Estimates of the Displacement Deadweight Loss from Tax Evasion: A Firm Survey Approach using Data from the Czech Republic[1]

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In the presence of an underground economy taxes give rise to a deadweight loss from displacement of efficient producers by inefficient producers. We consider an economy in which a producer faces two types of costs: the cost of production, and taxes. If the ability to evade taxes is inversely proportional to the ability to keep production costs down, high tax rates may cause inefficient producers to crowd out efficient producers. We estimate this deadweight loss from a survey of one hundred and seven Czech firms taken in 2004. We find that the deadweight loss due to this crowding out rises exponentially with the tax. Our paper provides the first estimates ever of the displacement loss from tax evasion as elaborated by Palda (1998, 2000a, 2000b, 2001, 2002).

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JEL Classification: H26, H43, K42, O17

Shell Brasil, the Brazilian subsidiary of the Anglo-Dutch oil group, is to sell 285 service stations and six fuel deposits to Agip do Brasil, the local subsidiary of Eni, the Italian group. Shell said the move was part of efforts to concentrate on the most profitable parts of its business in Brazil, but it is understood to have sold the stations, in remote central and western regions of the country, after failing to compete with smaller distributors undercutting bigger companies by evading taxes.
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1. Introduction

The present paper seeks to estimate the deadweight loss from the displacement of efficient producers by efficient tax evaders using a survey of 107 Czech firms taken in 2004. Uneven enforcement of taxes creates an uneven playing field on which inefficient producers with a willingness and ability to evade taxes can oust honest, efficient producers from the market. The difference between the costs of the surviving evaders and what costs would have been without evasion is the "displacement" loss from tax evasion. We put the term displacement in quotation marks because it is a term new to economics. Public finance theorists have ignored displacement loss, or have hurried past it, sprinkling but a few words of warning. Vito Tanzi (1982, p.88) is one of the few economists to have noticed that "untaxed underground activities will compete with taxed, legal ones and will succeed in attracting resources even though these activities may be less productive...There will of course be significant welfare losses associated with this transfer." Jonathan Kesselman (1997, p.300) made a related point: "If pure tax evasion is concentrated in particular industries or sectors it will raise net returns from activities in those sectors, and this will in turn tend to expand those sectors and their products as against the efficient pattern arising with uniform compliance."

In a series of papers and in a book Palda (1998, 2000a, 2000b, 2001, 2002) examined the circumstances under which a displacement loss from uneven enforcement of taxes arises. The amount of loss depends on how closely tied are a firm's productive efficiency and evasive ability. If efficient producers are honest tax payers and inefficient producers are dishonest, then a rise in taxes creates a climate that favors the survival of tax evaders above the survival of firms with low production costs. The less related are

productive efficiency and honesty, the lower is this cost. When productive efficiency and honesty go hand-in-hand, displacement losses tend to be high. Using a simple model of profit maximizing firms he showed how displacement losses from the tax tend to rise as the correlation between honesty and efficiency rises. Crucial to his results were the type of correlation assumed to exist in the industry between productive and evasive abilities. What his work lacked was a conception of what this correlation might be.

Palda relied exclusively on simulations to get an estimate of the deadweight loss of tax evasion. His conclusions did not follow from data. The present paper takes as its basis Palda's framework and uses a survey of firms to calculate the displacement loss from evasion. We recapitulate Palda's work to show that displacement loss depends on two fundamental variables: a range of firm efficiency in production and a range of firm efficiency in tax evasion. If we know how firms are distributed along these two axes we can venture an educated guess of the displacement loss from tax evasion by weighting this distribution with the costs of surviving firms and subtracting this cost from the hypothetical cost of firms if there were no evasion.

To get an idea of the joint distribution of evasive and productive abilities we asked firms two sets of questions. First we wanted their general opinions about who are the firms evading taxes in their industry and whether these firms posed a threat to the survival of tax-paying firms. A strong majority of firms (82.2%) believed tax evaders undercut their businesses. While 66.4% of respondents believed there was a relation between whether a firm evaded and its efficiency in producing, no consensus emerged

as to whether it was efficient firms who evaded the most or inefficient firms who evaded the most. We might well have been content with the answers to these questions as they rise above anecdotes to give the first statistically reliable indication that tax evasion which varies among firms is a threat to the survival of some.

We can go further than to affirm that tax evasion threatens economic efficiency by using Palda's model of displacement deadweight loss to cull the size of this deadweight loss from answers firms gave us in a second form of questioning. In Palda's efforts at modelling displacement loss, the correlation between evasive and productive abilities was crucial. Palda assumed correlations rather than measuring them. In the present paper we measure these correlations by presenting each firm with a five-by-five matrix which has evasive ability on one axis and productive ability on the other axis. We asked each firm to state what percentage of firms in their industry they believed fell into each of the twenty-five cells of the evasion-productivity matrix. We then gathered the answers of all firms and used these answers to estimate a Lebesgue-type weighting scheme applied to the costs of firms. We then compared these costs to what costs would be in the absence of tax evasion. The difference in the two costs is the displacement loss from tax evasion.

The plan of the present paper is first to present the answers to some general questions we asked firms about the effect of tax evasion by competitors on the survival of firms that do not evade taxes. To date no one has asked such questions, and the only researcher to ponder the size of this effect using circumstantial data is Farrel (2004) who wrote a consultant's report on the underground economy for the McKinsey group. We

then attack the problem of how to translate survey answers into a measure of displacement loss. To this end we present a simple and provisional model of firm survival in an environment of tax evasion. We then filter the answers to our survey questions through this model to arrive at the conclusion that displacement loss can easily reach ten percent of the value of an industry's output. We qualify our results in the conclusion to the paper and point to the direction future research might take.

2. What Firms Think about Tax Evasion

We want to measure how tax evasion may influence industry cost if some evading firms displace firms that evade less or do not evade at all. Only survey data, filtered through a model of industry costs, can provide us with an idea of displacement deadweight loss. Answers to surveys suffer from being subjective. We do not quite know what respondents have in mind when answering questions. We are forced to rely on a survey because objective data are not available on the distribution of evasive and productive talents.

The first questions firms answered gave us an impression of whether they believe tax evasion hurts industry efficiency. In telephone interviews, the survey firm *Median* asked firm representatives a number of simple questions about what they believed was the efficiency and evasive proclivity of other firms in their industry. What we mean by "representative" is summarized in Table 1.

Table 1: Who Answered our Survey

Working position	Frequency	Percent	Cumulative
Company owner	66	61.7	61.7
Director of the company/division	7	6.5	68.2
Manager with subordinate departments	34	31.8	100.0
TOTAL	107	100.0	

Table 1 indicates that 74% of respondents (of which there were 107) were among the most senior of company representatives. These representatives gave some of the following impressions about firm efficiency and evasion in the Czech Republic.

Table 2: Spread of Productive Efficiency of Firms
Question: "How big are the differences in productivity of companies in your line of business?"

Differences in productivity	Frequency	Percent	Cumulative
Very big	13	12.2	12.2
Rather big	34	31.8	44.0
Big	24	22.4	66.4
Rather small	29	27.1	93.5
Small	7	6.5	100.0
TOTAL	107	100.0	

No definite impression of the spread of productive efficiency can be garnered from Table 2. Such uncertainty suggests an almost uniform distribution of productive talents. A large spread in productive efficiency could be one half of the picture of a joint efficiency-evasion distribution which raises the specter of large deadweight

displacement costs. As far as the question posed in Table 2 is concerned, no such specter raises its head.

A common conviction among researchers who believe in displacement deadweight loss is that small firms are inefficient and resort to tax evasion to outcompete large firms. Table 3 gives little support to this notion. Small firms do not seem more likely to evade than large firms. In fact, there is a bias in Table 3 towards the argument that large firms are the biggest evaders. The questions we posed were not subtle enough to discern what percentage of its revenues a firm evaded, so we must regard Table 3 cautiously.

Table 3: Efficiency in Production vs. Firm Size
Question: "Which companies tend to evade paying taxes?"

Which companies evade taxes	Frequency	Percent	Cumulative
Definitely big companies	14	13.1	13.1
Rather big companies	31	29.0	42.1
No difference between big and small companies	50	46.7	88.8
Rather small companies	9	8.4	97.2
Definitely small companies	3	2.8	100.0
TOTAL	107	100.0	

Table 4 is perhaps the most percussive in the series of tables we have presented so far. Fully 88% of firms believed that firms that evade taxes are a threat to their existence. We might surmise from this answer that perhaps 12% of firms evade taxes, a result not out of line with many "macro" estimates of tax evasion. We are not concerned with measuring the extent of evasion in the present paper but rather in measuring evasion's

effect on deadweight loss. Table 4 gives very strong support to the notion that tax evasion is a threat to the survival of most firms.

Table 4: Are Evading Firms a Threat to Honest Firms?
Question: "Do you agree with the opinion that companies that evade paying taxes threaten your business?"

Are evading firms a threat to honest firms?	Frequency	Percent	Cumulative
Definitely agree	55	51.4	51.4
Rather agree	33	30.8	82.2
Neither agree nor disagree	7	6.6	88.8
Rather disagree	8	7.5	96.3
Definitely disagree	4	3.7	100.0
TOTAL	107	100.0	

Tables 5a and 5b give a more immediate sense of displacement loss than do the tables that precede them. Table 5a suggests that firms overwhelmingly believe that tax evasion and productive efficiency are related. Just what this relation might be is undercut by the results of Table 5b. If we infer the distribution of abilities from the distribution of *opinions* about ability, Table 5b suggests a joint normal distribution of opinions on the relation between productive efficiency and evasion. We would very much like to discover a knockout blow that shows that the least productive firms evade the most. This would amplify our results on the displacement deadweight losses from tax evasion. Tables 5a and 5b deliver no such knockout blow. We do not find this disconcerting, because we do not seek to champion the notion that displacement loss is large but rather to measure it.

Table 5a: Is There a Relation Between Productive Efficiency and Evasive Ability?
Question: "Is there any relation between evasion of paying taxes and efficiency of the company?"

Are evading firms a threat to honest firms?	Frequency	Percent	Cumulative
Definitely yes	16	15.0	15.0
Rather yes	55	51.4	66.4
Rather no	29	27.1	93.5
Definitely no	7	6.5	100.0
TOTAL	107	100.0	

Table 5b: What is the Extent of the Relation between Productive Efficiency and Evasive Ability?
Question: "What is the relation between evasion of paying taxes and efficiency of the company?"

Relation between tax evasion and efficiency	Frequency	Percent	Cumulative
Definitely positive	6	8.5	8.5
Rather positive	29	40.8	49.3
Rather negative	28	39.4	88.7
Definitely negative	8	11.3	100.0
TOTAL	107	100.0	

Table 6 is ancillary to the two tables that precede it and suggests that companies evade taxes to enhance their chance of survival in the market. This is hardly a surprising result but fits in well with the tenor of the present paper's view that tax evasion is a malign factor in the survival of firms.

Table 6: Do Companies Evade Taxes to Survive?

Question: "Do you think that companies try to evade paying taxes because if they pay taxes in full firms will not survive?"

Do companies evade taxes to survive?	Frequency	Percent	Cumulative
Definitely yes	15	14.0	14.0
Rather yes	44	41.1	55.1
Rather no	31	29.0	84.1
Definitely no	17	15.9	100.0
TOTAL	107	100.0	

3. How to Model Displacement Loss

Were this paper to end here it would already have made a contribution to the debate on how tax evasion influences the survival of firms. It is possible to go beyond this laudable, but narrow, objective for research by asking a few more questions. The answers to these questions might allow for a calculation to be made of the economic cost of tax evasion that follows the demise of efficient firms. To see how survey questions might provide the answer to the size of displacement deadweight loss a theory is needed to process survey answers into concrete figures. The theory of displacement loss begins with the works of Palda cited in the references to the present paper, though we are adamant in acknowledging that the idea of displacement loss, not named as such by those who were struck by it, has been around for at least 25 years and that the names Usher (1975) and Tanzi (1982) figure prominently among those who tried to warn readers of its existence.

The strategy of the present paper is to estimate what are the costs of firms under tax evasion and then to compare this cost to what costs would be if firms did not evade taxes. Imagine that survival in the market depends on two parameters *A* and *i*. A is an efficiency parameter indexed on [0,1]. Potential producers are infinite in number, indexed by *A*. *A* is a productivity parameter that differs from firm to firm. Nature grants each firm its *A* by drawing from a distribution *f(A)* along the interval [0,1] with mean μ_A and standard deviation σ_A. We assign the set of producers a measure of one, though we could have assigned them an explicit weight of say *N*. To keep notation simple we avoid making the measure explicit and assume that firms that find it profitable to produce are constrained to producing the identical infinitesimal output *dq* and that the sum of these outputs cannot exceed one. There is also a parameter *i*, indexed on [0,1] that determines how efficient firms are at evading taxes. Putting together these two parameters can yield a cost function for any given firm of

$$C = \frac{1+iT}{A} \tag{1}$$

Unit costs fall as efficiency in production *A* rises and falls as well as efficiency in tax evasion *i* rises. This cost function is not drawn out of thin air, but may be arrived at by assuming a Cobb-Douglas technology as Palda showed in his 2002 paper. Firms pay *w* for a unit of labor and *r* for a unit of capital. Government levies a tax of *T* on the value of each unit of capital and labor the firm employs (*T* may be thought of as unemployment insurance and a capital tax). The costs the firm perceives of hiring labor are *w(1+T)* and its costs of capital are *r(1+T)*. If we assume constant returns to scale and *w=r=.5* then the firm's cost function can be shown to be the one given in equation

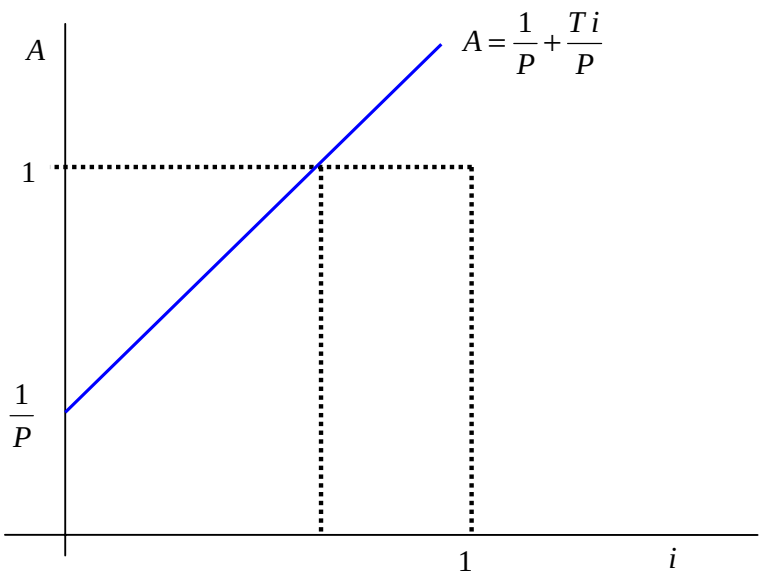
(1). Firms survive if their unit costs are below the price they receive. Put more formally, the proportion of firms that survives is

$$\Pr\left(\frac{1+iT}{A} \leq P\right) \qquad (2)$$

Where Pr denotes proportion and is a double integral bounded over the joint distribution of firms with random A and i for whom costs are less than price.

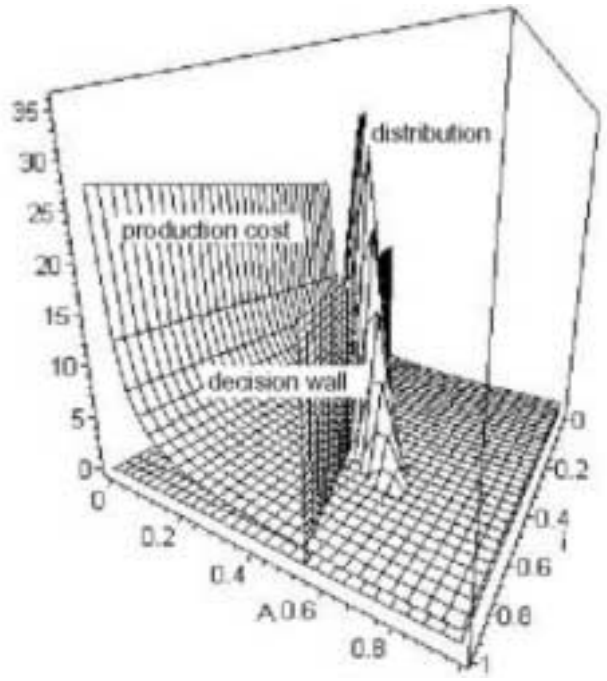
Figure 1 illustrates the conditions under which firms survive.

Figure 1: Survival criterion for firms



Those firms above the line are the ones who survive. One can visualize the iso-levels of probability of a distribution of firms imposed over the above figure or one can try to see things in three dimensions as presented in Figure 2.

Figure 2: A three dimensional representation of Figure 1



Those above the "decision wall" in what we call efficiency-evasion space have unit costs below product price and survive. Those below the decision wall perish. Palda (2002) has provided the calculus for such costs and the interested reader may refer to his work for technical specifics. The gist of his calculus is first to postulate a cost function, then to weight this cost function by those firms above the decision wall when evasion is admitted. Palda then collapses the joint distribution of firms in efficiency-evasion space to get a profile of firms that would survive were there no evasion. He uses this profile to weight a cost function. The difference between aggregate costs under evasion and aggregate costs when there is no evasion, for the same amount produced under no tax evasion, is the displacement deadweight loss from evasion.

4. Link Between a Displacement Loss Model and our Survey

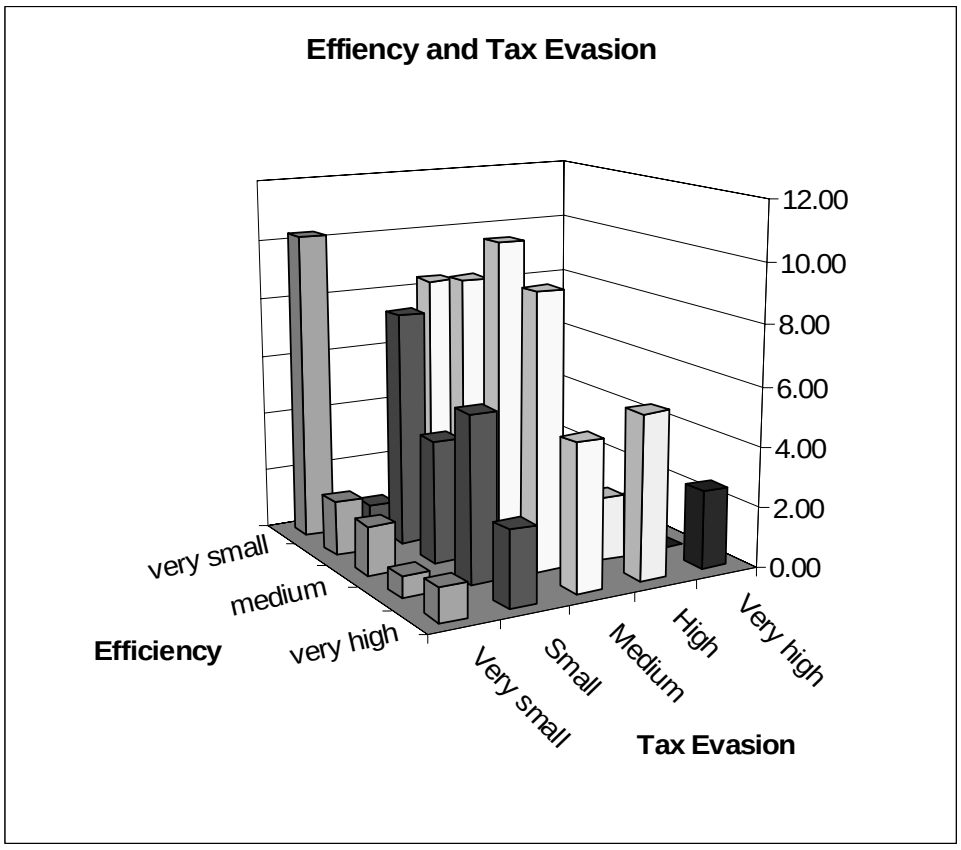
The exercise of the present paper is to compare the costs of firms that survive when evasion is possible to the costs of firms that survive when evasion is excluded, by using real-world data. To perform this exercise we must first calculate the costs of existing firms and compare these costs to what they would be if no one evaded. Calculating costs is a dicey exercise. We have to postulate a cost function. Then we would have to weight this cost function by the number of surviving firms, with knowledge of their efficiency in production and evasion, and compare this to a hypothetical world in which no one evaded. The deadweight displacement loss that would result would seem a pretty tall order.

The question of how big these losses might be outside of theoretical musings has to be addressed empirically. Two sorts of data are needed. First we need to know the cost functions of firms. Then we need to know how firms are distributed in efficiency-evasion space. Of these two necessary sets of data, cost functions are perhaps the most difficult to know and we tackle the problem simply by assuming a Cobb-Douglas function with varying values of its parameters. Economists have at best a fuzzy notion of cost functions. Their lack of knowledge is a blight on the profession, but not one we propose to correct.

Our main contribution in the present paper is to estimate how firms are distributed in efficiency-evasion space. We can get an idea of this distribution by asking firms how they believe other firms are distributed in efficiency-evasion space. We presented each firm with a 5X5 matrix. On one axis was a parameter scaled from one to zero indicating a firm's evasive ability. On the other axis was a parameter scaled from one to zero

indicating a firm's productive efficiency. We asked firms to indicate what percentage of firms in their market fell into each of the twenty-five categories of the matrix. Figure 1 shows the distribution of firm answers weighted to achieve representativity. The answers of each firm were forced to sum to 100% by a Java™ algorithm. Firms answered all questions to the survey (see the appendix for the questions to the survey) by phone but answered the last question on the joint distribution of evasive and productive abilities by entering an internet site that forced their answers to sum to one by not allowing respondents to finish until their answers summed to one. The algorithm designed to achieve such consistency was devised specifically for the purposes of this study by the Czech survey firm *Median*. Figure 3 shows the joint distribution of evasive and productive abilities according to Czech firms.

Figure 3: Joint Distribution of Firm's Evasive and Productive Abilities



The joint distribution illustrated in Figure 3 can in no way be said to correspond to either the normal or uniform distributions which Palda studied. Whatever were Palda's distributional assumptions are of no concern to us. We do not start from any assumption as to the nature of the distribution. We simply seek information on this distribution so that we may use it as a weighting function in our calculations of displacement loss. The above Figure can be summarized as well in the following Table 7:

Table 7: Relationship Between Tax evasion and Production Efficiency

		Low efficiency ⇒ High efficiency					
TAX EVASION		very low (.2)	low (0.4)	medium (.6)	high (.8)	very high (1.0)	TOTAL
High evasion ⇓ Small evasion	very high	0.45	0.09	0.93	0.00	2.63	4.10
	High	5.83	2.56	2.18	2.11	5.48	18.16
	Medium	8.36	8.76	10.38	9.15	4.88	41.53
	Small	0.66	7.81	4.09	5.55	2.50	20.61
	very small	10.28	1.83	1.64	0.75	1.11	15.60
TOTAL		25.57	21.06	19.22	17.56	16.59	100.00

The above table is the matrix we use in weighting the cost functions of firms that survive under alternate assumptions about the prevalence of tax evasion. What exactly must this distribution weight? The answer is that the distribution must weight some cost function that we postulate. As a first pass we take as our cost function the one given in equation (1). This is a "Pablum" cost function. Labor and capital have equal weight as do wages and rents. In future iterations of the present paper we will consider other cost

functions. We suspect that the results we produce will not be much different from the ones in the present paper, as the symmetric nature of the Cobb-Douglas function makes uncorrelated changes in the productivity parameters cancel out. We note that equation (1) are the costs a firm perceives. Its true production costs depend only on the productivity parameter and can easily be shown to be 1/A.

The exercise, as mentioned earlier, is to fix a certain tax T and assume demand to be perfectly elastic so that price is fixed at P. This, along with the criterion that a firm survives if its unit costs are less than price determines the identity of who survives in the market. This number can be counted as the frequencies in the colored cells above the "decision wall" drawn across Table 7. This wall corresponds to a tax of 1 and a price of 2. These numbers have no empirical support and are calibrated simply to show, as a first pass, how displacement loss may be calculated. Total firm production is the frequency of survivors (because we assumed unit production by each firm). This comes to 0.28. Costs when firms evade are the colored cells multiplied by 1 (our arbitrarily chosen measure of firms) over the efficiency parameter corresponding to the column in which that cell is located. Total industry costs are then 0.322. We must compare these costs to costs in a world of no tax evasion. To get these costs we simply add the costs of the most efficient firms that could produce 0.28. This cost comes to 0.318 and can be read off Table 7 by simply taking the most efficient 28% of firms and summing their costs. There is a 1% difference between actual and ideal costs. This difference is the displacement deadweight loss. If we were to increase taxes by 20% we would swing the decision wall upward and produce a displacement loss of 4%. In a series of calculations not shown here we find that as taxes increase linearly, displacement loss increases

exponentially. This is a comforting result that snuggles nicely into the Harberger view of deadweight losses from taxation being a non-linear function of the tax.

5. Conclusion

The present analysis has pursued three interlocking objectives: to survey firms for their general impressions on whether tax evasion by some firms is a threat to the survival of other, possibly more efficient firms; to model the cost to an economy when inefficient firms which evade taxes displace from the market efficient firms which evade less than inefficient firms; to combine this model with firms' opinions on the joint distribution of evasive and productive talents to produce an estimate of "displacement deadweight loss," which is the increased costs from having inefficient firms oust efficient firms from the market.

Our analysis is the first of its kind and as such must be viewed as provisional. We see two important problems that need to be addressed in future research if the concept of an empirically measured displacement deadweight loss is to be taken seriously.

The astute reader will notice a quandary in our formulation of the joint distribution function of firms. We asked existing firms to comment on their view of the market *as it is*. Our theory postulates a distribution over existing and *potential* firms. Nothing says that the existing distribution is the same as the potential distribution. Our analysis assumes both distributions to be the same. Such an assumption is questionable and must be seen as casting a shadow over the validity of our results. Future research must find a theoretical justification for assuming that firm answers about actual joint distributions of

evasive and productive talents are similar to the joint distribution of actual and *potential* firms.

What will also bother most readers is that we seemed to take evasive ability as exogenous. Firms may not be endowed with evasive ability but may decide instead to choose how much they evade. Their choice will depend on a decision function which we have neglected to model. What are the consequences of modelling firm choice remains to be seen and must form a chapter in any further investigations into the measurement of displacement deadweight loss. Such modelling is crucial because it will inform the researcher on how to pose his survey questions.

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APPENDIX

	Questions concerning your company:			*S01*
S01	**Your company conducts business in the area of:**	**Building industry**	1	*S02*
		Wholesale, retail	2	*S02*
		Other	3	*End*
S02	**How many employees does your company have?**	**No employees**	1	REG
		1 – 5 employees	2	
		6 – 24 employees	3	
		25 – 49 employees	4	
		50 – 99 employees	5	
		100 – 499 employees	6	
		500 employees or more	7	
REG	**In which region of the Czech Republic does your company have headquarters?**	Prague	1	*SIZE*
		Middle Bohemia	2	
		South Bohemia	3	
		Pilsen region	4	
		Carlsbad region	5	
		Ústí region	6	
		Libere region	7	
		Hradec Králové region	8	
		Pardubice region	9	
		Vysočina region	10	
		South Moravia	11	
		Olomouc region	12	
		Zlín region	13	
		Moravskoslezský region	14	
SIZE	**How big is the municipality in which there is headquarters of your company?**	Up to 999 inhabitants	1	*S05*
		1000 – 4999 inhabitants	2	
		5000 – 19999 inhabitants	3	
		20000 – 99999 inhabitants	4	
		100000 inhabitants or more	5	

S05	**What is your position in the company?**	**Owner of the company**	1	*A01*
		Director of the company, division, department	2	
		Manager with subordinate departments, divisions	3	
		Other position		*Rule*
Rule	Interview only managers, directors and owners of the company. Otherwise, find relevant person and re-do the interview with him.			
A01	**In your opinion the best Czech companies are, in comparison to the companies in the EU:**	**Highly productive**	1	*A02*
		Rather productive	2	
		Rather unproductive	3	
		Unproductive	4	
A02	**On average, the companies from your branch are, in comparison with the best Czech companies:**	**Highly productive**	1	*A03*
		Rather productive	2	
		Rather unproductive	3	
		Unproductive	4	
A03	**In your opinion, how big are differences in the productivity of companies within your branch:**	**Very significant differences**	1	*A04*
		Big differences	2	
		Rather big differences	3	
		Rather small differences	4	
		Small differences	5	
A04	**Do you think that the tendency to avoid paying taxes is typical for:**	**Big companies**	1	*A05*
		Rather big firms	2	
		Big as well as small firms, the size does not matter	3	
		Rather small firms	4	
		small firms	5	
A05	**Do you agree with the statement that the companies which avoid paying their taxes threaten the existence of the companies that pay their taxes properly?**	**Absolutely, I agree**	1	*A06*
		I rather agree	2	
		Neither agreement, nor disagreement	3	
		I rather disagree	4	
		I disagree	5	

A06	**Do you think that the ability to avoid paying taxes and the efficiency of the company are:**	**Surely related**	1	*A07*
		Rather related	2	
		Rather unrelated	3	*A08*
		Surely unrelated	4	
A07	**The ability to avoid paying taxes and the efficiency of a given company are in your opinion related:**	**Positively**	1	*A08*
		Rather positively	2	
		Rather negatively	3	
		Negatively	4	

A08	**Do you think that the companies in your branch are:**	**Highly efficient**	1	*A09*
		Rather efficient	2	
		Efficient on average	3	
		Rather inefficient	4	
		Inefficient	5	
A09	**Does your company support fairness of business in your branch with respect to the fact that everybody should pay taxes?**	**Definitely yes**	1	*A10*
		Rather yes	2	
		Rather no	3	
		Definitely no	4	
A10	**Do you think that companies try to avoid paying taxes because they do not trust in the quality of services provided by the state that are financed by these taxes?**	**Definitely yes**	1	*A11*
		Rather yes	2	
		Rather no	3	
		Definitely no	4	
A11	**Do you think that companies are trying to avoid taxes because if they pay them, they are not able to survive anymore?**	**Definitely yes**	1	*A12*
		Rather yes	2	
		Rather no	3	
		Definitely no	4	

A12	**Do you think that companies in your branch do avoid paying taxes?**	**Definitely yes**	1	*B01*
		Rather yes	2	
		They avoid it approximately in the same way as in the other branches	3	
		Rather no	4	
		Definitely no	5	

B01. Consider now the situation in your branch and express your opinion concerning the relationship between the efficiency of the companies in your branch and their tax evasion.
Put % (0-100) in the table, the values should sum up to 100%.

How would you divide 100% companies from your branch when considering their efficiency and the level of tax evasion?

What % of firms with ……(read the actual level of efficiency)….efficiency has …..(read the actual level of tax evasion)…..tax evasion?

		EFFICIENCY				
		Low efficiency ⇒ High efficiency				
TAX EVASION		very low	low	medium	high	very high
low tax evasion ⇓ high tax evasion	very low tax evasion	%	%	%	%	%
	low tax evasion	%	%	%	%	%
	medium tax evasion	%	%	%	%	%
	high tax evasion	%	%	%	%	%
	very high tax evasion	%	%	%	%	%

	Additional information concerning your company:			*S03*
S03	**What was the average annual turnover of your company in the last three years?** ***In thousands of Kč:***			*S04*
S04	**Is there a trade union in your organization?**	**Yes**	1	*End*
		No	2	