The Use of Third-Party Information Reporting for Tax Deductions: Evidence and Implications from Charitable Deductions in Denmark

Christian Gillitzer\textsuperscript{1} Peer Ebbesen Skov\textsuperscript{2}

\textsuperscript{1}University of Sydney

\textsuperscript{2}Auckland University of Technology

10 April, 2018

Forthcoming at \textit{Oxford Economic Papers}
Introduction

- Wide use of information reporting for sources of income line items.
- Recently a number of Scandinavian countries have introduced information reporting and pre-filling for tax return *deduction* line items.
- We provide the first study of the use of third-party information reporting and pre-filling for a deduction line item: charitable tax deductions.
Introduction

- Wide use of information reporting for sources of income line items.

- Recently a number of Scandinavian countries have introduced information reporting and pre-filling for tax return deduction line items.

- We provide the first study of the use of third-party information reporting and pre-filling for a deduction line item: charitable tax deductions

- Conventional wisdom suggests the reform should eliminate evasion opportunities:
  - Low audit rates make evasion a favourable gamble;
  - Information reporting effective at eliminating evasion opportunities;
  - Expect fewer deductions and increase in revenue.
Background: Denmark’s Tax System

- Wide use of information reporting and pre-filling for sources of income;
- Individual filing;
- No standard deduction;
Backgound: Denmark’s Tax System

- Wide use of information reporting and pre-filling for sources of income;
- Individual filing;
- No standard deduction;
- Flat charitable tax deduction subsidy rate:
  - Unrelated to marginal income tax rate;
  - Subsidy rate is one-third (subject to minor regional variation).
Figure: Taxpayers Claiming a Charitable Deduction

- Number (LHS)
- Average Value (RHS)
- Number
- DKK

- 1997
- 1999
- 2001
- 2003
- 2005
- 2007
- 2009
- 2011

- 0
- 100,000
- 200,000
- 300,000
- 400,000
- 500,000
- 600,000
- 700,000

- 0
- 1,000
- 2,000
- 3,000
- 4,000
Figure: Taxpayers Claiming a Deduction: By Claim Size and Year
Number of Unclaimed Charitable Deductions

- Approximate estimate based on a time-series regression:

\[
\triangle \log (\text{Number}_t) = 0.026 + 0.003 t + 0.630 \delta_{2008} + \epsilon_t
\]

- \( \text{Number}_t \) is the number of charitable deductions in year \( t \);
- \( t \) is a time trend;
- \( \delta_{2008} \) is equal one in 2008 and zero otherwise;
- 0.63 log points \( \cong 88 \) percent;
- \( R^2 = 0.93 \).
Value of Unclaimed Charitable Deductions

- Approximate estimate based on a time-series regression:

\[
\triangle \log (Value_t) = 0.028 + 0.004t + 0.067 \delta_{2008}
\]

- \( Value_t \) is the value of charitable deductions in year \( t \)
- \( t \) is a time trend;
- \( \delta_{2008} \) is equal to one in 2008 and zero otherwise;
- Approximate 7 percent increase in value of deductions;
- \( R^2 = 0.50 \).
Value of Unclaimed Charitable Deductions

- Approximate estimate based on a time-series regression:
  
  \[ \Delta \log (Value_t) = 0.028 + 0.004 t + 0.067 \delta_{2008} \]
  
  - Value\(_t\) is the value of charitable deductions in year \(t\)
  - \(t\) is a time trend;
  - \(\delta_{2008}\) is equal one in 2008 and zero otherwise;
  - Approximate 7 percent increase in value of deductions;
  - \(R^2 = 0.50\).

- Average value of unclaimed deductions:
  
  \[ \Delta (Average \ Value) = \frac{\Delta Number}{\Delta Value} \sim DKK\,370 \]
  
  \((DKK\,63)\)
Evasion Under the Self-Reporting Regime

▶ We examine the Kleven et. al. (2011) audit sample for overreporting:

▶ Approximately 20,000 taxpayers were selected at random for an unannounced audit in 2007 of their 2006 tax returns.

▶ For taxpayers in the audit sample reporting a charitable tax deduction:

▶ 7 percent overclaimed: mean value DKK2,447;
▶ 1 percent underclaimed: mean value DKK1,717;
▶ Net evasion rate: 2.3 percent.

▶ 2 percent had no pre-audit deduction but had a post-audit deduction.

Why did the audits not detect the missing claims?

SKAT did not investigate items for which no deduction was reported;

Audits are not designed to detect underclaiming.
We examine the Kleven et al. (2011) audit sample for overreporting:

- Approximately 20,000 taxpayers were selected at random for an unannounced audit in 2007 of their 2006 tax returns.
- For taxpayers in the audit sample reporting a charitable tax deduction:
  - 7 percent overclaimed: mean value DKK2,447;
  - 1 percent underclaimed: mean value DKK1,717;
  - Net evasion rate: 2.3 percent.
- 2 percent had no pre-audit deduction but had a post-audit deduction.

Why did the audits not detect the missing claims?
SKAT did not investigate items for which no deduction was reported; audits are not designed to detect underclaiming.
Evasion Under the Self-Reporting Regime

- We examine the Kleven et. al. (2011) audit sample for overreporting:
  - Approximately 20,000 taxpayers were selected at random for an unannounced audit in 2007 of their 2006 tax returns.
  - For taxpayers in the audit sample reporting a charitable tax deduction:
    - 7 percent overclaimed: mean value DKK2,447;
    - 1 percent underclaimed: mean value DKK1,717;
    - Net evasion rate: 2.3 percent.
  - 2 percent had no pre-audit deduction but had a post-audit deduction
- Why did the audits not detect the missing claims?
  - SKAT did not investigate items for which no deduction was reported;
  - Audits are not designed to detect underclaiming.
Did Information Reporting Increase Donations?

**Figure:** Number of Charitable Donors: 25 Largest Charities

![Graph showing the number of charitable donors from 2001 to 2011. The graph compares Charity Data and Tax Return Data, with a notable increase in the latter after 2008.]
Did Information Reporting Increase Donations?

Figure: Value of Charitable Donations: 25 Largest Charities
## Effect of Information Reporting: Persistence of Missing Deductions

<table>
<thead>
<tr>
<th>Description</th>
<th>Number ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total deductions claimed in 2008*</td>
<td>293</td>
</tr>
<tr>
<td>Did not claim a deduction 2006 or 2007</td>
<td>153</td>
</tr>
<tr>
<td>3 deductions 2009-2011</td>
<td>104</td>
</tr>
<tr>
<td>2 deductions 2009-2011</td>
<td>16</td>
</tr>
<tr>
<td>1 deduction 2009-2011</td>
<td>14</td>
</tr>
<tr>
<td>0 deductions 2009-2011</td>
<td>19</td>
</tr>
</tbody>
</table>

* By taxpayers who filed a return in each year 2006-11.
Drivers of Reporting Behaviour: Compliance Costs

Figure: Taxpayers Claiming a Deduction: By Claim Size and Year

(a) All Taxpayers

(b) Accountants
Drivers of Reporting Behaviour: Multiple Deductions

<table>
<thead>
<tr>
<th>Dependent Variable: Reported a Charitable Deduction in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other wage-earner (self-reported)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Childminders and fisherman deduction (self-reported)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Establishment account deposit (self-reported)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Unemployment insurance contributions (pre-populated)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Alimony (pre-populated)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Transport (pre-populated)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: Sample is taxpayers who claimed a deduction in each year under the information reporting regime.
### Drivers of Reporting Behaviour: Active/Passive Choice

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reported a Charitable Deduction in 2007</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension saving above default</td>
<td>0.019***</td>
<td></td>
<td></td>
<td>0.031***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td></td>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Capital pension account</td>
<td></td>
<td>0.012***</td>
<td></td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.005)</td>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Changed withholding</td>
<td></td>
<td></td>
<td>0.085***</td>
<td>0.065***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td><strong>Number of observations</strong></td>
<td>145,119</td>
<td>69,097</td>
<td>213,579</td>
<td>57,656</td>
</tr>
</tbody>
</table>

Note: Sample is taxpayers who claimed a deduction in each year under the information reporting regime.
Drivers of Reporting Behaviour: Loss Aversion

Figure: Taxpayers by Size of Preliminary Deficit in 2007

(a) Characteristics

(b) Charitable Deduction
### Tax Value of Regular Gifts

<table>
<thead>
<tr>
<th>Taxpayer</th>
<th>Charity 1</th>
<th>Charity 2</th>
<th>Charity 3</th>
<th>Tax Deductible Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>400</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>700</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>C</td>
<td>500</td>
<td>500</td>
<td>0</td>
<td>500</td>
</tr>
<tr>
<td>D</td>
<td>500</td>
<td>500</td>
<td>400</td>
<td>500</td>
</tr>
</tbody>
</table>
Drivers of Reporting Behaviour: Notched Subsidy Scheme

Figure: Dominated Giving Choices: 2011

Charitable Gift Amount: DKK

No.
Drivers of Reporting Behaviour: Notched Subsidy Scheme

<table>
<thead>
<tr>
<th>Persistence of Dominated Choices</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>100</td>
<td>35</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>2009</td>
<td>100</td>
<td>33</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>100</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Percent of Total</td>
<td>2.2</td>
<td>2.5</td>
<td>2.9</td>
<td>3.2</td>
</tr>
</tbody>
</table>
Relationship with the Literature

- Our findings contrast with Fack and Landais (2016):
  - 1983 reform in France requiring people to include receipts with tax return to claim a charitable deduction;
  - Coincided with a 75 percent fall in deductions claimed;
  - F&L assume increased compliance cost had no effect on claiming behaviour.

- Our findings are consistent with Rehavi (2010):
  - Survey reports of United States taxpayers.
    - Cost of itemizing deductions in the United States:
      - Pitt and Slemrod (1989): approximately US$105 (2015 dollars);
Our findings contrast with Fack and Landais (2016):

- 1983 reform in France requiring people to include receipts with tax return to claim a charitable deduction;
- Coincided with a 75 percent fall in deductions claimed;
- F&L assume increased compliance cost had no effect on claiming behaviour.

Our findings are consistent with Rehavi (2010):

- Survey reports of United States taxpayers.
Relationship with the Literature

- Our findings contrast with Fack and Landais (2016):
  - 1983 reform in France requiring people to include receipts with tax return to claim a charitable deduction;
  - Coincided with a 75 percent fall in deductions claimed;
  - F&L assume increased compliance cost had no effect on claiming behaviour.

- Our findings are consistent with Rehavi (2010):
  - Survey reports of United States taxpayers.

- Cost of itemizing deductions in the United States:
  - Pitt and Slemrod (1989): approximately US$105 (2015 dollars);
Conclusions

- Tax deductions perceived to be an important source of lost revenue.

- We find underreporting to be more important than overreporting:
  - About half of all eligible charitable deductions unclaimed;
  - Average value of unclaimed deductions about DKK370;
  - Repeated failure to claim eligible deductions.
Conclusions

- Tax deductions perceived to be an important source of lost revenue.
- We find underreporting to be more important than overreporting:
  - About half of all eligible charitable deductions unclaimed;
  - Average value of unclaimed deductions about DKK370;
  - Repeated failure to claim eligible deductions.
- Audits not suited to detection of missing tax deductions:
  - Reliance on audits overstates the importance of evasion.
Conclusions

- Tax deductions perceived to be an important source of lost revenue.
- We find underreporting to be more important than overreporting:
  - About half of all eligible charitable deductions unclaimed;
  - Average value of unclaimed deductions about DKK370;
  - Repeated failure to claim eligible deductions.
- Audits not suited to detection of missing tax deductions:
  - Reliance on audits overstates the importance of evasion.
- Drivers of reporting behaviour:
  - Compliance cost: accountants & multiple deductions;
  - Loss aversion: owed taxes;
  - Active/passive choice;
  - Information frictions: notched subsidy scheme.