836581
Bins = 100
Ceiling: R\$ 5,531

Workers close to retirement have higher incentives to report their true wages, but up to the ceiling.

Results

Average Log Wages - Incumbent Workers



This plot shows that reported wages of incumbent workers increase by 1% after the lawsuit relative to the control group.