Tax Credits Response to Tax Enforcement: Evidence from a Quasi-Experiment in Chile

Claudio A. Agostini*
Universidad Adolfo Ibañez

Claudia Martínez A.
Universidad de Chile

Abstract

Diesel in Chile receives a different tax treatment depending on its use. If diesel is used in industrial activities the diesel tax paid can be used as a credit against VAT and if diesel is used in freight or public transportation (basically trucks and buses) a fraction of gasoline taxes paid can be used as a credit against VAT. As a result of this different tax treatment firms have incentives to use "tax exempted" diesel in activities requiring "non tax exempted" diesel. This price wedge generates and opportunity for tax evasion. In this paper we analyze the impact of a tax enforcement program implemented by the Chilean IRS, where letters requiring information about diesel tax credits were sent to around 200 firms in 2003. Using different empirical strategies to consider the non-randomness of the selection of firms, we find that firms receiving a letter decreased their diesel tax credits by 16%.

JEL: H26, H32

Keywords: diesel tax, tax evasion, tax enforcement

*Agostini: claudio.agostini@uai.cl, Martínez A.: cmartineza@econ.uchile.cl. We thank Joel Slemrod, Jeff Smith, and seminar participants at the University of Michigan for valuable comments and suggestions. We also thank Servicio de Impuestos Internos for access to the data and the funding provided by the Research Grant Fondecyt 1110542. Javiera Selman provided excellent research assistance.

1. Introduction

Gasoline and diesel are subject to specific taxes and VAT in Chile, but diesel is taxed at a much lower rate. Gasoline tax is equivalent to US$1.27 a gallon while diesel tax is just US$0.43 a gallon. Additionally, because diesel is used as a main input in several industrial activities it receives a special tax treatment depending on its use. Specifically, if diesel is used in industrial activities the diesel tax paid can be used as a credit against VAT and if diesel is used in freight or public transportation (basically trucks and buses) a fraction of gasoline taxes paid can be used as a credit against VAT.[1] As a result of this different tax treatment firms have incentives to use "tax exempted" diesel in activities requiring "non tax exempted" diesel. This might be particularly easy to do for multi-products firms using diesel for several activities, allowing them to evade diesel taxes by claiming a larger tax credit than what is legally allowed. A similar practice was detected in the U.S. during the 80s where firms were buying exempted fuel to be used for on-road tax activities and then created several transactions among related firms to hide the tax evasion, a practice known as "daisy chain" (Marion and Muehlegger (2008)).[2]

In 2003 the Chilean IRS implemented a special auditing plan to detect diesel tax evasion and improve tax enforcement. For this purpose, the IRS selected first the firms that had had large changes in their tax credits reported between 2001 and 2002 and sent them a letter asking to voluntarily report more details of every diesel transaction during the last two and half years. In October of 2003, 205 firms received the letter asking them to submit the information within the next 30 days. The IRS received some type of information from 183 firms and after revising the information sent by the firms, 66 firms were selected and received a second letter for an exhaustive and mandatory audit. This special auditing plan was implemented only once in October 2003.

In this paper we use monthly data from October 2002 to September 2004, for all firms reporting gasoline tax credits when filing VAT, to estimate the impact of receiving the first letter that requested tax information on diesel tax credits claimed. The dataset contains detailed information about many relevant dimensions for each firm: size based on sales (very

[1] The fraction has changed over time. Currently is 80% (after hundreds of trucks blocked the main highway for 3 days in 2008 requesting subsidies from the government to compensate the spike in oil prices).

[2] More specifically, firms purchased untaxed diesel fuel and resold it to affiliates to make it more difficult to audit the transaction. Then the affiliate resold the diesel to retail gas stations as diesel for which taxes had been collected.

small, small, medium and large)[3], number of different economic activities, tax regime (accrual based accounting, cash flow accounting, presumptive tax regime), if it uses an accountant for filing taxes, if it has been audited before by the IRS (any auditing, not only VAT or diesel) and the year the firm started its operations.

One of the main difficulties in identifying the effects of receiving the first letter from the IRS and also the effects of being audited is that, in both cases, the firms were not randomly selected. As a matter of fact, the firms that received the letter are quite different than the firms that did not receive it in many dimensions that might be correlated with tax evasion. For example, 65% of the firms to which the IRS sent the first letter were large firms, while only 3.2% of the ones not receiving are large; 98.5% are under accrual accounting tax reporting regime, compared to only 37.5% among firms that did not receive the letter.[4] For this reason, the experimental methods usually used in the literature to identify tax enforcements effects on tax compliance (Kleven et al. (2011), Fellner et al (2009), Wenzel and Taylor (2004), Blumenthal et al. (2001), Slemrod et al. (2001),) might produce biased estimates in the context of our data and cannot be used.

Even though the firms were not randomly selected and the two groups actually differ in some relevant dimensions, we know the selection criterion used by the IRS to choose the firms to which send the letter. They ranked the firms based on their changed in tax credits used between 2002 and 2001 and sent a letter to the first 205. Therefore, the first empirical strategy we used to identify the effects of the letter on the diesel tax credit claims by the firms is to estimate a difference in difference impact between control and treatment groups considering the selection process implemented by the IRS to choose the "treated" firms. The selection equation is, therefore, estimated considering the change in the amount of tax credit claimed by each firm between 2002 and 2001. Using this method we find that receiving the letter reduced diesel tax claims by 19%.

[3] The standard classification used by the government is based on annual sales: less than US$100,000 are very small firms; between US$100,000 and US$1,000,000 are small firms; above US$1,000,000 but below US$4,200,000 are medium firms; and more than US$4,200,000 are large firms.

[4] In some other dimensions the two groups of firms are not too different, for example 36.6% of the firms to which the letter was sent have only one economic activity and 55% are more than 10 years old, compared to 39.9% and 52% among the firms not receiving the letter respectively.

As a second empirical approach to identify the effects of the letter sent by the IRS, we constructed and artificial control group using propensity score matching. The results also show a statistically significant impact of the letter in reducing the average amount of diesel tax credits claim by the "treated" firms even though the magnitude is smaller. The Kernel estimator shows a 16.5% reduction in the tax credits claim while the Nearest Neighbor estimator shows a 15% reduction.

In general, our results show a significant impact of the letter sent by the IRS, asking firms to voluntarily report some information on their diesel tax credits, in reducing the amount of tax credits claimed by firms. The results are consistent with other results in the literature showing that just receiving a letter from the IRS has an impact on tax compliance because it causes a substantial increase in the perceived detection risk (Fellner et al (op.cit.)). In that sense, the results show that the IRS in Chile can successfully reduce diesel tax evasion by affecting firms' perceived cost on non-compliance.

2. Fuel Taxes in Chile

Fuel taxes were enacted in Chile in 1986, justified as an instrument to finance road construction, especially after a strong earthquake that struck the country in 1985. The tax is paid in the first sell or import with a fixed rate by cubic meter. It has to be paid by the producer or the importer in the first 10 days after the transfer or before being taken out from customs.

The diesel tax rate is four times lower than the gasoline tax rate with a rate of 1.5 UTM by m3, equivalent to 0.44 US dollars per gallon, as opposed to 6 UTM by m3 for gasoline.[5] The gasoline tax is high relative to the United States, but not relative to Europe, while the diesel tax (for transportation) is relatively low.

To avoid effects on production efficiency, firms can claim a tax credit for all or a share of the diesel tax paid used in activities different from transportation in public roads. Starting in October 2001, companies from the trucking industry can claim a credit for a share of their diesel purchases, whereas passenger transport companies could only recover 20% of

[5] The monthly tax unit (UTM) is an index used to maintain the value of taxes in constant money. In October 2011, one UTM was worth 38,634 Chilean pesos, around 77 US dollars.

their toll expenses[6]. Specifically, companies owning or leasing trucks with a gross weight of 3.86 tons or higher can claim 25% of their diesel tax paid as a tax credit against the VAT.[7]

Tax revenue, credit claims and the number of firms claiming the tax credit have changed over time because of changes in diesel prices and regulation. The diesel tax revenue increased between 2000 and 2009 in 97.9%, while over the same time period, diesel VAT credit has increased in 192.3%. The percentage of the diesel tax that is claimed as VAT credit has increased from 48.06% to 70.9%. Absent of a diesel price change, the rate of recovery (VAT credit / diesel tax revenue) of each firm should be constant over time unless there is either a change in their productive process that modify the use of diesel or a normative change.

The rate of recovery can also be affected by changes in consumer behavior, specifically, in tax evasion. The diesel tax credit creates a wedge in diesel prices depending on its use: there is a price for diesel used in transportation, a lower price for diesel used in the trucking sector and an even lower price for diesel used in manufacturing. These different prices generate incentives to use "tax exempted" diesel in activities that should pay diesel tax.

Tax evasion can occur in several different ways. Firms can buy diesel for manufacturing, and then use it for transportation, firms can pay services with diesel, and transportation firms can claim the diesel credit for all their operations, not only for their national use which is what they are legally allow to do. Additionally, diesel from the firm can be used for the diesel cars of the owners and managers of the firm. Some of these mechanisms were detected by the IRS, which motivated the implementation of a special enforcement program for diesel taxation with the goal of reducing its evasion.

[6] The Law No. 20.278 increased the share of toll expenses that can be recovered to 35% starting on January 2009. We will not consider the passenger transportation industry because it does not have a diesel tax credit.

[7] The Law No. 19.764 established a phase-in period of 3 years ofr the diesel tax credit. The share of the diesel tax paid that could be claimed as tax credit was 10% in 2001-2002, 20% in 2003 and 25% since January 2004. Then, the Law No. 20.278 increased the share to 80% for the period between July 2008 and June 2009. Finally, the Law No. 20.360 established a recovery share based on anual sales. Firms with annual sales below 18.600 UTM can claim as a tax credit 80% of their diesel tax paid, firms with sales above 18,600 UTM and below 42,500 UTM can claim 50%, and firms with sales above 42,500 UTM can claim 38%.

3. The Diesel Tax Enforcement Program

In 2003 the Chilean IRS implemented a special auditing plan to detect diesel tax evasion and improve tax enforcement. The IRS selected the firms that had had large changes in the tax credits reported between 2001 and 2002 and sent them a letter asking to report more details of every diesel transaction.

The letter says: "The IRS will start an auditing program for taxpayers claiming diesel tax credits. For this reason you should send the following information to the IRS

–Diesel purchases between January 2001 and August 2003

–Diesel tax paid

–Quantity and fraction of diesel used by vehicles

–List and registration number of vehicles owned by the firm, including year, maker, model, mpg and monthly miles traveled.

The requirement to send this information does not imply you are going to be audited. In case your firm is selected for a detailed auditing you will receive a new letter from the IRS."

In October of 2003, 205 firms received the letter asking them to submit the information within the next 30 days. As it was mentioned before, firms were chosen according to their previous increase in diesel tax credit. Using the IRS data we replicate this decision rule and find out that the letter was not sent to 22 of the top 200 firms[8], and that the letter was also sent to 20 firms that were not in the top 200.[9]

The IRS received some type of information from 183 firms out of the 205 that received the letter and after revising the information sent by the firms, 66 firms were selected and received a second letter for an exhaustive and mandatory audit. This special auditing plan was implemented only once in October 2003. In this paper, we focus on the effect of the first letter.

Theoretically, the letter sent by the IRS could potentially reduce the amount of tax credits claimed by firms after receiving it. Marion and Muehlegger (2008) using a simple

[8] Firms ranked in places 2,3,6,11,29,30,34,38,62,69,77,79,100, 115, 123,147,150,153,158,175,193 and 196.

[9] Ranked 202 to 223, except 210.

model, where firms choose the fraction of untaxed diesel purchases they use to produce output conditional on their evasion cost, show that an increase in the probability of auditing by the IRS reduces the fraction of untaxed diesel purchases by the firms. If the letter sent by the IRS has the effect of increasing the perceived probability of being audited by the firms, then the amounts of tax credits claimed should decreased from evading firms. The empirical question then is if this happen or not and to what extent.

4. Empirical Strategy

4.1 Data

We use IRS monthly data from October 2002 to September 2004 for small, medium and large firms reporting diesel tax credit every month (N=2.408)[10]. Firms of four economic sectors were included in the enforcement program so in the data base we have firms on transportation (except passenger transportation), manufacturing, commerce and construction. The data include sales, VAT credits and debits, diesel credits, economic sector, accounting system/tax regime, number of different economic activities and firms' age of 2.307 not notified firms and 101 notified firms.[11]

Table 1 shows the summary statistics of the data we use in the empirical analysis. The average monthly diesel tax credit is $794,652, with a standard deviation of $4,123,867. The letter was sent to 4.02% of all credit users of the sample. The credit users are mostly very small firms (67.5%), and large firms represent only 13.5%. The main economic sector claiming the tax credit is, as expected, transportation (69.5%), followed by manufacturing and construction. Regarding the type of tax reporting, 72.5% of the sample uses accrual reporting and 20.1% pay according to presumptive tax (Even though presumptive taxes are used only in three economic sectors in Chile (mining, agriculture, and transportation)). The average number of tax reported activities is 2.3, with a maximum of 17, and most of the firms are 10 years or more.

[10] Very small firms are excluded since none of them received a letter in the tax enforcement program

[11] The original data has N=21,876 firms. In this version of the paper we only use those firms that have claimed diesel credits in all the period analyzed to focus on the extensive margin response to the letters sent by the IRS.

Table 1: Descriptive Statistics

	Obs.	Mean	Std. Dev.	Min	Max
Firm Characteristics					
Letter	2408	0,042	0,201	0	1
Number Activities	2407	2,345	1,672	1	17
Construction	2408	0,080	0,271	0	1
Transport	2408	0,695	0,461	0	1
Manufacturing	2408	0,154	0,361	0	1
Commerce	2408	0,071	0,257	0	1
Small Firm	2408	0,675	0,469	0	1
Medium Firm	2408	0,190	0,392	0	1
Large Firm	2408	0,135	0,342	0	1
Age between 0 and 2	2407	0,014	0,118	0	1
Age between 2 and 4	2407	0,147	0,354	0	1
Age between 5 and 6	2407	0,120	0,326	0	1
Age between 7 and 10	2407	0,137	0,344	0	1
Older than 10	2407	0,582	0,493	0	1
Accrual Reporting	2408	0,725	0,447	0	1
Presumptive Tax	2408	0,201	0,401	0	1
Monthly Data					
Diesel Tax Credit	45752	794252	4123867	150	135000000
VAT Reported	45752	5865571	45900000	0	2580000000

Source: author's calculations based on IRS data.

Table 2 shows firms' descriptive statistics by letter status, which will be relevant to frame the empirical strategy, and the results of a t-test for the mean difference between notified and non-notified firms for each characteristic. As expected because the letter was not sent to a random sample of firms, notified and not notified firms are statistically different in many dimensions. Notified firms have more activities (which can give more opportunities for evasion), are more likely to be in construction or commerce, are larger, older and have smaller reported VAT. Interestingly, none of them have the presumptive tax regime. These differences in observable variables challenge the identification of the effect of the letter on the diesel credit requested. Interpretations of correlation found between receiving the letter and the credit claims should consider the possibility that they are caused by these different characteristics, and not related to the letter. In the next section, we propose an empirical strategy that attempts to separate the effect of the letter from these underlying characteristics.

Table 2: Mean Characteristics by Treatment Elegibility

	Not Notified (N=2.307)		Notified (N=101)		Difference	
	Mean	Std. Desv.	Mean	Std. Desv.	Mean	ttest
Number Activities	2,328	1,643	2,743	2,208	-0,415	-2,443
Construction	0,069	0,253	0,327	0,471	-0,258	-9,533
Transport	0,710	0,454	0,347	0,478	0,363	7,860
Manufacturing	0,153	0,360	0,178	0,385	-0,025	-0,674
Commerce	0,068	0,251	0,149	0,357	-0,081	-3,103
Small Firm	0,702	0,457	0,050	0,218	0,653	14,269
Medium Firm	0,185	0,388	0,297	0,459	-0,112	-2,812
Large Firm	0,113	0,316	0,653	0,478	-0,541	-16,386
Age between 0 and 2	0,015	0,121	0,000	0,000	0,015	1,229
Age between 2 and 4	0,146	0,353	0,158	0,367	-0,012	-0,341
Age between 5 and 6	0,122	0,327	0,089	0,286	0,033	0,989
Age between 7 and 10	0,138	0,345	0,109	0,313	0,029	0,830
Older than 10	0,579	0,494	0,644	0,481	-0,064	-1,280
VAT repoted (log)	10,371	6,009	9,064	8,164	1,308	2,104
Accrual Reporting	0,713	0,453	1,000	0,000	-0,287	-6,379
Presumptive Tax	0,209	0,407	0,000	0,000	0,209	5,169

Source: author's calculations based on IRS data.

4.2 Econometric Specification

As we previously noted, the notified sample is not comparable to the not notified sample, and therefore we cannot just directly compare the outcomes of treated and untreated firms. We study the effect of this tax enforcement program with two approaches: difference in difference with selection correction and matching estimator.

First, we compare the diesel tax credits of notified firms to the ones of not notified firms after the program was implemented. This is, we do a difference in difference where the first difference is time, and the second being in the notified group. Even though the firms were not randomly selected and the two groups actually differ in some relevant dimensions, in the case of the first letter sent by the IRS we know that the selection of firms was based on the changed in tax credits used between 2002 and 2001. We use this fact to estimate the selection process with our data, and then incorporate the inverse mills ratio to consistently estimate the average treatment effect. Therefore, the first empirical strategy we used to

identify the effects of the letter on the diesel tax credit claims by the firms is to estimate a difference in difference impact between control and treatment groups considering the selection process implemented by the IRS to choose the "treated" firms. The selection equation is, therefore, estimated considering the change in the amount of tax credit claimed by each firm between 2002 and 2001.

Let T_i=1,0 indicate if the firm was notified, A_i=1,0 indicate if the observation is before or after the letter was send, Y_i the diesel tax credit (the outcome of interest) and X_i a set of firm i characteristics, then the empirical specification is:

$$T_i = \theta + \sigma \Delta credit_i + \mu_i$$

$$Y_i = \alpha + \beta T_i * A_i + \gamma_1 T_i + \gamma_2 A_i + \gamma_3 X_i + \lambda IMR_i + \varepsilon_i$$

The identification assumption under this first approach is that notified and not notified firms have a parallel trend on their diesel tax credits (Y_i). The second approach consists of finding a comparison group similar in observables characteristics, with a propensity score matching.

5. Results

As a benchmark case, we estimated first the impact of the letter using the panel of firms with random effects (a Hausman test does not reject random effects with respect to fixed effects). Table 3 shows the results of the benchmark case. The variable letter is a dummy equal to 1 for the firms receiving the first letter from the IRS, the variable After Letter is a dummy equal to 1 for the months after the letter was sent, and the variable Letter*After Letter is the interaction of the two variables whose coefficient represents therefore a difference in difference estimator. The first column show the results of the estimation without considering additional controls; the second column shows the results adding monthly and year dummies; and the third column shows the results of the regression including several firm's characteristics as explanatory variables.[12] The difference in difference estimator shows consistently a statistically significant decrease of around 19% in tax credit claims by the treated firms after receiving the letter.

[12] Additionally, model (3) was also estimated using Jacknife to address the potential existence of outliers driving the results, but the results were almost identical.

Table 3: Random Effects Panel

	(1)	(2)	(3)
Log Diesel Tax Credit			
Notification	3.064***	3.064***	1.678***
	(0.133)	(0.133)	(0.109)
After Letter	0.200***	-0.0579**	-0.0585**
	(0.00580)	(0.0193)	(0.0193)
Notification*After Letter	-0.191***	-0.191***	-0.191***
	(0.0283)	(0.0274)	(0.0274)
Number Activities			0.0531***
			(0.0127)
Commerce			-0.0375
			(0.0840)
Manufacturing			0.0940
			(0.0618)
Construction			0.217**
			(0.0827)
Small Firm			-1.871***
			(0.0717)
Medium Firm			-0.777***
			(0.0759)
Age between 2 and 4			-0.0542
			(0.180)
Age between 5 and 6			0.115
			(0.181)
Age between 7 and 10			-0.00643
			(0.181)
Older than 10			0.0602
			(0.174)
VAT reported (log)			0.00455***
			(0.000569)
Accrual Accounting			0.372***
			(0.0824)
Presumptive Tax			-0.339***
			(0.0899)
Constant	11.80***	11.37***	12.40***
	(0.0273)	(0.0326)	(0.210)
Montrly Dummies	No	Yes	Yes
Year Dummies	No	Yes	Yes
Observations	45752	45752	45733
R2	0.155	0.164	0.464
Wald	1701.9	4801.4	6969.7

Standard errors in parentheses * p<0.05 ** p<0.01 *** p<0.001

Table 4 shows the results of estimating the same equation as in the benchmark case, but considering the non-random selection of firms, estimating for this purpose a selection equation first. As before, the first column shows the results of the estimation without any controls; the second column includes months and year dummies in the regression; and the last column includes firms' characteristics.[13] The difference-in-difference estimator shows again a significant impact of the letter on diesel tax credit claims. On average, the letter had the impact of reducing the amount of credits reported by the treated firms in 16%. This result is quite robust to the different specifications and is not quite different than the one obtained using random effects panel.

It is also important to highlight in the results that the amount of tax credits claimed by firms is increasing with the number of different economic sector in which firms report activities, showing that it is probably easier to evade taxes for multi-sector firms. Additionally, firms using accrual tax regimes also report larger amounts of diesel tax credits.

[13] As before, model (3) was also estimated using Jacknife to address the potential existence of outliers driving the results, but the results were again almost identical.

Table 4: Heckman Selection

	(1)	(2)	(3)
Log Diesel Tax Credit			
After Letter	0.199***	-0.0592**	-0.0595**
	(0.00496)	(0.0213)	(0.0200)
Notification*After Letter	-0.159***	-0.161***	-0.168***
	(0.0329)	(0.0294)	(0.0275)
Number Activities			0.0539***
			(0.00139)
Commerce			-0.0109
			(0.0120)
Manufacturing			0.0241***
			(0.00652)
Construction			0.365***
			(0.0103)
Small Firm			-2.043***
			(0.00880)
Medium Firm			-0.883***
			(0.00964)
Age between 2 and 4			-0.0304
			(0.0274)
Age between 5 and 6			0.135***
			(0.0277)
Age between 7 and 10			0.0195
			(0.0263)
Older than 10			0.0777**
			(0.0266)
VAT reported (log)			0.00461***
			(0.000567)
Accrual Accounting			0.386***
			(0.0117)
Presumptive Tax			-0.331***
			(0.0120)
Constant	17.98***	17.55***	16.46***
	(0.0413)	(0.0555)	(0.0604)
Letter			
Diff. Diesel Tax Credit 2002-2001	1.17E-09	1.17E-09	1.17E-09
	(1.27E-10)	(1.27E-10)	(1.27E-10)
Lambda (Inverse Mills)	-2.753***	-2.754***	-1.772***
	(0.0185)	(0.0229)	(0.0198)
Montly Dummies	No	Yes	Yes
Year Dummies	No	Yes	Yes
Observations	45752	45752	45733
R2	0.0676	0.0758	0.451
Wald	31946.0	31237.3	292987.1

Standard errors in parentheses * p<0.05 ** p<0.01 *** p<0.001

As a second empirical approach to identify the effects of the letter sent by the IRS, we constructed an artificial control group using propensity score matching. Table 5 shows the results of the matching estimation using the Kernel and the Nearest Neighbor estimators. In both cases, the results show a statistically significant impact of the letter in reducing the average amount of diesel tax credits claim by the "treated" firms even though the magnitude differ somewhat importantly. The Kernel estimator shows a 16.5% reduction in the tax credits claim while the Nearest Neighbor estimator shows a 15% reduction, a bit smaller magnitudes than the previous results.

Table 5: Propensity Score Matching

	Kernel	Nearest Neighbord
ATT	-0.165	-0.1489
	(0.036)	(0.068)

6. Conclusion

A differential diesel tax treatment in Chile creates incentives for firms to use "tax exempted" diesel in activities requiring "non tax exempted" diesel. This might be particularly easy to do for multi-products firms using diesel for several activities, allowing them to evade diesel taxes by claiming a larger tax credit than the legally allowed.

In an attempt to reduce potential evasion of diesel taxes and improve tax enforcement, the Chilean IRS sent a letter to some firms asking to voluntarily report more details of every diesel transaction during the last year. In this work we evaluate the impact of the letter on firms' behavior. The results show a significant impact of the letter sent by the IRS in reducing the amount of tax credits claimed by firms. On average, treated firms reduce their tax credits claims by around 16% after receiving the letter. The results are consistent with other results in the literature showing that just receiving a letter from the IRS has an impact on tax compliance because it causes a substantial increase in the perceived detection risk (Fellner et al (op.cit.)). In that sense, the results show that the IRS in Chile can successfully reduce diesel tax evasion by affecting firms' perceived cost on non-compliance. It would be important to consider in future research what happens in the long run. It could be possible

that future letters would not have the same effect or even that the effect of the letter fades out in time and firms go back to the over-reporting practice.

Future work includes analyzing the impact of the letter in the intensive margin and studying the existence of differential trends across different types of firms.

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APPENDIX

Tables A1, A2, and A3 show frequency statistics of the data based on some of the most relevant firm's characteristics, separating the sample between firms receiving the letter and not. The first two rows show the total number and fraction of firms by firm size for those not receiving it, the second two rows show the same information for firms that did receive the letter.

As we can see in the tables that firms that received the letter are older, (64% have more than 10 years compared to 57.9% of not audited), are more concentrated in construction and commerce and are mostly big firms (65.4% of audited firms are "big", compared to 11.3% of non audited firms).[14]

Table A1: Firm Size by Treatment Status

	Size (sales)			
	Small	Medium	Large	Total
Not Notified	1.620	427	260	2.307
	70,2	18,5	11,3	100
Notified	5	30	66	101
	5,0	29,7	65,4	100
Total	1.625	457	326	2.408
	67,5	19,0	13,5	100

Table A2: Economic Sector by Treatment Status

	Economic Sector				
	Transport	Manufacturing	Construction	Commerce	Total
Not Notified	1.638	354	159	156	2.307
	71,0	15,3	6,9	6,8	100
Notified	35	18	33	15	101
	34,7	17,8	32,7	14,9	100
Total	1.673	372	192	171	2.408
	69,5	15,5	8,0	7,1	100

[14] In some other dimensions the two groups of firms are not too different, for example 36.6% of the firms to which the letter was sent have only one economic activity and 55% are more than 10 years old, compared to 39.9% and 52% among the firms not receiving the letter respectively.

Table A3: Firm Age by Treatment Status

	Age in Years					
	0-2	2-5	5-7	7-10	10+	Total
Not Notified	34	337	281	318	1.336	2.306
	1,5	14,6	12,2	13,8	57,9	100
Notified	0	16	9	11	65	101
	0,0	15,8	8,9	10,9	64,4	100
Total	34	353	290	329	1.401	2.407
	1,4	14,7	12,1	13,7	58,2	100