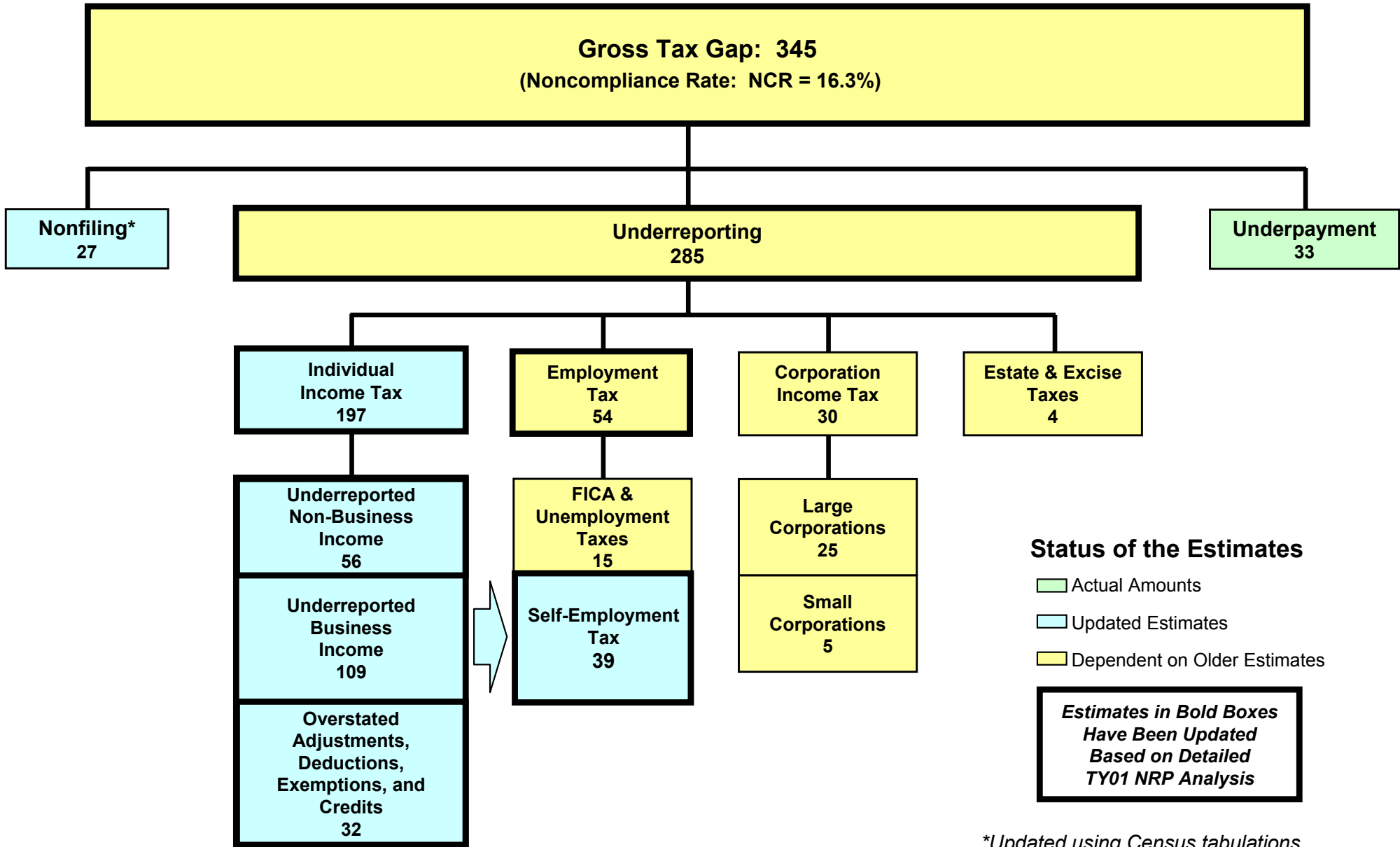


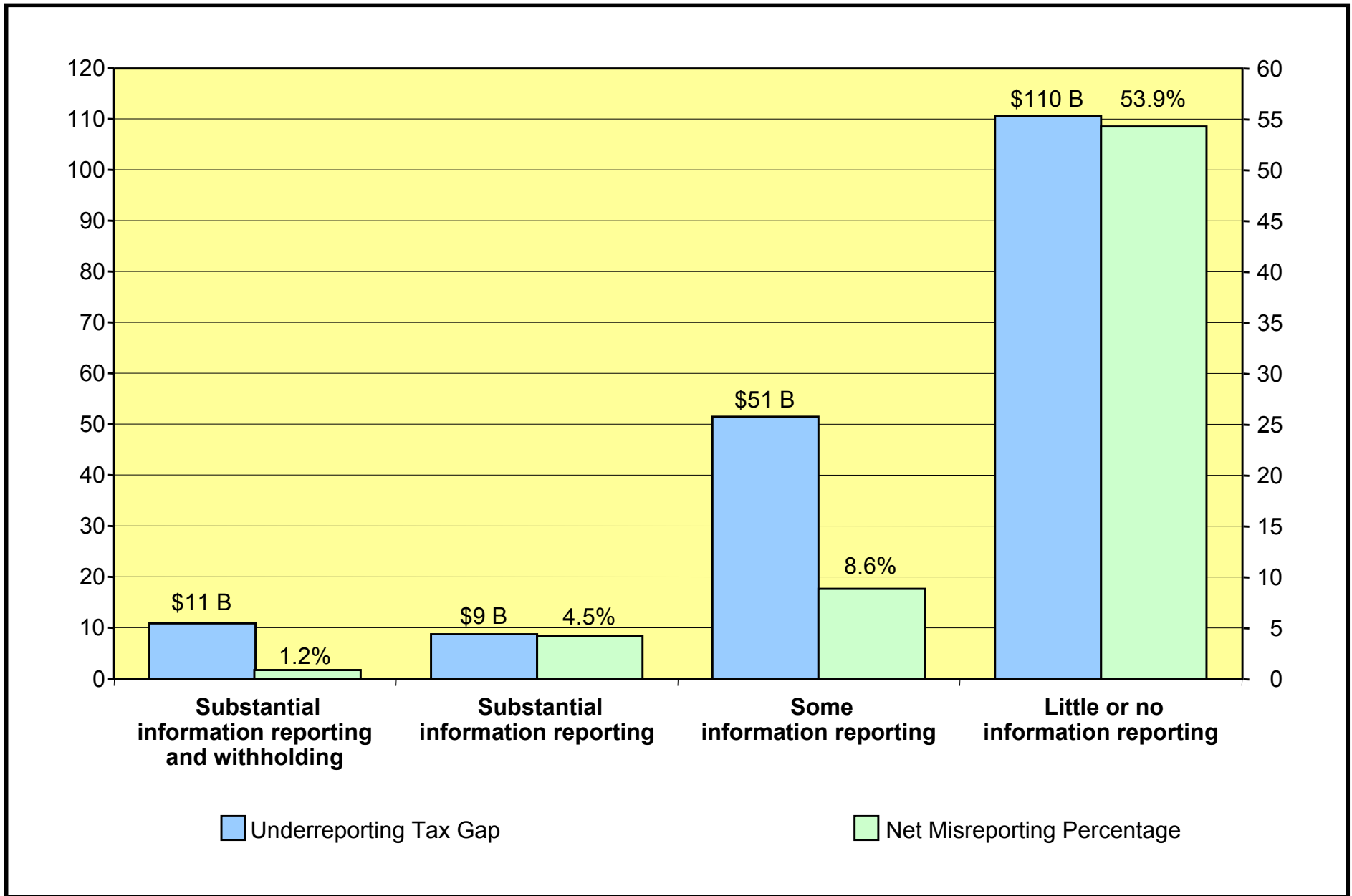
# Tax Year 2001 FEDERAL TAX GAP

(in Billions of Dollars)



\*Updated using Census tabulations

# Individual Income Tax Underreporting Gap



	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

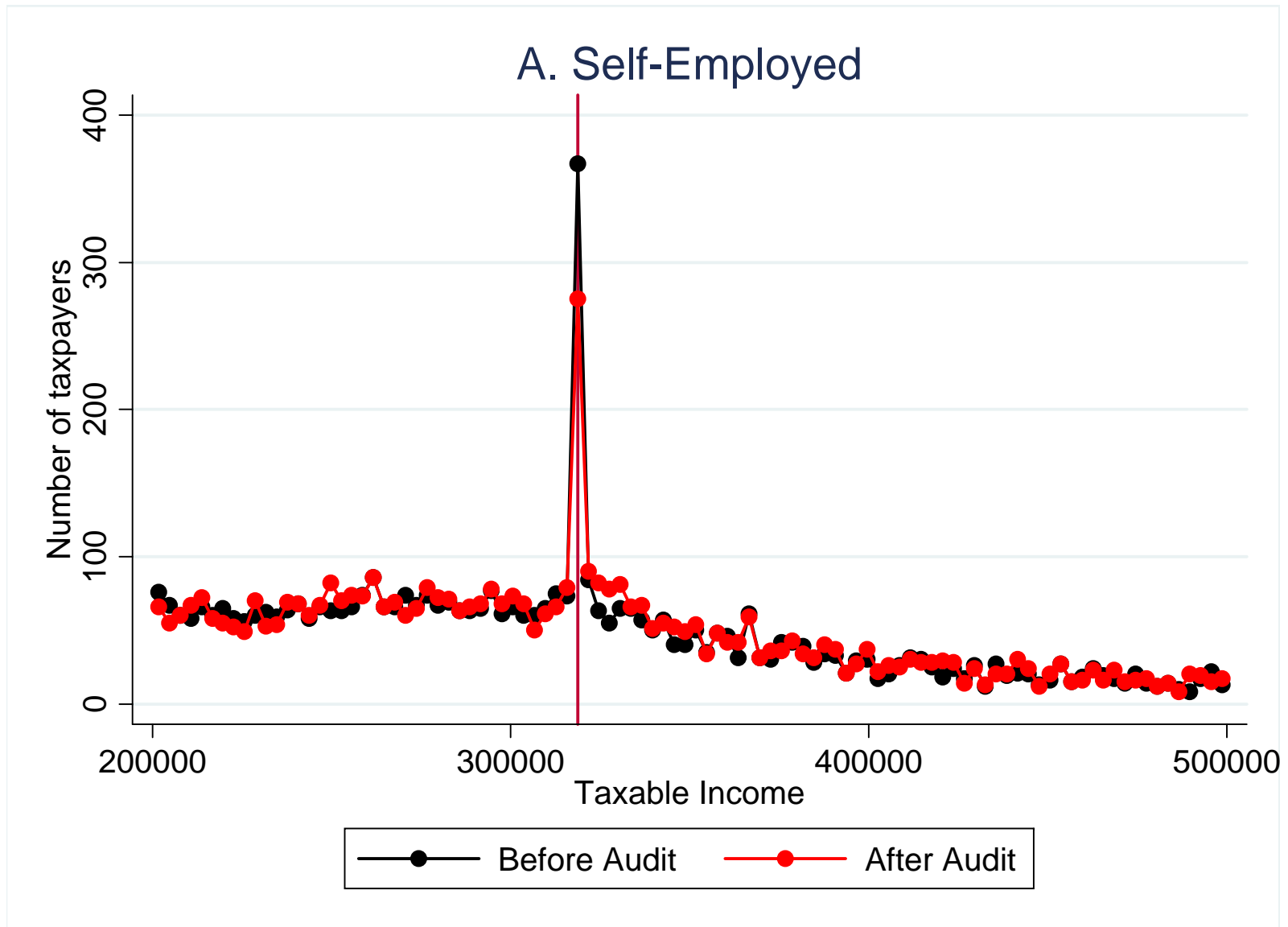
---

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

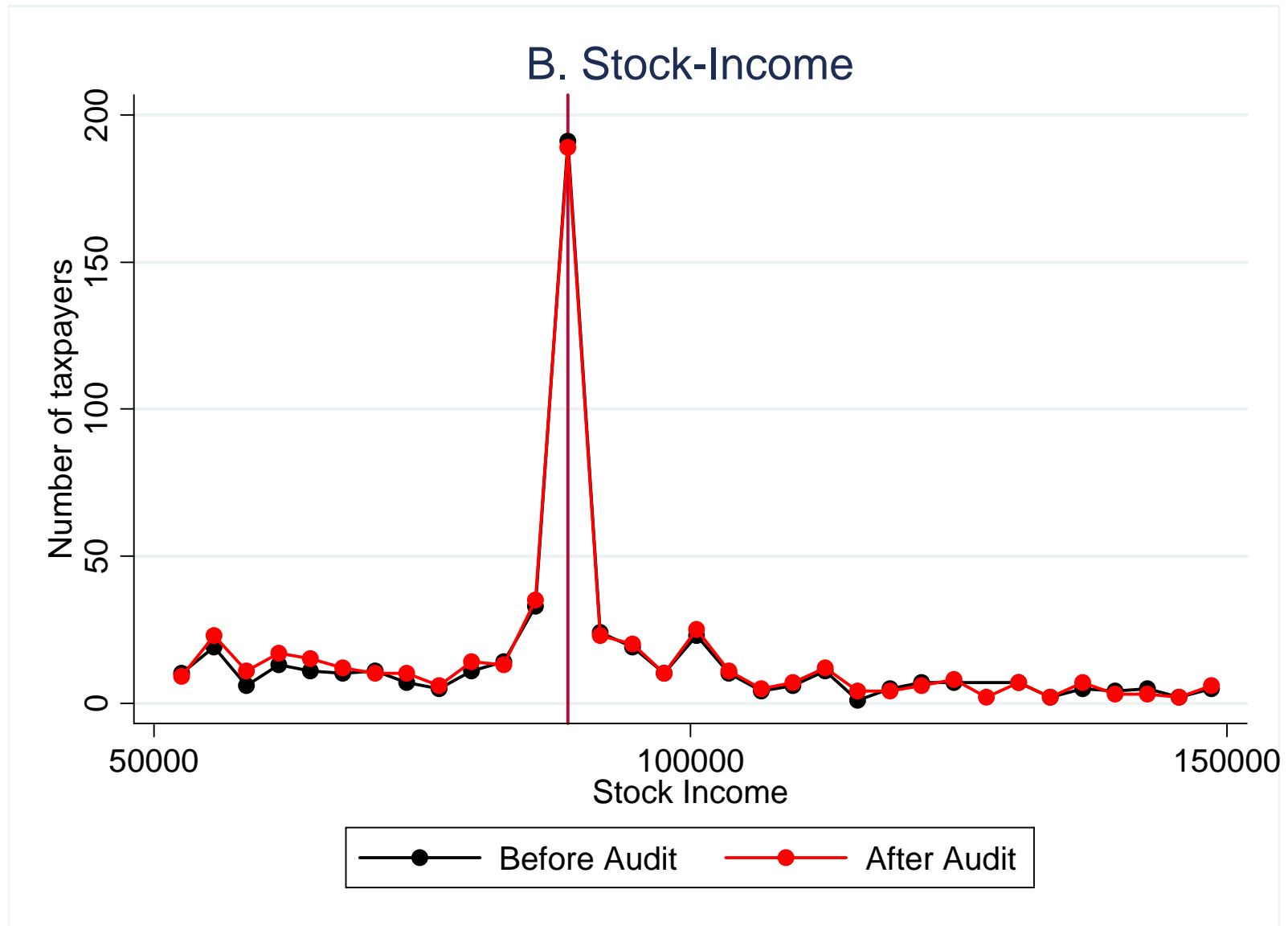
## Determinants of the Probability of Audit Adjustment: Social, Economic, and Information Factors

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

# 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
<b>Net income</b>	<b>5629</b>	<b>2554</b>	<b>2322</b>	232
	(497)	(787)	(658)	(691)
<b>Total tax</b>	<b>2510</b>	<b>1377</b>		
	(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		
	Baseline	Any adjustment	Upward adjustment	Downward adjustment
<b>Net income</b>	<b>13.37</b>	<b>1.65</b>	<b>1.51</b>	0.13
	(0.35)	(0.47)	(0.28)	(0.40)
<b>Total tax</b>	<b>13.67</b>	<b>1.56</b>	<b>1.54</b>	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)

---

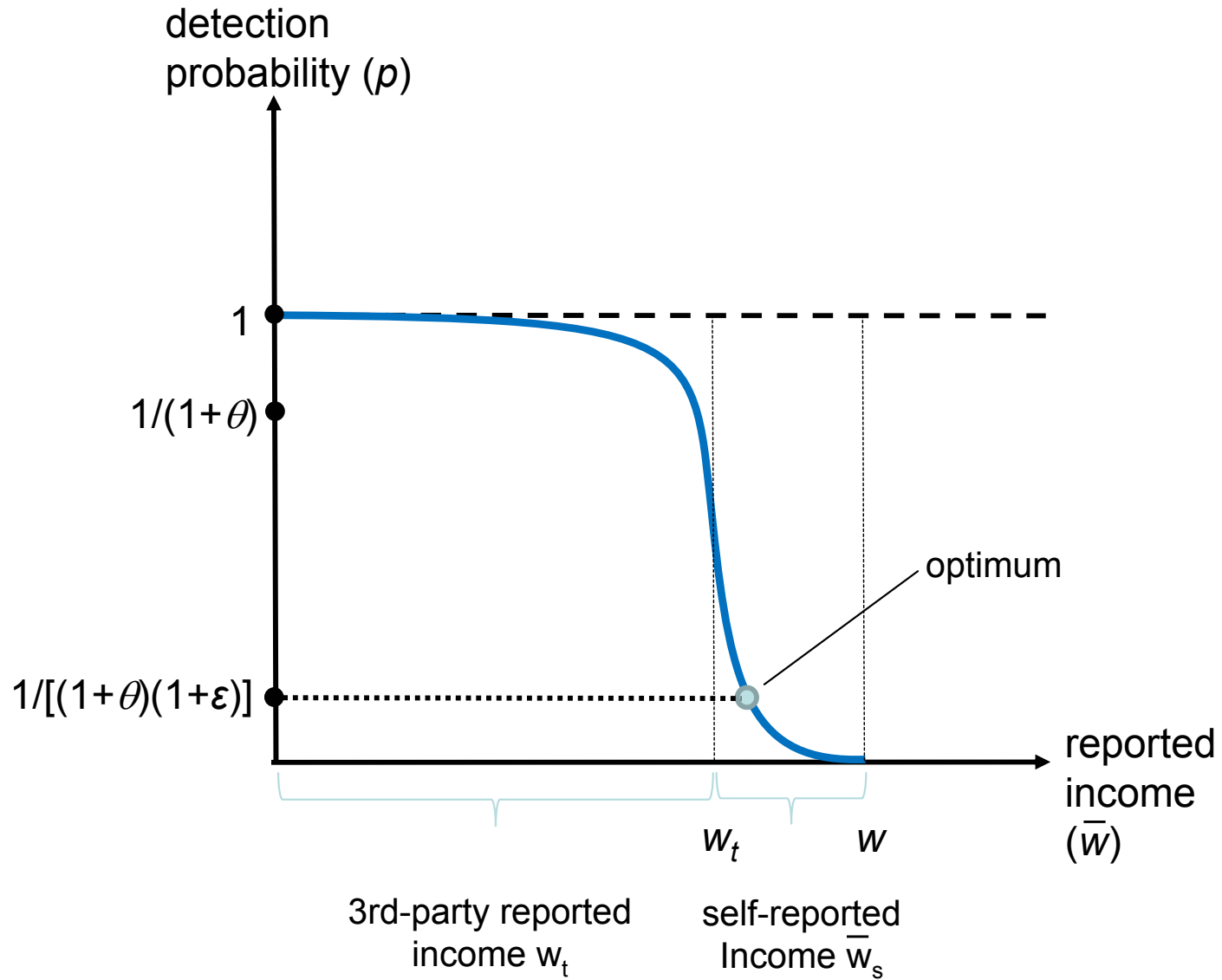
Both 0% and 100% audit groups

---

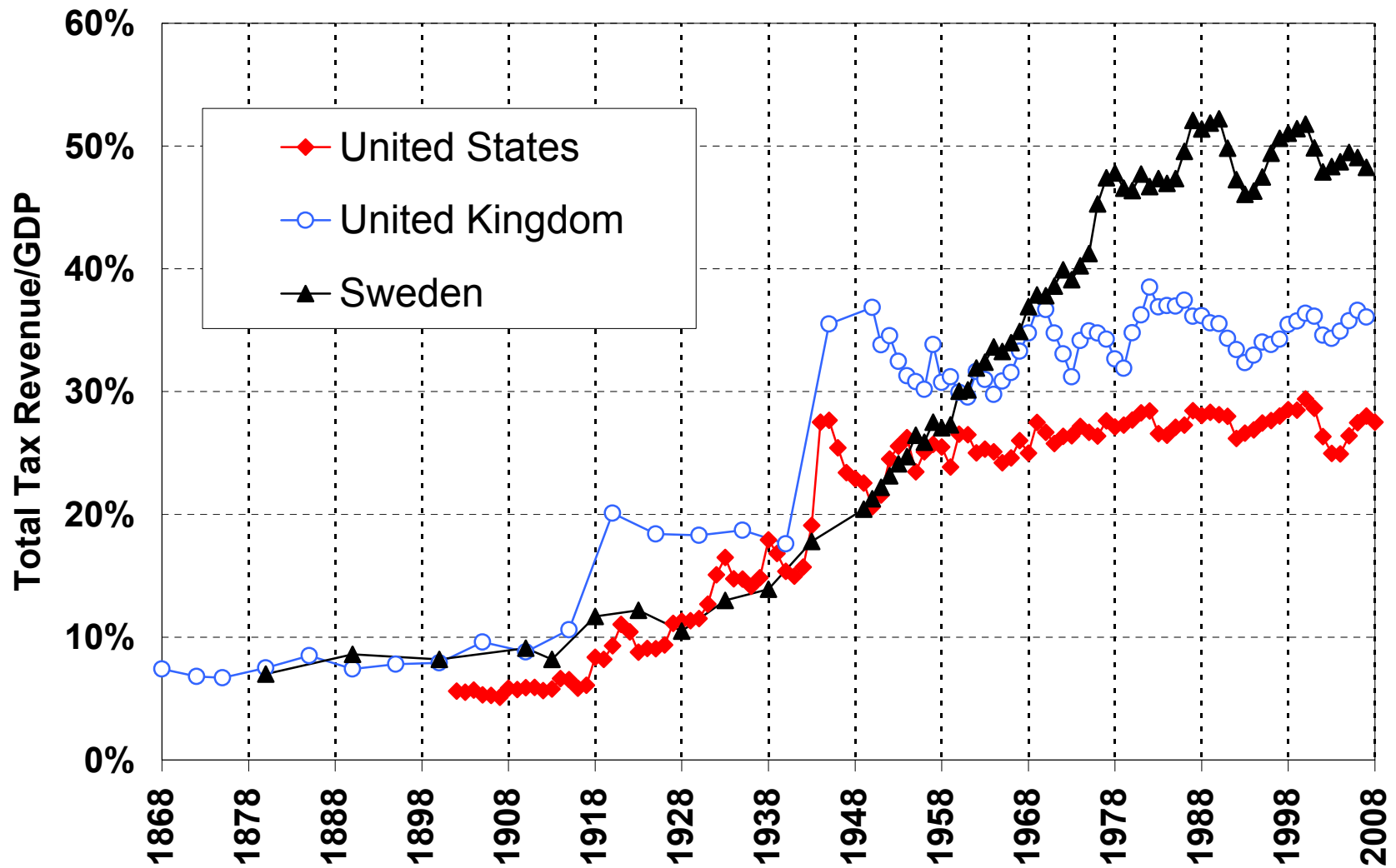
	<b>Letter – No Letter</b>	<b>50% Letter – No Letter</b>	<b>100% Letter – 50% Letter</b>
<b>Net income</b>	<b>1.51</b>	<b>1.04</b>	<b>0.95</b>
	(0.28)	(0.33)	(0.33)
<b>Total tax</b>	<b>1.54</b>	<b>0.99</b>	<b>1.10</b>
	(0.28)	(0.33)	(0.33)

---

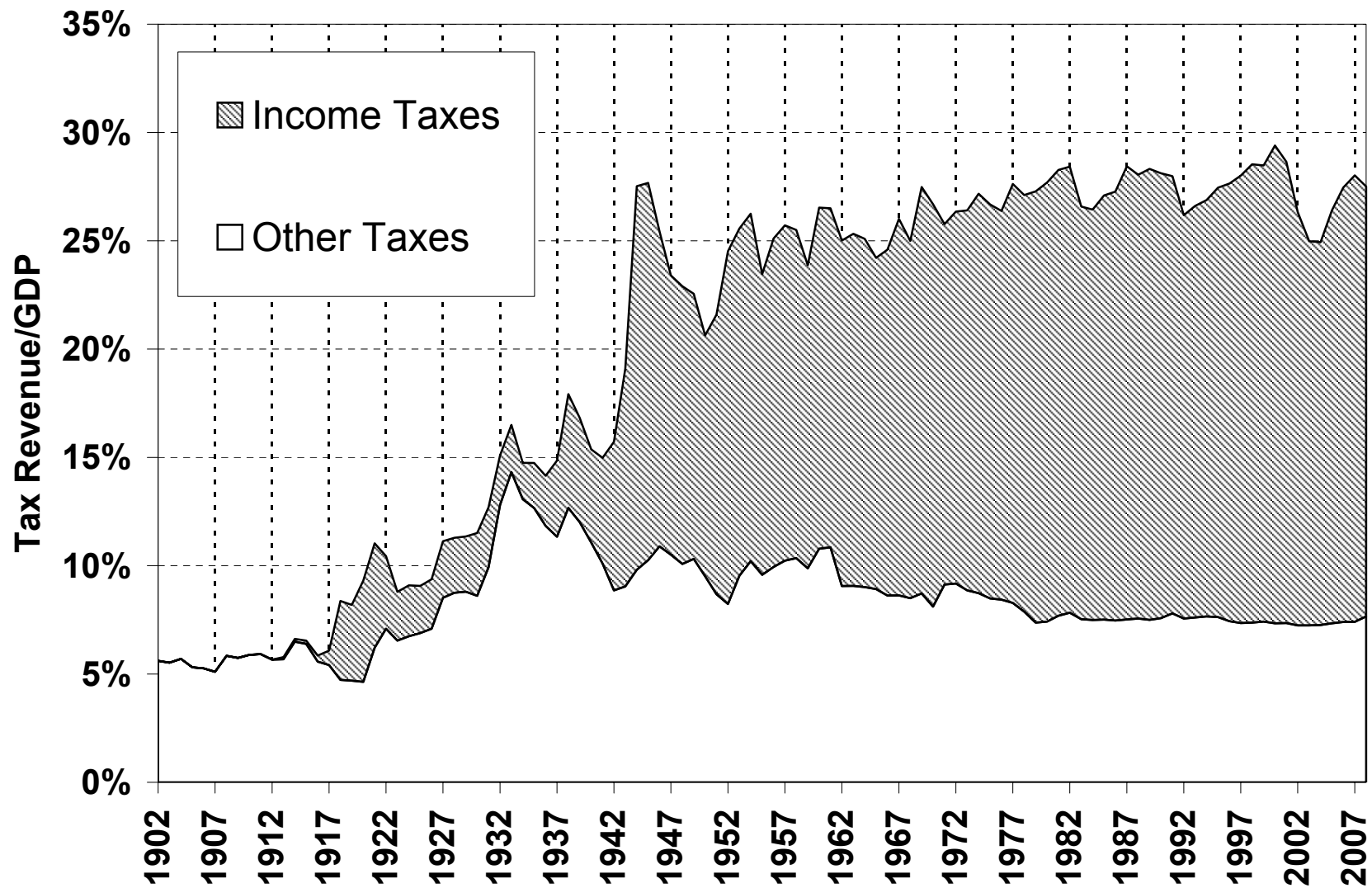
**Figure 1: Probability of Detection under Third-Party Reporting**



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

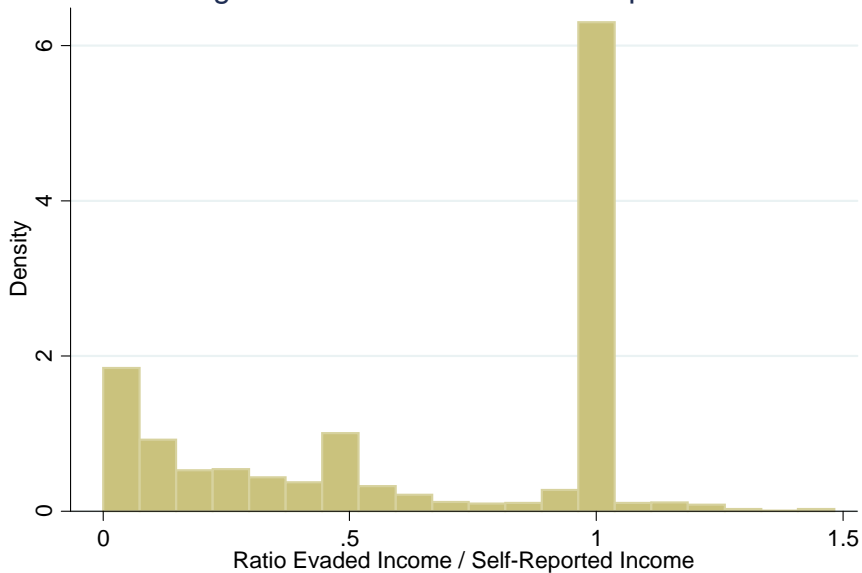


## 2B. US Tax Composition, 1902-2008

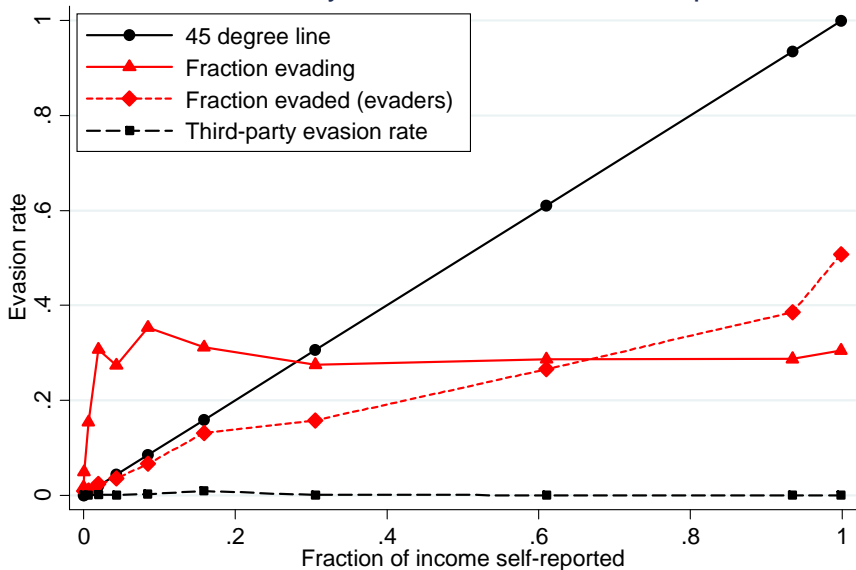


Source: statistics computed by the author

## A. Histogram Evaded Income/Self-Reported Income

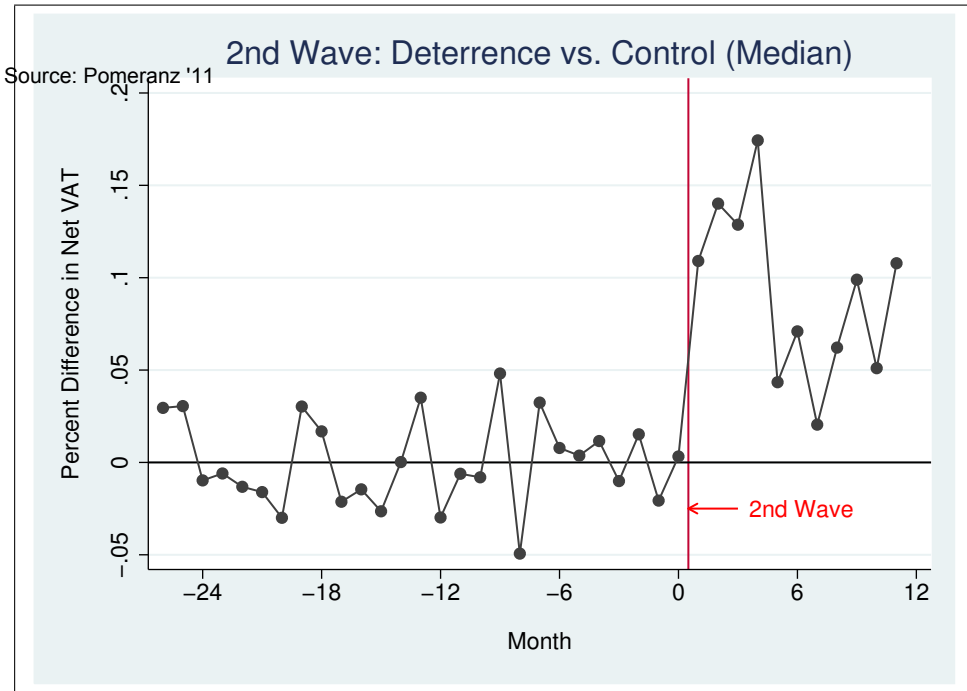


## B. Evasion by Fraction Income Self-Reported



**Figure 3. Anatomy of Tax Evasion**

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

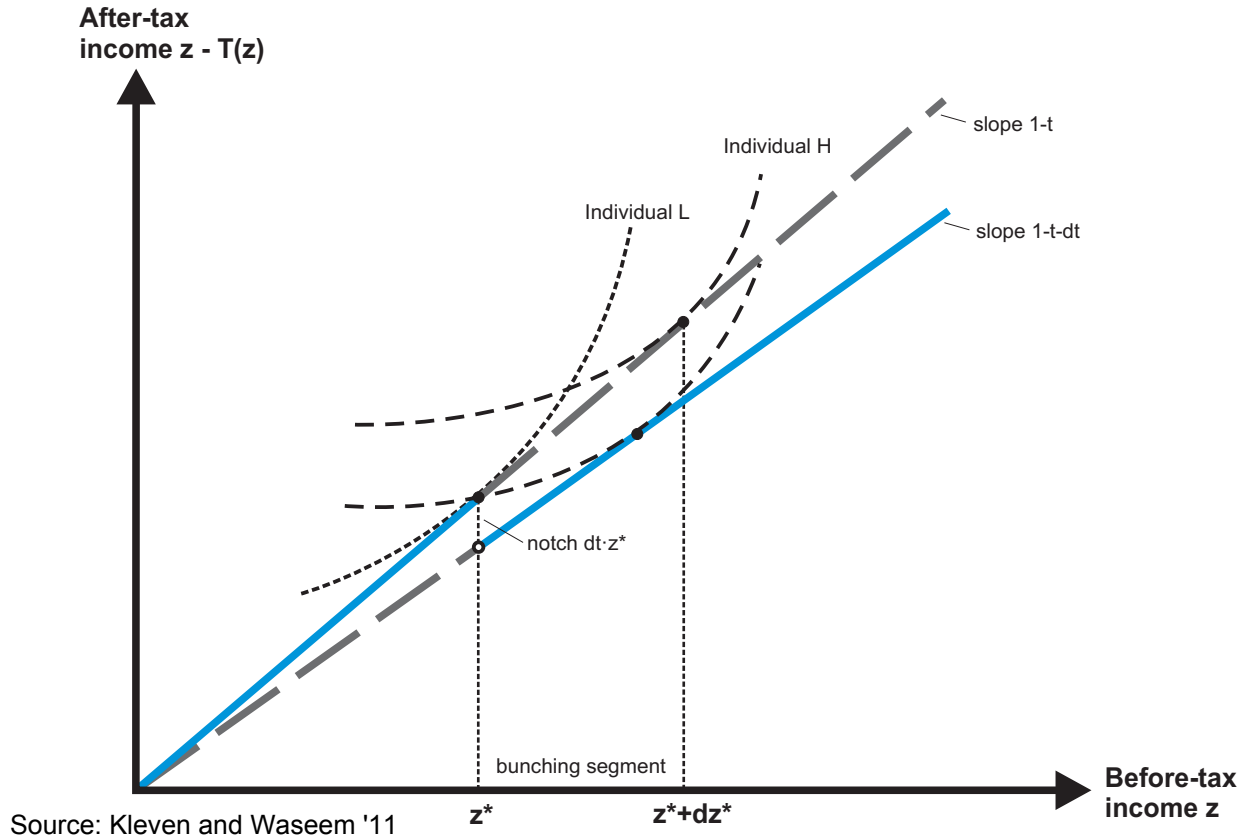


**Figure A5:** Impact of Deterrence Letter: Second Wave of Mailing

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:  $(\text{median VAT treatment group} - \text{median VAT control group}) / (\text{median VAT control group})$ , 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 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

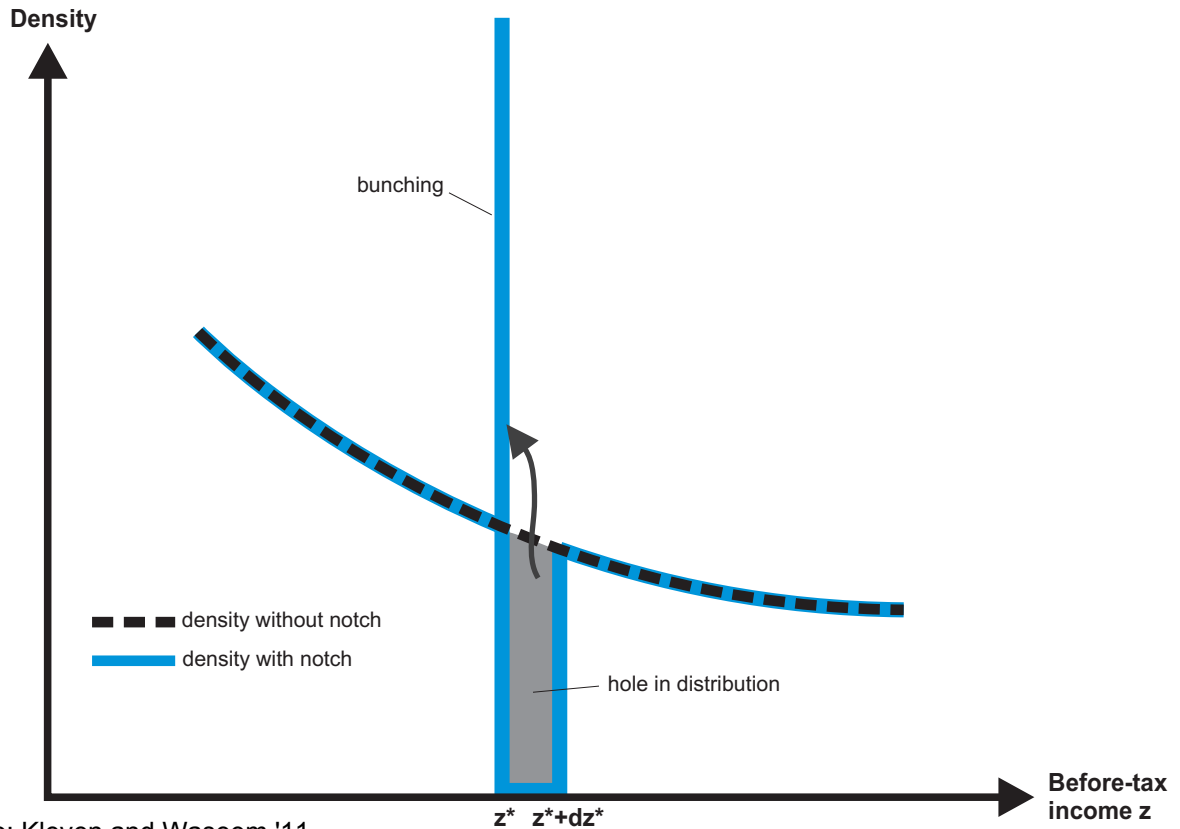
**Panel A: Bunching at the Notch**



# FIGURE 2

## Effect of Notch on Density Distribution

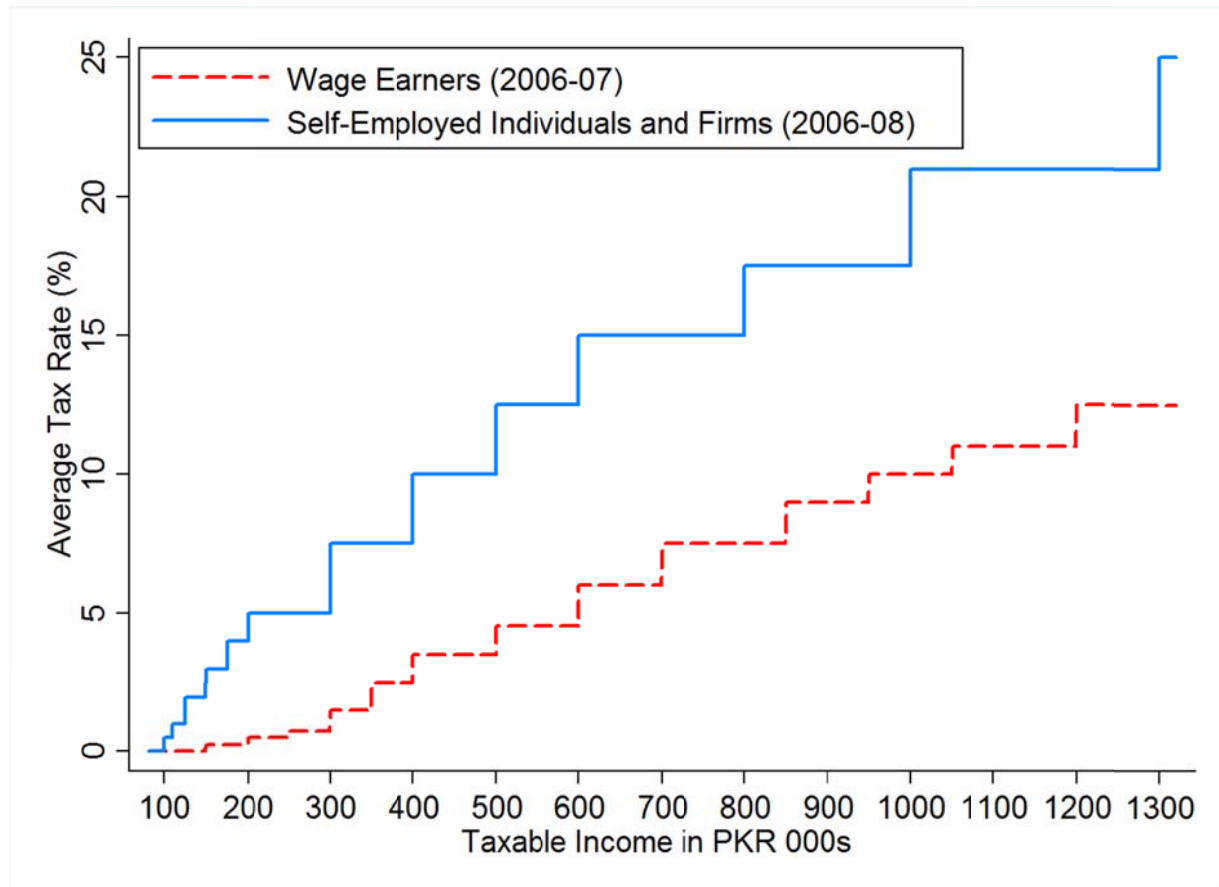
### Panel A: Theoretical Density Distributions



Source: Kleven and Waseem '11

**FIGURE 3**

## Personal Income Tax Schedules in Pakistan



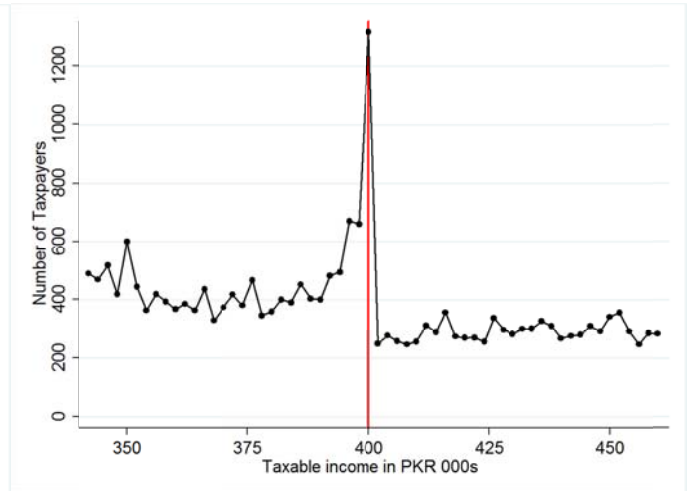
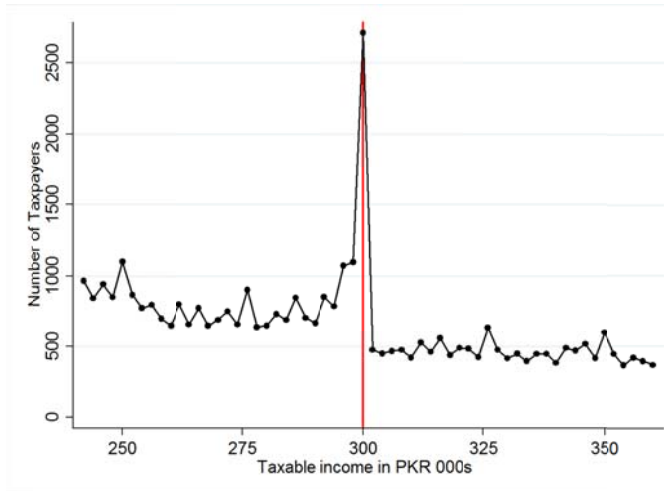
Notes: the figure shows the statutory (average) tax rate as a function of annual taxable income in the personal income tax schedules for wage earners (red dashed line) and self-employed individuals and unincorporated firms (blue solid line), respectively. Taxable income is shown in thousands of Pakistani 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)

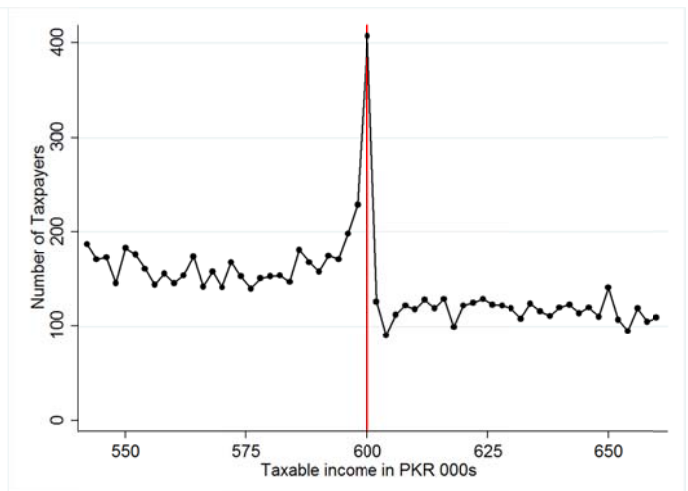
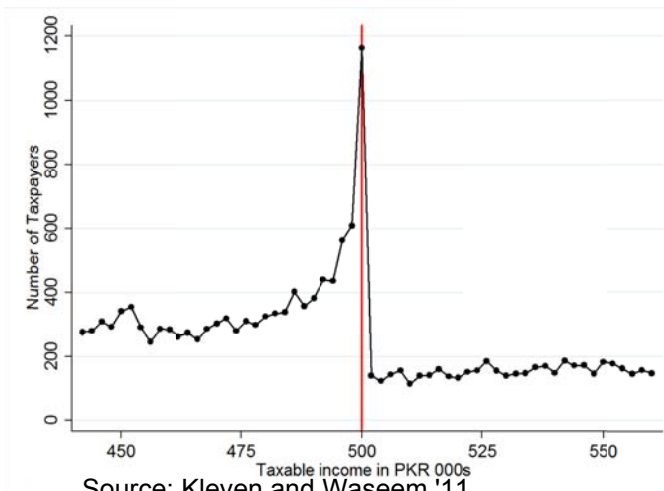
**Panel A: Notch at 300k**

**Panel B: Notch at 400k**



**Panel C: Notch at 500k**

**Panel D: Notch at 600k**



Source: Kleven and Waseem '11