

Tax or Administrative Burden: A Move Toward Education or Simplification?

Cécile Bazart¹ & Thierry Blayac

Université de Montpellier – UMR LAMETA – FRANCE
VERY PRELIMINARY VERSION – PLEASE DO NOT QUOTE

Abstract

A large literature has been devoted to the analysis of tax compliance mixing theoretical and empirical contributions to end up with a large list of determinants to tax decisions, notably reporting decisions. However, taxation being a social topic, taxpayers' perceptions of the tax system, seen as a wide system of levy and control is a starting point of any questioning on tax legitimacy and relevant tax reforms. From 1990 and the extensive work of Dubergé ([1]), no attention has been paid to French taxpayers' opinion on tax matters. This work was built with the aim to bridge this gap starting from the idea that it was important: (i) to isolate to which determinants French taxpayers were more sensitive, and (ii) to appreciate the validity of their perception. To this purpose we designed, and ran, a comprehensive survey over a representative sample of French taxpayers testing both their tax knowledge and perceptions on a large range of tax aspects.

Keywords: Tax compliance, Tax knowledge, Psychological costs, Simplification

1. Introduction

2 Tax legitimacy is a complex notion. Firstly, taxes are built on a representation
3 principle. Taxes are designed by governments, implemented the tax administration

¹Corresponding Author: Cécile Bazart

Address: Faculté d'Economie – UMR LAMETA – Site de Richter - Avenue Raymond Dugrand – CS79606 – 34960 Montpellier Cedex 2 – France.

Tel.: +33 4 34 43 24 93

Fax: +33 4 34 43 25 62

E-mail: cecile.bazart@lameta.univ-montp1.fr

4 to the benefit of all. This means that legitimacy questions are not restricted to tech-
5 nical choices made in terms of type of taxes, rates and brackets. It is also a matter
6 of tax administration, understood widely as the tax collection organization and con-
7 trol. Finally it involves the perceived counterpart to taxes that is the analysis of how
8 funds collected through are used. In the end, the overall complexity of the topic is
9 inevitable due to the conjunction of its political, economic and social dimensions.

10 The economic literature has initiated the analysis of tax legitimacy by focusing on
11 direct consequences of a diminishing legitimacy of the levy: namely tax evasion. This
12 can be understood looking at the wide nature of what economists call evasion. Effec-
13 tively in economics tax evasion is defined by its consequences in terms of collection
14 without considering the legal or illegal nature of the cause. It thus gathers besides
15 illegal tax evasion: tax planning, tax optimization tax evasion or any type of behav-
16 ior resulting in a decreased tax liability and possibly, in prosecutions and correction.
17 Tax evasion is a gamble since the seminal work of Allingham and Sandmo ([2]). Of
18 course, rapidly, models have differentiated high risk gambles (tax evasion) from low
19 risk one (tax avoidance) and have included the costs incurred to open avoidance or
20 planning opportunities, Alm ([3]). But from the 80s it became clear that portfolio
21 analysis could not help predicting and encompassing the complexity of the tax deci-
22 sion.

23 Alm et al. ([4]) demonstrated that under the threat of current audit policies all
24 taxpayers, if rational in the economic sense, should always declare zero income and
25 evade all their taxes. A shift in tax evasion research occurred hereafter with a rever-
26 sal in the angle of study from tax evasion decision to tax compliance understanding
27 and a methodological enlargement. New tools among which the first econometric
28 studies based on the TCMP in the US, and experimental works explored the newly
29 discovered area of voluntary tax compliance, with more or less success. While the
30 theoretical debate on the impact of the tax burden on tax compliance decision is still
31 an open area of research due to contradicting results, some clear correlations have
32 been isolated. On the one hand, unfairness, complexity of the tax law, a social norm
33 of dishonesty, lack of transparency or a wasteful use of funds levied through taxes de-
34 crease tax compliance. On the other hand, uncertainty (on audit parameters or public
35 goods provided as counterparts), education, direct democracy, rewards of different
36 types increase tax compliance².

37 Nevertheless one should not conclude that any skilled interventions to solve com-
38 plexity of the tax law guarantee more tax compliance. The literature has shown that

²For surveys of these dimensions, see for instance Bazart ([5]) and Alm ([6]).

39 tax practitioners driven by a customers' effect give aggressive advices and work to
40 decrease tax liabilities. Conversely, help and services provided to taxpayers by the
41 tax administration as a positive impact on tax compliance, Alm ([7]). Additionally
42 the study of unfairness impact on evasion has led to various studies depending on
43 the nature on unfairness. For instance, Bazart and Bonein ([8]) compare structural
44 unfairness of the tax system (vertical inequity), from unfairness resulting from dif-
45 ferent opportunities and decisions to evade (Horizontal inequity). Recently, more
46 attention has been paid to procedural unfairness rising from unequal audit experi-
47 ence(see, for instance, Rato and Gemmel [9]). Nothing simple can be proposed to
48 address this complex problem but there is evidence that tax system being different
49 from one country to the other, these theoretical determinants of tax compliance may
50 weight differently in the tax problem.

51 In this paper we aim at tackling this issue by offering a comprehensive survey
52 on French taxpayers' knowledge and perception about taxes. The general aim of
53 this study is to provide a first empirical assessment³ of those theoretical items on
54 compliance to estimate and explain French taxpayers' acceptance of taxation.

55 The paper is organized as follows. Section 2 details the questionnaire structure
56 and its implementation. Section 3 gives insights into our statistical analysis and re-
57 sults. Section 4 concludes.

58 2. SURVEY AND DATA COLLECTION

59 2.1. Questionnaire Structure

60 The questionnaire is built following the main trends and results of the economic
61 and psychological literature. Its framework is organized in 7 parts and in total con-
62 tains 59 items. The first part deals with some elements of fiscal knowledge such
63 as nature of taxes, dominant taxes in the French tax structure, taxes that are the
64 more evaded, overall level of tax levy, and major public goods and services financed
65 through taxes, *etc.*The second part relates to fiscal duties: the psychological costs of
66 tax reporting, the use of tax practitioners, relationships with tax administration. The
67 third part focuses on deterrence, thus on the frequency, the quality and the harshness
68 of audits. Efficiency and equity of the French tax system are tackled in the fourth
69 part of the questionnaire: notions relative to vertical and horizontal equity as well as

³To our knowledge, the work of Dubergé ([1]) is the only and last attempt to assess French Tax-
payers' reaction to taxation. Despite the time lag between our study and that of Dubergé ([1]), the
methodologies used also widely differ.

70 distribution of the tax burden among classes are addressed. Assessment of tax legit-
71 imacy is provided through the prism of social interactions stereotype, scandals and
72 tax morale by means of 6 questions in the fifth part. The seventh part of the question-
73 naire investigates perceptions to alternative and debated reforms of the French fiscal
74 system. This part ends on the issue of simplification asking whether the number of
75 taxes, the tax rates, tax loopholes, the administration of taxation should be reformed
76 first. Finally, the last part lists traditional socio-demographics items relevant in tax
77 concerns such as: household income, gender, age, structure of the household, loca-
78 tion, political allegiance and religious concerns.

79 2.2. *Endogenous and Exogenous Variables*

80 Our econometric model aims to explain French taxpayers's perception of taxes
81 (endogenous variable) using a large set of exogenous variables gathered under seven
82 categories as described above. These explanatory variables are the following:

- 83 • a *Knowledge Index*: Using items of the first part of the questionnaire, we build a
84 specific index that aggregates the answers to ten general questions about French
85 taxation. This *Knowledge Index* can vary from 0 to 100, and can be interpreted as
86 a percentage of right answers (see below for more details);
- 87 • a variable named *Motivation*: this qualitative variable captures intrinsic or ex-
88 trinsic motivations to pay taxes. In line with the literature, five categories were
89 identified: the sense of civic duty, redistribution considerations, public goods
90 provision, fear of audits and prosecutions, and tax moral;
- 91 • a *Rejection Motives* variable: this a qualitative variable with eight categories that
92 gives the first difficulty encountered by taxpayers while fulfilling their fiscal du-
93 ties. Tax burden, tax law complexity, numerous changes, administrative com-
94 plexity, no transparency in the use, fear of audits, lack of help, suspicious cli-
95 mate;
- 96 • a variable untitled *Extent of rejection*: as people were asked whereas fulfilling
97 fiscal duties was a formality, reasonable worry, serious worry or real chore;
- 98 • an *Equity Perception* variable applied to the tax system as a whole: the rating
99 was handled using a ten point scale from Perfect Equity (10) to Total Inequity
100 (1);

- 101 • a variable called *Complexity*: the subject had to point the core reform to simplify
102 the tax system. Propositions were reduce the number of existing taxes, tax rates,
103 administrative processes or tax loopholes;
- 104 • a variable called *Liquidation*: we distinguished three categories : real cost decla-
105 ration, flat tax and both;
- 106 • the *Net Monthly income of household*: eleven categories were initially distinguished
107 from less than €450 to more than €7500. This qualitative variable has been
108 turned into a quantitative one by substituting the class center for each income
109 range. We used the square value of the variable to isolate potential threshold
110 effect in the tax burden ;
- 111 • a variable named *Religious Believes*: a dummy variable (Yes/No);
- 112 • a *Political Wing* variable: five categories are identified from Extreme left wing to
113 Extreme right wing.

114 2.3. Subjects and Sample Description

115 The sample was built hiring the services of Survey Sampling International Inc.,
116 to guarantee its representativeness. The sampling method used is the quota method
117 based on the following criteria: gender, age, geographical location (5 areas: Paris
118 region, North West, North East, South West and South East of France) and socio-
119 professional categories. Data collection was implemented by the use of online survey
120 thanks to the LimeSurvey software. This step of the survey occurred from January,
121 the 29 to February, the 8 of 2015. Overall, 1094 questionnaires were collected. The
122 socio-demographic characteristics of the sample are provided in Table 1⁴.

123 3. Results

124 In this section, we provide a twofold analysis. First, we draw a general picture
125 using descriptive statistics on each part on the questionnaire. Second, we used an
126 econometric analysis of taxpayers perceptions about the tax burden by means of bi-
127 nomial logit regression.

⁴The quota's criteria targeted are specified in brackets

Table 1: Sample descriptive characteristics

Variable	Frequency (%)	Variable	Frequency (%)
Age		Location	
18 to 24	10.51 [14]	Paris Area	18.24 [19]
25 to 39	31.99 [31]	North West	23.52 [23]
40 to 49	23.49 [22]	North East	22.87 [23]
50 to 65	32.08 [32]	South West	11.48 [11]
Above 65	1.92 [1]	South East	23.8 [24]
Gender		Children	
Male	50.56 [49.5]	Yes	56.48
Female	49.44 [50.5]	No	43.52
Income		Education	
Below 450 €	5.09	Certificat d'étude	2.59
451 € to 600 €	3.70	BEPC	3.70
601 € to 750 €	2.31	CAP-BEP	15.09
751 € to 1000 €	6.57	Baccalauréat	23.70
1001 € to 1500 €	15.83	Licence	32.31
1501 € to 2000 €	16.02	Master	19.63
2001 € to 3000 €	23.06	PhD	1.76
3001 € to 4500 €	17.13	Other	1.20
4501 € to 6000 €	6.76	Religious believe	
6001 € to 7500 €	2.04	Yes	42.04
Above 7500 €	1.48	No	57.96
Political allegiance		Socio-professional categories	
Extreme left-wing	6.30	Upper class	30.56 [34]
Left-wing	30.83	Lower class	42.13 [30]
Centre	30.56	Inactive	27.31 [36]
Right-wing	21.94		
Extreme right-wing	10.37		

128 3.1. French taxpayers and taxes: the general picture

129 French taxpayers have a very limited knowledge of the French tax system as their
130 average *Knowledge Index* is about 33.4%, with a standard deviation around 14. The
131 range of the *Knowledge Index* stands from 0 to 80. The French tax system is perceived
132 by taxpayers as unfair since the average *Equity Perception* is about 4.11 on a ten point
133 scale. The average *Monthly Net income of Household* is €2408, with a standard devi-
134 ation of 1578. This corresponds to a yearly taxable income of €14081 by fiscal part.
135 They declare that they are subject to lump sum taxes (44%), and to real expenses
136 (41%). To the question, « Do you feel that you are paying too many taxes? », in-
137 dividuals responded positively in 77% of the cases. They also report paying taxes
138 because it is a civic duty (45%), because it finances goods and services that benefit to
139 all (25%), because they are afraid of being controlled and paying penalties (14%) or
140 also because cheating is immoral (10%). The redistributive aspect of the tax system
141 is only mentioned in 6% of the cases. As for the variable *Rejection Motives*, the tax
142 liability is mentioned in 28% of responses while the tax law complexity is evoked for
143 21% of individuals, following by numerous reforms (13%), lack of transparency on
144 the uses of taxes (11%) and complexity of administrative processes (10%). Regard-
145 ing the simplification of the French tax system, taxpayers prefer mainly two ways:
146 reducing the number of taxes (47%) and reducing the number of rates for income tax
147 (24%). It should also be noted that fulfilling fiscal duties is perceived as a formality by
148 45% of individuals, following by a reasonable worry (23%), a real chore (23%) and a
149 serious worry (9%). Moreover, individuals declare that they have political ideas close
150 to those of the extreme left wing (6%), left wing (31%), center (31%), right wing (22%)
151 and extreme right wing (10%). Finally, religious beliefs are reported by 42% of the
152 respondents.

153 3.2. Determinants of tax burden perception

154 3.2.1. Econometric modeling

155 In order to identify the main determinants of French taxpayers perception of taxes,
156 we estimate a binary logit model. Indeed, we model the probability that a given tax-
157 payer has the feeling of paying too many taxes. This feeling was measured using a
158 dichotomous variable (Yes/No) in the questionnaire survey. Therefore, the endoge-
159 nous variable takes the following form:

$$y_i = \begin{cases} 1 & \text{if the } i\text{-th individual has the feeling of paying too many taxes} \\ 0 & \text{otherwise.} \end{cases} \quad (1)$$

160 A latent variable Z_i is then defined which takes the following form for a given
 161 taxpayer i :

$$Z_i = X_i\beta + u_i \quad \forall i = 1, \dots, N \quad (2)$$

162 expression in which X_i is a vector of explanatory variables, β a vector of coefficients
 163 to be estimated and u_i is a random term. If we assume that this random term is
 164 distributed according to a logistic law of zero mean and variance equal to $\pi^2/3$, then
 165 the expression of the probability that a given taxpayer has the feeling of paying too
 166 many taxes is provided by the following simple form:

$$Prob\{y_i = 1\} = \frac{\exp(Z_i)}{1 + \exp(Z_i)} \quad (3)$$

167 More precisely, in our study, the latent equation incorporates the exogenous vari-
 168 ables presented in section 2.2⁵. So, we get:

$$Z_i = \beta_0 + \beta_1.KI_i + \beta_2.INC_i + \beta_3.SQINC + \beta_4.EQTY_i + \beta_{5-8}.MO_i + \beta_{9-15}.REM_i \\ + \beta_{16-18}.EXR_i + \beta_{19-22}.CPLX_i + \beta_{23-24}.LQD_i + \beta_{25}.RB + \beta_{26-29}.PW_i + u_i \quad (4)$$

169 The results of the econometric process are presented in Table 2 and Table 3. The
 170 econometrically modeled probability is the probability of having the feeling of pay-
 171 ing too many taxes⁶. Table 2 provides some information about the statistical quality
 172 of the estimated model while Table 3 gives the estimated coefficients and their signif-
 173 icance. As it can be seen from Table 2, the likelihood ratio test allows us to reject the
 174 null hypothesis of simultaneous nullity of the slope coefficients ($p - value < 0.0001$).
 175 Therefore, the model is globally valid. The *pseudo* - R^2 is equal to 0.190, which is
 176 quite suitable for this type of modeling. In addition, the estimated model accurately
 177 forecasts 79.72% of individual observations, with a greater ease to predict the «Yes»
 178 answer to the question than the «No» answer. Still from a statistical point of view,
 179 we must now consider the significance of the explanatory variables introduced in

⁵For practical considerations, the variable names will be abbreviated in the equations as follows: KI for Knowledge Index, MO for Motivations, REM for Rejection Motives, EXR for Extent of Rejection, EQTY for Equity Perception, CPLX for Complexity, LQD for Liquidation, INC for Net Monthly Income of Household, SQINC for the square of Net Monthly Income of Household, RB for Religious Beliefs and PW for Political Wing.

⁶All estimations were powered by SAS 9.4 software.

180 the model (Table 3). All the quantitative variables introduced are statistically signifi-
 181 cant at least at the 10% level. For the qualitative variables, the Type 3 effects analysis
 182 shows that the latter are also significant at least at the 10% level, even if some cate-
 183 gories are not significant.

Table 2: Goodness of fit

Index	Value	Index	Value
Log Likelihood		Likelihood Ratio Test	
<i>LogL</i>	-470.47	$\chi^2_{95\%}(29ddl)$	220.32
<i>LogL₀</i>	-580.63	<i>p</i> – value	<0.0001
<i>Pseudo – R²</i>	0.190	Proportion Predicted with Succes	
Information Criteria		<i>Overall</i>	79.72%
<i>AIC</i>	1000.93	<i>Yes</i>	94.57%
<i>SC</i>	1150.33	<i>No</i>	30.68%

184 From an economic and psychological point of view, it is interesting to pay atten-
 185 tion to the sign associated with the various explanatory variables during the estima-
 186 tion process. We do this only for statistically significant variables and modalities.
 187 With a positive sign, the *Knowledge Index* variable has a positive impact on the prob-
 188 ability of having the feeling of paying too much tax. This result could appear to be
 189 quite logical given the complexity of the French tax system and the number of direct
 190 and indirect taxes (the French tax burden rate is about 44.5% in 2016). However, in
 191 our sample, individuals have a poor knowledge of the French tax system (the average
 192 of the *Knowledge Index* is only 33.44%), but this variable nevertheless has a positive
 193 impact on the previous probability. The *Net Monthly Income of Household* variable is in
 194 a linear form with a positive sign and in a quadratic form with a negative sign. Such
 195 a configuration reflects the existence of a threshold effect. Thus, in our study, income
 196 has a positive effect on the probability of having the feeling of paying too much tax
 197 up to the €5214 threshold, beyond this threshold, income has a negative effect on this
 198 probability. The *Equity Perception* variable has a negative impact on the probability of
 199 having the feeling of paying too much tax. The more individuals perceive the tax sys-
 200 tem as fair, the more it reduces the feeling of paying too many taxes. Regarding the
 201 qualitative variables introduced in our model, only the statistically significant modal-
 202 ities will be commented in relation with the reference modality. For the *Motivation*,
 203 the sense of civic duty and public goods provision categories decrease the probability

Table 3: Econometric results of the Binary Logit estimation

Variable	Coefficient	p-value
Quantitative Variables		
Intercept	1.0296	0.0758
Knowledge Index	0.0159	0.0083
Net monthly income of household	0.000462	0.0071
Square of net monthly income of household	-4.43E-8	0.0848
Equity perception	-0.2403	<0.0001
Motivation		
Cheating is immoral	Ref.	Ref.
It is a civic duty	-1.3034	0.0006
It benefits to the most disadvantaged	0.0354	0.9453
It finances goods and services that we all benefit	-1.2946	0.0011
I'm afraid of being controlled and having to pay penalties	-0.6674	0.1466
Rejection Motives		
Tax law complexity	Ref.	Ref.
Tax liability	0.7287	0.0025
Lack of transparency on the use of taxes	0.6067	0.0544
Lack of reliable administrative services	0.5546	0.1356
Complexity of administrative procedures	-0.1096	0.6984
Fear of audits	-0.1189	0.7676
Suspicious climate	0.7340	0.0631
Numerous reforms	0.3839	0.1600
Extent of Rejection		
Fulfilling fiscal duties is a formality	Ref.	Ref.
Fulfilling fiscal duties is a reasonable worry	0.4593	0.0234
Fulfilling fiscal duties is a serious worry	0.1521	0.6058
Fulfilling fiscal duties is a real chore	1.2384	<0.0001
Complexity		
Administrative processes	Ref.	Ref.
Number of different taxes	0.8539	0.0004
Number of tax loopholes	0.2650	0.3523
Number of tax rates	0.4701	0.0702
Other	0.7335	0.2888
Liquidation		
Both	Ref.	Ref.
Lump sum taxes	0.5029	0.0412
Real expenses	0.1925	0.4278
Religious Believes		
Yes	Ref.	Ref.
No	-0.3629	0.0337
Political Wing		
	10	
Extreme left wing	-1.0661	0.0014
Left wing	-0.6875	0.0006
Center	Ref.	Ref.
Right wing	0.3964	0.1233
Extreme right wing	0.3673	0.2839

204 of having the feeling of paying too many taxes, with regard to the reference category
 205 *Cheating is immoral*. For the variable *Rejection Motives*, which refers to the difficulties
 206 of fulfilling fiscal duties, all statistically significant categories exert a positive effect
 207 on the feeling of paying too many taxes in relation to the reference category *Tax law*
 208 *complexity*. Thus, the lack of transparency on the use of taxes, the tax liability and
 209 the suspicious climate reinforce the feeling of paying too many taxes. For the *Extent*
 210 *of Rejection* variable, compared to the reference category *Fulfilling fiscal duties is a for-*
 211 *mality*, individuals who state that fulfilling their fiscal duties is a reasonable worry
 212 or a real chore, have a sense of paying too many taxes reinforced. The complexity of
 213 the French tax system also contributes to the feeling of paying too many taxes. This
 214 feeling is largely due to the number of tax rates and number of different taxes. The
 215 type of tax liquidation also has an impact on the probability of having the feeling
 216 of paying to many taxes. Thus taxpayers who opt for a lump sum taxes see their
 217 feeling increased. As might be expected, political orientation plays a major role in
 218 the perception of paying too many taxes. This feeling is diminished for the left wing
 219 and extreme left wing voters. More counter-intuitively, not having religious believes
 220 diminishes this feeling.

221 3.2.2. Economic implications: elasticity and odds ratio

222 In order to illustrate the sensitivity of the probability of having the feeling of pay-
 223 ing too many taxes, we have calculated the elasticities for the quantitative variables
 224 and the odds ratio for the qualitative variables⁷. More precisely, we compute the
 225 elasticity of the probability as follow:

$$\epsilon_{Prob/x_i} = \frac{\partial Prob(y_i = 1)}{\partial x_i} \times \frac{x_i}{Prob(y_i = 1)} \quad (5)$$

226 For qualitative variables, odds ratio are given by:

$$OR_{x_i} = \frac{\frac{Prob(y_i=1/x_i)}{1-Prob(y_i=1/x_i)}}{\frac{Prob(y_i=1/x_{ref.})}{1-Prob(y_i=1/x_{ref.})}} \quad (6)$$

227 The results are provided in Table 4 and Table 5

228 Table 4 highlights the strong elasticity of the feeling of paying too many taxes in
 229 relation to household income. Indeed, for households whose net monthly income is
 230 less than €5214, a 1% increase in their income results in an increase in the probability

⁷Computations are made only for the statistically significant categories.

Table 4: Elasticities of the probability

Variables	Value
Knowledge Index	+0.056
Net Monthly Income of Household	
Income less than €5214 (e.g. 2408)	+4.489
Income more than €5214 (e.g. 6000)	-5.914
Equity Perception	-0.013

231 of feeling that they pay too many taxes of 4.9%. On the other hand, for households
 232 whose income is strictly higher than €5214, a 1% increase in their income results in
 233 a decrease in the previous probability of 5.9%. This result should be compared with
 234 the work of Landais et al. ([10]) which shows that, in practice, the French tax system
 235 is weakly progressive up to the middle class level and is clearly regressive for the
 236 5% of the richest households. In Figure 1, we show the evolution of the probability
 237 of having the feeling of paying too many taxes based on the monthly net income of
 238 the household. The curve obtained is largely compatible with those describing the
 239 evolution of the compulsory levy according to income, as presented in Landais et al
 240 ([10])⁸.

241 Table 5 highlights that for individuals who think that paying taxes is a civic duty,
 242 the relationship between the feeling of paying too many taxes and the feeling of not
 243 paying too much is 4 times lower than for individuals who think that cheating is im-
 244 moral. Similarly, for individuals who think that fulfilling fiscal duties is a real chore,
 245 the relationship between the feeling of paying too many taxes and the feeling of not
 246 paying too much is 3.5 times higher than for individuals who think that fulfilling
 247 fiscal duties is a formality.

248 4. Conclusion

249 This paper indirectly tackles the question of tax compliance and tax legitimacy
 250 in France. We do so by linking theoretical determinants of tax compliance to the
 251 perceived burden of taxes among a representative sample of French taxpayers. Re-
 252 spondents were in fact asked to specify if they had the feeling of paying too much

⁸See <http://www.revolution-fiscale.fr/le-systeme-actuel/un-systeme-regressif>.

Table 5: Odds–Ratio

Variable	Point Estimate	Lower Bound (95% CI)	Upper Bound (95% CI)
Motivation			
Cheating is immoral	Ref.	Ref.	Ref.
It is a civic duty	0.272	0.129	0.570
It finances goods and services that we all benefit	0.274	0.126	0.596
Rejection Motives			
Tax law complexity	Ref.	Ref.	Ref.
Tax liability	2.072	1.293	3.322
Lack of transparency on the use of taxes	1.834	0.988	3.404
Suspicious climate	2.083	0.961	4.519
Extent of Rejection			
Fulfilling fiscal duties is a formality	Ref.	Ref.	
Fulfilling fiscal duties is a reasonable worry	1.583	1.064	2.355
Fulfilling fiscal duties is a real chore	3.450	2.025	5.879
Complexity			
Administrative processes	Ref.	Ref.	
Number of different taxes	2.349	1.468	3.757
Number of tax rates	1.600	0.962	2.662
Liquidation			
Both	Ref.	Ref.	
Lump sum taxes	1.654	1.020	2.680
Religious Believes			
Yes	Ref.	Ref.	
No	0.696	0.498	0.972
Political Wing			
Center	Ref.	Ref.	
Left wing	0.503	0.339	0.745
Extreme left wing	0.344	0.179	0.663

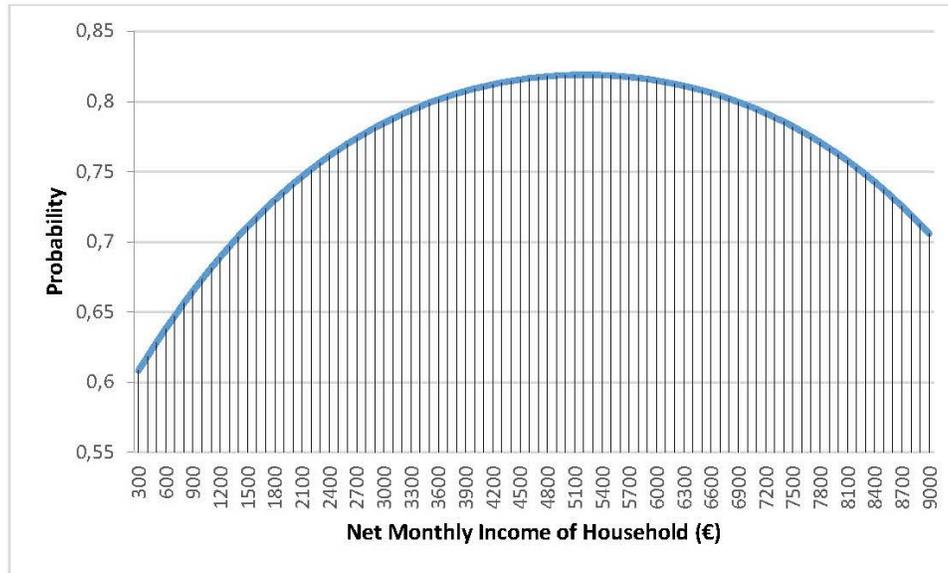


Figure 1: Evolution of the probability of having the feeling of paying to many taxes

253 taxes or not. This endogenous variable is then studied thanks to numerous explana-
 254 tory variables among which some elements of general tax knowledge; a set of pos-
 255 sible motivations to pay taxes; various concrete elements accounting for compliance
 256 costs such as complexity of tax law, perceived compliance costs and fairness of the
 257 system, socio demographic characteristics completed of religious and political con-
 258 siderations. We also introduce an estimate of taxpayers knowledge to enlighten and
 259 discuss relevance of their perception concerning taxes.

260 Our results support the distorting impact of inequity, complexity and high com-
 261 pliance costs on the probability to have the feeling of paying too much tax. Complex-
 262 itys effects are various. The more the calculus of tax liability is complex, the number
 263 of taxes and of tax rates to deal with, the lack of transparency increase the feeling of
 264 paying too much. Tax compliance costs, that is time efforts engaged to fulfill admin-
 265 istrative duties, have a significant negative impact on tax burden perception. Those
 266 who answered that reporting income was a real chore had a higher probability to
 267 perceive the burden as high. . Knowledge and income are also positively related to
 268 the perception of paying too much taxes but this result has to be taken with caution.
 269 Firstly, if knowledge increases the perception to pay too much it has to be mitigated
 270 by the very low knowledge score obtained in our sample. With a level of 33.44%

271 over 100% of knowledge index among our sample we have to recognize that French
272 taxpayers show a low level of understanding of their system, its aim and structure.
273 The analysis of the link between the level of income and the probability of having
274 the feeling to pay too much leads to a curve symmetric with that of Landais, Piketty
275 and Saez (2011). These authors show that the overall burden of taxes and social con-
276 tributions is slightly progressive up to a gross income of 5200 euros and regressive
277 afterward. In our study we show that income has a positive effect on the probability
278 of having the feeling of paying too much tax up to a threshold of 5214 euros of income
279 and, for incomes above this threshold has a negative impact on the probability. As
280 a consequence, perceptions relative to income dont seem to be that much distorted
281 on the income item despite the bad knowledge index. Last, our work concludes on
282 a positive point with 45.16% of the sample ranking the civic sense of duty as the first
283 motivation to pay taxes and 90% of the sample supporting the idea that taxpayers
284 should not cheat while paying taxes there seem to be some room for manoeuver to
285 sustain tax compliance in the long run. Both, the sense of civic duty and the fact to
286 finance goods and services to the benefit of all decrease the probability of paying too
287 much taxes.

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