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Public support for tax policies in COVID-19 times: Evidence from Luxembourg[*]

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Abstract

We study attitudes towards the introduction of hypothetical new taxes to finance the cost of the COVID-19 pandemic. We rely on survey data collected in Luxembourg in 2020. The survey asks for the agreement of respondents over: a one-time net wealth tax, an inheritance tax, a temporary solidarity income tax, and a temporary increase in VAT. All questions include different and randomly assigned tax attributes (tax rates and exemption amounts). We find a clear divide with relatively high support for new wealth and inheritance taxes on the one hand and a low support for increases in VAT and income taxes on the other hand. While 58% of respondents agree or strongly agree with a one-time tax levied on net worth, only 24% are in favor of a small increase in VAT. Support for any tax is however negatively associated with the size of the tax as measured by the predicted revenues. Our results indicate that a one-time wealth tax could raise substantial revenues and still garner public support.

Key words: COVID-19, wealth tax, inheritance tax, income tax, VAT, preference for redistribution

JEL-classification: H2, D31, E62, I38

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1 Introduction

Governments around the globe have taken unprecedented fiscal measures to cope with the economic effects of the COVID-19 pandemic, shifting massive resources towards the health and social security systems, cutting on taxes and contributions, providing direct financial help for the most vulnerable and giving or backing large amount of credit to keep businesses running (Alberola et al., 2020; IMF, 2020b; OECD, 2020; Eurofound, 2020).

The introduction of temporary taxes levied on net wealth stands up as one of the solutions suggested to finance the extraordinary costs of the pandemic. For example, Piketty (2020) mentions that, after the second world war, exceptional taxes were charged on the richer to pay the public debt and could similarly be advocated. Landais et al. (2020) also take inspiration in the post-war experience (particularly in Germany) and propose the introduction of a progressive and temporary wealth tax, which should be European-wide and applied to the net worth of the top 1% richest persons. The International Monetary Fund (IMF) has proposed financing the pandemic costs by applying progressive taxes on the better-off individuals and on those who were less affected by the crisis, including higher taxes on higher income brackets, exclusive property, capital gains, and wealth (IMF, 2020b), and even a 'solidarity surcharge' (IMF, 2020a), as well as changing corporate taxation to tax firms according to their profitability. The United Kingdom established in 2020 the Wealth Tax Commission to assess proposals for a national wealth tax (Advani et al., 2020; Rowlingson et al., 2020). In the United States, leading politicians had already proposed wealth taxes as part of the larger and ongoing debate on how to tackle rising economic inequality (Scheuer and Slemrod, 2021). Moreover, recent literature has highlighted that wealth and inheritance taxes may reduce the inequality equilibrium for the next generation (IMF (2017), Cowell et al. (2019), Berg and Hebous (2021)).

The goal of these proposals is to find alternative revenues to face increasing expenditures in areas like health and social care, and to ease fiscal deficits. However, a key element for the success of the introduction of any new taxes (or the increase in existing taxes) is the support it can garner among the public. Without political feasibility, government tax proposals may fail, particularly in the extraordinary circumstances of the pandemic crisis, with some people and economic sectors much more affected than others. As recently put by the IMF report *A Fair Shot* (IMF, 2021), the rise of taxes and reallocation of spending will "require dialogue with society at large to ensure that policies are aligned with people's preferences. Understanding these preferences, which have likely been affected by the COVID-19 crisis, will be crucial."

Building on this premise, this paper studies public support for wealth taxes and other tax policies in the context of the pandemic. We draw upon a survey run between May and July 2020 in Luxembourg in which participants were invited to express their views about the introduction of new hypothetical personal taxes to cover the anticipated costs arising from the pandemic. The originality of the questionnaire was two-fold. First, respondents were asked about four different *types* of taxes: a one-time wealth tax, a permanent inheritance tax, a temporary increase in

income taxes, and a temporary increase in value-added taxes. Second, some key parameters of the different schedules – tax rates, exemption amounts and duration of the tax – were randomized across respondents. We are therefore able to examine (i) the general support for increased taxation in the face of the pandemic, (ii) preferences over different types of tax instruments, and (iii) preferences over different tax parameters (and notably the overall amount collected).

Our results show a clear divide with support for new wealth and inheritance taxes on the one hand and a low support for increases in existing VAT and income taxes on the other hand. Regardless of the specific tax attributes shown to the respondents, we observe that 58% agree or strongly agree with a one-time tax levied on net worth, but only 24% were in favor of a small increase in VAT. For the wealth and inheritance taxes, the scenarios involving lower exemption amounts and higher marginal tax rates are less popular. Yet, substantial support remains. For example, 75% and 52% of respondents are in favour (agree or strongly agree) of a 0.5% or 2.0% tax rate, respectively, levied on net wealth in excess of EUR 4 million, but the support falls to 38% when the tax rate is 2% and the exception amount is EUR 2 million.

Our findings contribute to the literature investigating preferences for redistribution (Alesina and Giuliano, 2011; Andreoli and Olivera, 2020; Olivera, 2015), particularly to the studies assessing attitudes to tax policy (Stantcheva, 2020; Rowlingson et al., 2020) and feasibility of wealth taxation (Saez and Zucman, 2019; Scheuer and Slemrod, 2021). Closer to our study is the report made by Rowlingson et al. (2020) to measure the attitudes towards the introduction of a wealth tax in the United Kingdom. The authors find that among 5 different types of taxes, 41% of respondents indicated the wealth tax as their preferred option, while 75% of individuals support this tax either as first, second or third option. WID (2021) reports opinion polls showing high support to a wealth tax in USA (64%), Canada (79%) and France (76%). People from Latin American countries – a region badly hit by the COVID-19 pandemic – also express support for introducing a tax on large wealth: Public opinion surveys fielded along 2020 in Argentina, Bolivia, Chile, Ecuador, Mexico and Peru reveal that between 64% and 76% of citizens support the implementation of special taxes on large wealth (CELAG, 2020).[1]

Other recent studies using survey data to assess public attitudes towards redistributive policies in the aftermath of the pandemic are Klemm and Mauro (2021) and Balasundharam and Dabla-Norris (2021). The first one finds that in the United States, people most affected by the pandemic (serious illness or job loss) or who personally know someone who was, express relatively more favourable views for temporary or structural progressive taxation. The second one uses opinion surveys of eleven advanced and emerging market economies and finds that the support for redistributive policies depends on personal experiences, views about the poor, and whether there is a favourable perception of government responses.

The paper is organized as follows. Section 2 presents the data. Section 3 describes the methods. Section 4 provides regression results and discusses their implications for potential

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[1]In December 2020, Argentina implemented a one-off wealth tax, while Bolivia set up a permanent wealth tax. Both countries have already collected revenues for this new tax.

policy implementation. Section 5 concludes.

2   Data

Our analysis draws upon the first wave of the COVID-19 Socio-Economic Impact (SEI) survey run in Luxembourg in 2020 (Dijst et al., 2021). The SEI survey is an online, opt-in survey. Respondents were invited to participate through a nationwide communication campaign launched in social media and in the press by academic institutions and research-funding agencies of Luxembourg. The survey targeted residents of Luxembourg aged 16 and above as well as people working or studying in Luxembourg but residing outside of the country. The first wave of the survey ran between May 27 and July 5 2020.

The sample

The survey covered multiple topics. After a core set of socio-demographic questions participants were randomly assigned to one or two of four modules, covering either employment and living conditions, mobility, health or time use and interactions in the household (see Dijst et al., 2021). Out of an initial number of 7,297 'hits' on the survey web-page, the survey recorded 4,118 entries. Filtering out entries tagged as implausible, incomplete or untrustworthy led to a sample of 3,304 usable entries (see Van Acker and Van Kerm, 2021, for details). For the present analysis we retained therefrom the 2,528 entries from respondents residing in Luxembourg (and therefore potentially impacted by all types of tax policies discussed) and selected the 802 entries that were randomized to answer the module on "employment and living conditions".

As a non-probability sample, no element of the design can guarantee representativity of the survey and we observed, among the usable entries, an over-representation of women, of the highly educated, of people employed, and of individuals between 35 and 50 year old. A set of calibration weights were therefore constructed to match (i) the (joint) distribution of age, gender, education and activity status observed in the 2018 European Union Statistics on Income and Living Conditions (EU-SILC) and (ii) Luxembourg population counts by age and gender as of November 2019 (Van Acker and Van Kerm, 2021).

Variables of interest

As part of the module on "employment and living conditions", participants were asked about their attitudes towards the introduction of new taxes. The framing for these questions was about how acceptable is raising taxes to collect revenues to finance measures supporting the economy and protecting households who have faced income losses. The survey asked for opinions about (i) a one-time net wealth tax, (ii) an inheritance tax, (iii) a temporary solidarity tax on labour income, and (iv) a temporary increase in VAT. This took the form of a 5-level Likert scale

with respondents indicating whether they "strongly disagree", "disagree", "neither agree nor disagree", "agree" or "strongly agree" with the proposed tax schemes.

In each case, parameters of the proposed tax were made explicit, but the value of the parameters were randomized across respondents. Thus, all participants were invited to express their opinion about the four tax proposals but different participants were shown taxes with different parameters. For the wealth tax, these are eight combinations of marginal rates of 0.5%, 1.0%, 1.5% or 2.0% applied to net worth in excess of 2 or 4 million euros. The inheritance tax included 9 scenarios formed by the combination of marginal rates 5.0%, 7.5% or 10.0% applied to inheritances in excess of 1, 2 or 5 million euros. The labour income tax included 9 scenarios formed by the combination of tax rates 1.0%, 2.0% or 3.0% levied during 1, 2 or 3 years. The increase of the VAT (currently 17%) included 9 scenarios formed by the combination of increases of 0.25, 0.5 or 1.0 percentage points levied during 1, 2 or 3 years.

To put these numbers in context, Table 1 shows back-of-the-envelope calculations of the amount of potential revenues that the different tax schedules shown to participants in the survey could approximately collect in 2021 (calculations are detailed in Appendix A). The policy delivering the highest revenues is the introduction of a 2% tax applied to net worth in excess of 2 EUR million. By implementing this policy, the government could collect about 2,295 EUR million (3.6% of GDP), although this tax would only exist for one year.[2] If the exemption amount and tax rate were 4 EUR millions and 2%, the government could raise 1,429 EUR millions (2.3% of GDP). According to the the Eurozone Household Finance and Consumption Survey (HFCS) 2018, about 9% of households hold net worth larger than 2 EUR millions, and about 2.7% have net worth larger than 4 EUR millions (the median and mean were EUR 498,500 and EUR 897,900). Even a less stringent wealth tax policy can produce substantial revenues. For example, a mere tax rate of 0.5% may raise 574 or 357 EUR millions if applied to net worth in excess of 2 or 4 EUR millions, respectively. These simple back-of-the-envelope calculations disregard any potential behavioural response and corresponding changes in the tax base.

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[2]We use data about GDP forecast in Luxembourg from (European Commission, 2020).

Table 1: Expected revenues in 2021 under each hypothetical tax policy (EUR millions)

Wealth tax	Exemption \ tax rate	0.50%	1.00%	1.50%	2.00%
	2 million	574	1,147	1,721	2,295
	4 million	357	714	1,072	1,429
Inheritance tax	Exemption \ tax rate	5.00%	7.50%	10.00%	
	1 million	83	125	167	
	2 million	52	79	105	
	5 million	35	52	70	
Labour income tax	Duration \ tax rate	1.00%	2.00%	3.00%	
	1 year	300	599	899	
VAT	Duration \ tax rate	0.25%	0.50%	1.00%	
	1 year	61	122	244	

Note: See Appendix A for details on the calculation of expected revenues.

Note that Luxembourg currently has no wealth taxes for individuals. Inheritances are not taxed for direct line heirs, i.e. between parents, grandparents, children, and spouses.[3] Other relationships between donors and heirs are taxed at different rates and are increasing in the amount of the inheritance. Inheritance tax revenues are therefore low – 115 EUR millions in 2019, representing about 0.5% of total tax revenues or 0.18% of GDP. Taxes on wage and salaries collected in 2019 amounted to 4,146 EUR millions, while VAT revenues were 3,872 EUR millions, representing 16.6% and 15.5% of total tax revenues (or 6.5% and 6.1% of GDP) respectively.

Covariates

Most of the other variables used in our analysis are self-explanatory. The survey asks respondents to indicate their total monthly household net income by showing seven possible income brackets. To derive a measure of per capita household income, we assigned to these categories the corresponding median income within each bracket obtained from the Luxembourg's EU-SILC survey carried out in 2018. We then divided income values by the number of reported household members. The variable *Luxembourgish* indicates that this is the most common language spoken at home. Note that 48% of residents in Luxembourg are foreigners and few would primarily speak Luxembourgish at home. The variable for lower education indicate primary or lower secondary education, while the variable for higher education indicate any level of tertiary education.

The analysis includes the variable *financial difficulties*, which is a composite index gener-

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[3]However, a tax is levied on the portion of the estate that deviates – at the will of the donor – from the legal inheritance shares corresponding to the heirs.

ated from five questions capturing self-assessed financial difficulties and experienced hardship.[4] Klemm and Mauro (2021) found in a survey of US residents that people who have experienced economic hardship due to the COVID-19 pandemic have relatively more favourable views about implementing temporary progressive taxes or structural progressive tax reforms. In our survey, the individuals respond about how concerned have recently been about social and economic dimensions in a 1-5 Likert scale (from not at all concerned to extremely concerned). Among these dimensions, we consider concerns about the economy in general, social cohesion and the evolution of share prices and other forms of investments. For all these dimensions, we compute a dummy variable taking value 1 if the respondent expressed being extremely concerned, and taking value 0 otherwise.

Table B–1 in the Appendix reports descriptive statistics of all the variables used in the analysis.

3 Methods

With tax characteristics randomized in four hypothetical tax scenarios, our data structure is similar to that of a factorial survey experiment (see, e.g., Auspurg and Hinz, 2014). Accordingly, to assess support for different types of taxes, we estimated three regression models. In the first model, we stacked answers to the four tax questions that were asked to participants and estimated a random effects probit regression of the form

$$\Pr\left[y_{ij} > 3 | Z_i, T_j, R_{ij}\right] = \Phi\left(\alpha + \alpha_i + Z_i\beta + T_j\gamma + \delta R_{ij}\right) \tag{1}$$

where y_{ij} is the support of respondent i for tax type j as reported on the 5-points Likert scale ($y_{ij} > 3$ implies that the individual "agrees" or "strongly agrees" with the proposed tax), Φ is the normal cumulative distribution function, Z_i is a vector of respondent characteristics, $\alpha_i \sim N(0, \sigma_\alpha)$ is a normally distributed individual-specific random effect (reflecting the respondent's propensity to support added taxes generally, irrespective of its type), T_j is a vector of three dummy variables for tax types (wealth tax, inheritance tax or income tax, with VAT tax omitted as reference type) capturing differential support for distinct types of taxes, and R_{ij} represents the expected tax revenues given the parameters of the type j tax presented to respondent i which captures how much the total tax burden influences support for the tax (as shown in Table 1). Recall that each respondent is randomly presented with one of alternative scenarios for each tax type with variations on the tax rate, the exemption amount and/or the duration of the tax. We

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[4]The index is computed with a PCA's first component of the following questions: How well would you say you are managing financially these days? (1-5 scale); In 2020, do you expect to save any of your income regularly?; Since the beginning of the COVID-19 lock-down, have you ever been unable to pay your rent or mortgage?; Since the beginning of the COVID-19 lock-down, have you ever been unable to pay your bills on time?; During the COVID-19 lock-down, did you cancel or postpone any purchase of durable goods (e.g. car, house, computer, etc.)? The index is re-scaled to range from 0 to 1; the larger the index is, the more financial difficulties the individual experienced.

adopt a random effects specification since there is no gain to using a fixed-effect specification for the individual-specific term here: first, all variables in Z_i are invariant across tax type and their impact therefore would not be separately identified from the fixed-effect in a "within" transformation model, and, second, the values of R_{ij} are randomized across respondents and therefore independent by design on any respondent characteristic (observed or unobserved), therefore amenable to random effects assumption. The individual covariates included in Z_i are age, sex, marital status, education, employment status, household per capita income, home ownership status, and speaking Luxembourgish.

In a second specification, we allow total revenues and individual covariates to have different effects on different types of taxes. In particular we want to capture whether the elasticity of support towards taxation with respect to the tax burden varies across tax types. We are also seeking to capture preference heterogeneity across tax types along individual characteristics. To do so, we estimate separate regression equations for each of the four tax types of the form:

$$\Pr\left[y_{ij} > 3 | Z_i, T_j, R_{ij}\right] = \Phi\left(\alpha_j + Z_i\beta_j + \delta_j R_{ij}\right) \tag{2}$$

For completeness, the third specification is similar to specification (2) but includes dummy variables for each possible combinations of tax type and parameters (P_{ij}):

$$\Pr\left[y_{ij} > 3 | Z_i, T_j, P_{ij}\right] = \Phi\left(\alpha_j + Z_i\beta_j + P_{ij}\gamma_j\right). \tag{3}$$

As sensitivity analysis, we also estimated linear models using the original Likert scale of 1-5 points as the dependent variable, and in a subsample obtained by removing individuals answering the neutral category "neither agree nor disagree".

4   Results

4.1   Descriptives

Figure 1 reports the overall support for each tax policy regardless of the specific attributes of the policy. To facilitate comparisons, the figure does not plot the category "neither agree nor disagree", which is chosen by about 13-17% of the respondents for each policy. There is a clear divide between supporting a one-time wealth tax (58.2% agree or strongly agree and 28.3% disagree or strongly disagree) and an inheritance tax (54.7% vs 28.1%) on the one hand, and not supporting an increase neither in income taxes (51% disagree or strongly disagree and 31.2% agree or strongly agree) nor in VAT (70.6% vs 24.0%) on the other hand. Stronger support for wealth taxation could be related to the fact this tax would affect the better-off individuals, i.e. just a share of the population, and hence it can be perceived as fairer than the other taxes levied on almost everyone (labour income tax and VAT). High support for inheritance taxation could be associated with fairness beliefs and perceptions. For example, Fisman et al. (2020) show that

individual support for wealth taxation increases when wealth comes from inheritance rather than own savings; Alesina et al. (2018) show that pessimistic information about intergenerational mobility increases individual support for inheritance taxation; and Bastani and Waldenström (2021) find that informing respondents about the large salience of inherited wealth in the country and its link to equality of opportunity increases support for inheritance taxation.

Figure 1: Support for hypothetical new or increases in personal taxes by tax type
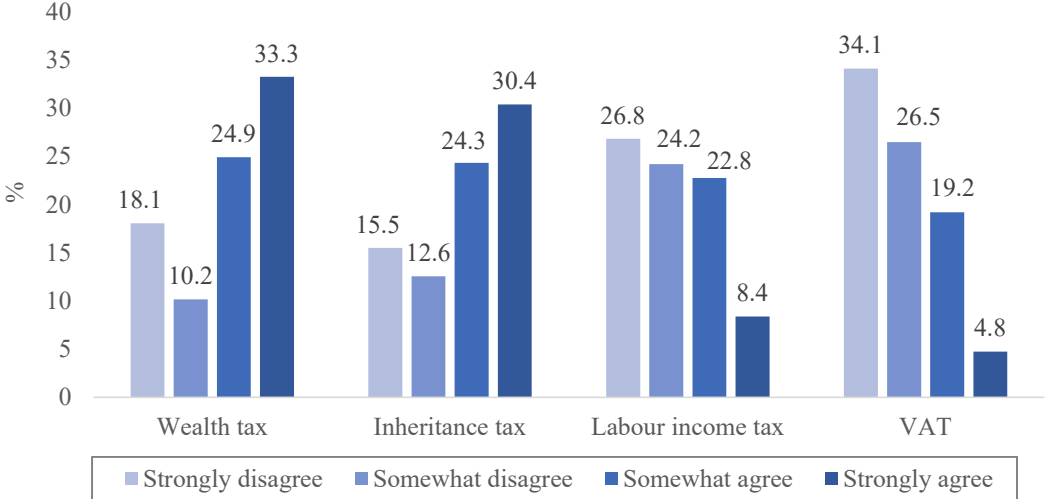
Notes: The graph does not plot the category "Neither agree nor disagree", which is roughly chosen by 13% to 17% of individuals. Pooled answers to tax questions with different parameters. The figures are unconditional statistics and use calibration weights.

Figure 2 reports the support for each policy tax separately by tax parameters. The bars shown with a darker colour indicate the policy scenarios that could potentially raise the highest and lowest revenues. For example, the scenario for the wealth tax (in the upper left panel) reporting more revenues is the one involving a 2% tax rate applied to net worth in excess of 2 EUR million, while the scenario delivering the lowest revenues is the one involving a 0.5% tax rate applied to net worth in excess of 4 EUR million. For inheritance taxation, the corresponding scenarios are a rate of 10% and 5% tax rate applied to inheritances in excess of 1 and 5 EUR millions, respectively. For the other tax policies, the scenarios producing the highest and lowest revenues are evident. We can observe that differences in the support between extreme tax scenarios are significant for wealth and inheritance taxation, but not for the other types of taxes. Although these differences are just based on unconditional proportions (and are not necessarily statistically significant), patterns emerge in the support for tax policies to finance the COVID-19 crisis. Within each tax type, tax parameters leading to the smallest revenues – that is, to the lightest aggregate burden – generally obtain the largest support (the income tax case is the only exception where the smallest revenue scenario comes close second). Similarly, tax parameters leading to the highest revenues receive lowest support in wealth and inheritance taxes. The patterns identified in Figure 1 across tax types persist here: the scenario garnering the least

support in inheritance taxation (46 percent) or in wealth taxation (38 percent) still has more support than any of the income tax or value-added tax scenarios. Differences in support for wealth tax and inheritance tax are not so clear cut and depend on the tax parameters – and similarly for differences between support for income and value-added tax.

Figure 2: Support for hypothetical new or increases in personal taxes by tax type and scenario

2a. Wealth tax

2b. Inheritance tax

2c. Labour income tax

2d. Value-added tax
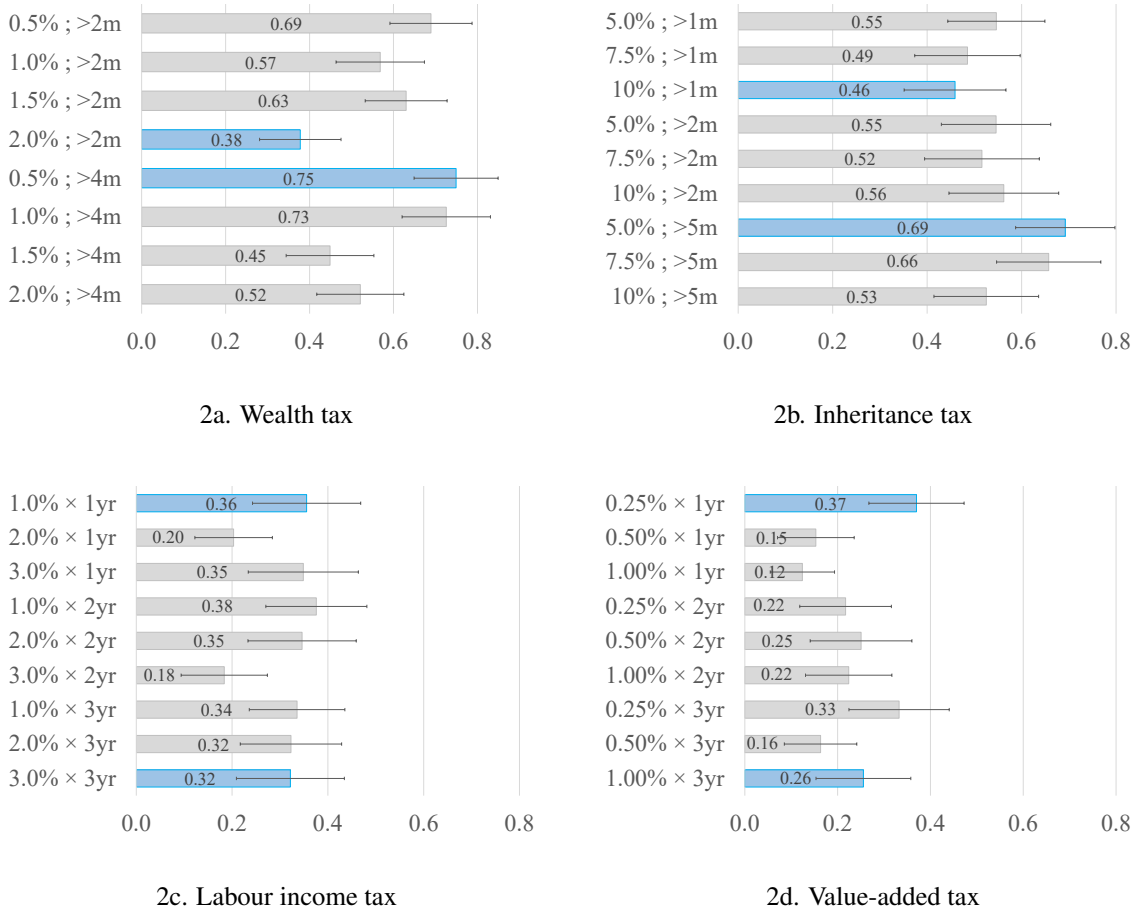
Notes: The graphs plot the share of individuals who answer 'Strongly agree' or 'Agree' in each type of tax policy. The tax policies have specific attributes (tax rate, exemption amount and duration) that were randomized among the respondents. The confidence intervals use 95% confidence level. The bars in darker colour indicate the tax policies that potentially could raise the highest and lowest revenues. The figures are unconditional statistics and use calibration weights.

4.2   Regression analysis

The first column of Table 4 reports parameter estimates for the model presented in equation 1. For ease of interpretation, the table shows marginal effects evaluated at covariate means. The first column reports these marginal effects for the model with the dependent variable that takes value 1 if the individual answers strongly agree or somewhat agree, and it takes value 0 otherwise. As a matter of sensitivity analysis to the definition of the dependent variable, the second column reports the marginal effects of the probit regression model when we remove the individuals who answered the neutral category (neither agree nor disagree). Finally, the third

column reports marginal effects from a linear random-effects regression when the dependent variable is the original Likert scale 1-5.

Regression estimates reveal a clear preference for a wealth tax and then for an inheritance tax, income tax and finally a VAT. The first column of Table 4 reports that the probability of supporting a wealth tax is about 42 p.p. larger than the probability of supporting a consumption tax – controlling for the size of the total revenues. The distance in support for the wealth tax with respect to the support for the income tax is also sizable (26 p.p.). The estimates from the models in columns 2 and 3 confirm these results. Removing the neutral category leads to a larger preference for a wealth tax (45 p.p. larger than the support for a consumption tax). As expected from the descriptive results, the tax scenarios leading to higher revenues have less support. Overall, an increase of 100 million EUR in tax revenues is associated with a reduction in the support for the tax of about 0.6 p.p. In general, tax scenarios with higher revenues imply a larger base of tax-payers (lower exemption rate) or a higher burden (higher tax rate or larger duration of the policy), so that the results could be interpreted as individuals expressing self-interest motivations.

Overall support for the hypothetical taxes does not appear to vary significantly with individuals characteristics. Notably, income is positively related with tax policy support in the first two models. In columns 2 and 3, experiencing financial difficulties is – as expected – negatively related to tax support, while being Luxembourgish is also negatively associated to the support for taxes. Home ownership (an indicator of individual wealth) is negatively associated to tax support, but this is significant only in column 2. If overall support for taxes does not seem to vary much with individual characteristics, self-interest considerations could suggest however that individual characteristics may be more strongly associated with preferences over different types of taxes, rather than with overall support. We return to this point when discussing the other two models in Tables 3 and 4.

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Table 2: Regression estimation of public support for tax policy (Model 1)

Variable	(1) Policy support 0/1		(2) Policy support 0/1		(3) Policy support 1-5	
	mg eff	s.e.	mg eff	s.e.	coeff	s.e.
Policy characteristics:						
wealth tax	0.418***	(0.030)	0.449***	(0.031)	1.363***	(0.087)
inheritance tax	0.346***	(0.023)	0.381***	(0.023)	1.137***	(0.070)
income tax	0.163***	(0.029)	0.161***	(0.031)	0.422***	(0.077)
tax revenues (billions)	-0.063***	(0.020)	-0.060***	(0.021)	-0.184***	(0.054)
Individual characteristics:						
age <40	-0.033	(0.025)	-0.026	(0.027)	-0.075	(0.077)
age 60+	0.074	(0.045)	0.074	(0.048)	0.311**	(0.144)
male	0.009	(0.026)	-0.018	(0.028)	-0.082	(0.085)
married	0.020	(0.025)	0.010	(0.026)	0.037	(0.076)
low education	0.057	(0.039)	0.056	(0.043)	0.147	(0.122)
high education	0.017	(0.028)	-0.013	(0.030)	-0.040	(0.085)
working	-0.008	(0.030)	0.006	(0.031)	0.041	(0.092)
log income	0.065***	(0.024)	0.061**	(0.026)	0.096	(0.077)
financial difficulties	-0.094	(0.061)	-0.148**	(0.065)	-0.423**	(0.193)
home ownership	-0.039	(0.031)	-0.068**	(0.033)	-0.154	(0.095)
luxembourgish	-0.039	(0.025)	-0.058**	(0.027)	-0.195**	(0.079)
constant					1.942***	(0.590)
obs	2475		2106		2475	

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. For model 1, the dependent variable takes value 1 if the individual answers "strongly agree" or "somewhat agree", and it takes value 0 otherwise. For model 2, the neutral category is removed ("neither agree nor disagree"). For model 3, the dependent variable is the original Likert scale 1-5 from "strongly disagree" to "strongly agree". The tax revenue variable is the expected revenue computed for each tax policy scenario showed to the respondent. The variables wealth tax, inheritance tax, and income tax are indicator variables for the type of tax.

Table 3 shows the estimations of equation 2, that is, we run separate regressions for each tax policy and include the amount of tax revenues implied by each tax scenario.[5] Differences emerge regarding the association of tax revenues and tax support across the policies. In terms of the magnitude of variations on the support for tax policies, we observe that an increase of 100 million EUR in tax revenues is associated with a reduction of about 0.7, 13.6, 0.6 and 2.7 p.p. in the support for wealth, inheritance, income and value added taxes, respectively. Recall from Table 1 that tax collection varies greatly among tax policies, with the inheritance tax being the policy collecting less revenues (35-167 million EUR) and the wealth tax being the policy collecting the most (357-2,295 million EUR). Thus, the above mentioned marginal effects must be analysed according to the potential tax revenues. In terms of elasticity (evaluated at the means of tax support and tax revenues for each policy), we obtain that an increase of 1% in the amount of tax revenue leads to a reduction of 0.14%, 0.20%, 0.21%, and 0.35% in the support for wealth, inheritance, income and value added taxes, respectively.

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[5]The values of tax revenues used in the regressions come from Table 1. For the case of the income tax and VAT carried during 2 or 3 years, we multiply the potential tax revenue of one year by 2 and 3, respectively.

Table 3: Regression estimates of public support for tax policies (model 2)

Variable	Wealth tax		Inheritance tax		Labour income tax		VAT	
Policy characteristics:								
tax revenues (billions)	-0.069**	(0.031)	-1.356***	(0.473)	-0.056**	(0.026)	-0.274***	(0.092)
Individual characteristics:								
age <40	-0.008	(0.043)	-0.086**	(0.043)	-0.034	(0.041)	0.016	(0.036)
age 60+	0.026	(0.075)	-0.005	(0.072)	0.146**	(0.066)	0.116*	(0.060)
male	0.058	(0.044)	0.021	(0.044)	-0.034	(0.040)	-0.012	(0.037)
married	-0.014	(0.041)	0.044	(0.041)	0.042	(0.039)	0.013	(0.035)
low education	0.063	(0.073)	0.149**	(0.076)	-0.112	(0.071)	0.104*	(0.060)
high education	0.085*	(0.045)	0.021	(0.047)	-0.031	(0.044)	-0.019	(0.040)
working	-0.026	(0.050)	-0.048	(0.049)	-0.007	(0.048)	0.050	(0.044)
log income	0.034	(0.040)	0.049	(0.040)	0.111***	(0.040)	0.064*	(0.033)
financial difficulties	-0.046	(0.108)	0.076	(0.110)	-0.194*	(0.109)	-0.250**	(0.104)
home ownership	-0.046	(0.050)	-0.142***	(0.051)	0.031	(0.048)	-0.014	(0.043)
luxembourgish	-0.126***	(0.042)	-0.012	(0.043)	0.050	(0.039)	-0.073**	(0.035)
obs	619		619		618		619	

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Each dependent variable takes value 1 if the individual answers strongly agree or somewhat agree, and it takes value 0 otherwise. The tax revenue variable is the expected revenue computed for each tax policy scenario showed to the respondent. The reported coefficients are the marginal effects.

Income is positively related with the support for a new temporary labour income tax and a temporary increase in VAT. This is may appear somewhat counter-intuitive as higher income respondents would pay a larger share of the proposed income tax. However the proposed income tax increase is not progressive. There is no exemption level and the *relative* contribution would not be larger for higher income people. This is unlike the proposed wealth and inheritance tax schedules which would be levied on the wealthy only. To the extent that higher income respondents are also more likely to have high wealth and expect inheritance, the pattern observed can be consistent with self-interest considerations. Another possible explanation is that richer individuals have sources of incomes other than earnings, so that they would not bear all the costs of a tax on labour earnings. Moreover,with a lower marginal propensity to consume (Carroll et al., 2017), the burden of an increase in VAT would not be so high on high income individuals as it would be for poorer individuals.

The negative relationship found between being aged under 40 and support for inheritance taxation may be explained by the fact that these individuals are generally more credit constrained than older individuals or have low or negative wealth (due to mortgages for instance). Expecting an inheritance may ease these credit constraints, so that these individuals may oppose to inheritance tax. Indeed, the coefficient for home ownership (a proxy capturing the existence of a mortgage) in the inheritance tax regression is negative. Interestingly, when we replace the variable home ownership with the interaction between a dummy variable indicating an active mortgage and the dummy variable for the group age under 40 in the inheritance tax regression, the marginal effect is negative (-0.154) and significant. Thus, there is some support for the mechanism of credit constraint and support for inheritance taxation.

The variable capturing Luxembourgish is statistically significant and negatively related to the support for a wealth tax and an increase in VAT. Speaking Luxembourgish is associated to

a drop of 12.6 p.p. in the likelihood to support a one-time wealth tax. A possible reason for this result is that natives tend to be richer than foreign residents in Luxembourg (Girshina et al., 2019), and therefore it is less likely they will favour wealth taxation. Luxembourgish speaking is also related with a drop of 7.3 p.p. in the probability to support an increase in VAT. These patterns can also be read through self-interest motives.

Financial difficulties is statistically significant with the support for a temporary labour income tax and a temporary increase in VAT. About an increase of 1 p.p. in the index of financial difficulties is associated to a reduction of 0.19 p.p. and 0.25 p.p. in the probability of supporting temporary labour income and value added taxes, respectively. This result is expected given the fact that households in hardship are poorer, or at least are liquidity constrained, and therefore tend to oppose an increase in taxes on labour income or consumption.

Table 4: Regression estimates of public support for tax policies (model 3)

Variable	Wealth tax		Inheritance tax		Labour income tax		VAT	
Policy characteristics:								
	0.5%×2m	0.134*	5.0%×1m	0.039	1.0%×1yr	0.202**	0.25%×1yr	0.178**
		(0.073)		(0.075)		(0.080)		(0.070)
	1.0%×2m	0.070	5.0%×2m	0.140*	1.0%×2yr	0.126	0.25%×2yr	0.079
		(0.073)		(0.080)		(0.079)		(0.075)
	1.5%×2m	0.156**	5.0%×5m	0.213***	1.0%×3yr	0.125*	0.25%×3yr	0.145**
		(0.070)		(0.081)		(0.075)		(0.073)
	0.5%×4m	0.192**	7.5%×1m	0.020	2.0%×1yr	0.063	0.50%×1yr	0.105
		(0.077)		(0.079)		(0.077)		(0.074)
	1.0%×4m	0.162**	7.5%×2m	0.093	2.0%×2yr	0.057	0.50%×2yr	0.141*
		(0.079)		(0.082)		(0.082)		(0.077)
	1.5%×4m	0.045	7.5%×5m	0.131*	2.0%×3yr	0.129	0.50%×3yr	-0.029
		(0.073)		(0.079)		(0.079)		(0.077)
	2.0%×4m	0.080	10%×2m	0.088	3.0%×1yr	0.104	1.0%×1yr	0.035
		(0.071)		(0.079)		(0.083)		(0.074)
			10%×5m	0.079	3.0%×2yr	0.025	1.0%×2yr	0.017
				(0.079)		(0.081)		(0.075)
Individual characteristics:								
age <40		-0.010		-0.088**		-0.035		0.019
		(0.043)		(0.043)		(0.040)		(0.036)
age 60+		0.024		-0.009		0.141**		0.118**
		(0.075)		(0.073)		(0.066)		(0.059)
male		0.055		0.023		-0.035		-0.011
		(0.044)		(0.044)		(0.040)		(0.036)
married		-0.011		0.043		0.041		0.018
		(0.042)		(0.041)		(0.039)		(0.035)
low education		0.074		0.144*		-0.112		0.108*
		(0.074)		(0.075)		(0.070)		(0.059)
high education		0.090**		0.019		-0.027		-0.018
		(0.045)		(0.047)		(0.044)		(0.039)
working		-0.029		-0.053		-0.007		0.051
		(0.050)		(0.049)		(0.048)		(0.043)
log income		0.035		0.049		0.113***		0.065**
		(0.040)		(0.041)		(0.040)		(0.032)
financial difficulties		-0.067		0.069		-0.181*		-0.253**
		(0.108)		(0.110)		(0.109)		(0.103)
home ownership		-0.051		-0.145***		0.031		-0.013
		(0.050)		(0.051)		(0.048)		(0.042)
luxembourgish		-0.126***		-0.011		0.048		-0.082**
		(0.042)		(0.043)		(0.039)		(0.035)
obs		619		619		618		619

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Each dependent variable takes value 1 if the individual answers strongly agree or somewhat agree, and it takes value 0 otherwise. The reference variable for the tax attributes is the combination of marginal tax rate and exemption amount or period leading to the highest potential tax revenue. For the wealth tax is 2.0% and 2 million; for the inheritance tax is 10% and 5 million; for the labour income tax is 3.0% and 3 years; and for the VAT is 1.0% and 3 years.

The results of Table 4 are similar to those reported in Table 3, but instead of using the tax revenue collected for each policy-scenario, we include dummy variables for each of the tax scenarios presented to the individual. Figure C–1 in the Appendix displays these estimates graphically. In all regressions, the reference variable for the scenario dummies is the combination of marginal tax rate and exemption amount or period leading to the highest potential tax revenue (e.g. highest marginal tax rate and lowest exemption amount), so that we should expect positive marginal effects on tax support. In the wealth tax, moving from a scenario with 2%×2m to another one with 0.5%×2m, the support for the wealth tax can improve by 13.4 p.p. The highest statistically significant support for this tax (marginally increasing by 19.2 p.p.) is obtained when the features are a marginal tax rate of 0.5% and an exemption amount of 4 million EUR.

The highest support for the inheritance tax occurs when the marginal tax rate is 5% and the exemption amount is 5 million EUR, implying a marginal increase of 21.3 p.p. with respect to the base scenario of 10%×1m. The scenario showing the largest support for the income tax is a 1% tax rate for one year (20.2 p.p. marginal increase), while for the VAT is a 0.25% tax rate for one year (17.8 p.p. marginal increase). We return in Section 4.4 on the potential implications of these results.

4.3 Additional results

In additional analysis, we inspected the relationship between the support for tax policy and whether the individual expresses concern about some challenges in the economy and society arising due to COVID-19. This was done by adding three additional variables to the list of individual characteristics in model 3. Regression estimates on these variables are shown in Table 5 and Figure 3. We do not find any relation between being "concerned about the economy" and the support for tax policies, but we do find a positive relationship between being "concerned about social cohesion" and the support inheritance taxes. It is interesting to find that people more concerned with social cohesion have also more favourable views to inheritance taxation. Some of the arguments expressed in favour of inheritance taxation rest on fairness and distributive justice considerations (Schokkaert and Truyts, 2017) as well as these taxes can reduce future inequality. Moreover, according to a recent study by Stantcheva (2020), among the most important individual factors shaping preferences for tax policy are the perceived benefits of redistribution, fairness views, and views about the government. Given that social cohesion is fostered in fairer societies, our results are in line with such arguments.

Our estimates also show that individuals most "concerned with the evolution of share prices and other forms of investments" are less in favor of all the tax policies considered, yet the size of the association is larger for wealth and inheritance taxes.

Table 5: Regression estimates of public support for tax policies by societal concerns (augmented model 3)

Variable	Wealth tax	Inheritance tax	Labour income tax	VAT
extremely concerned with...				
the economy in general	0.019	0.059	-0.041	-0.016
	(0.053)	(0.053)	(0.051)	(0.046)
social cohesion	0.092	0.127**	-0.050	-0.011
	(0.058)	(0.058)	(0.055)	(0.053)
the evolution of share prices and other investments	-0.267***	-0.310***	-0.205**	-0.139*
	(0.084)	(0.085)	(0.094)	(0.084)

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The regressions are as of table 4 and including the covariates about societal concerns of the individual. Each dependent variable takes value 1 if the individual answers strongly agree or somewhat agree, and it takes value 0 otherwise.

Figure 3: Estimated marginal effects of public support for tax policies and societal concerns
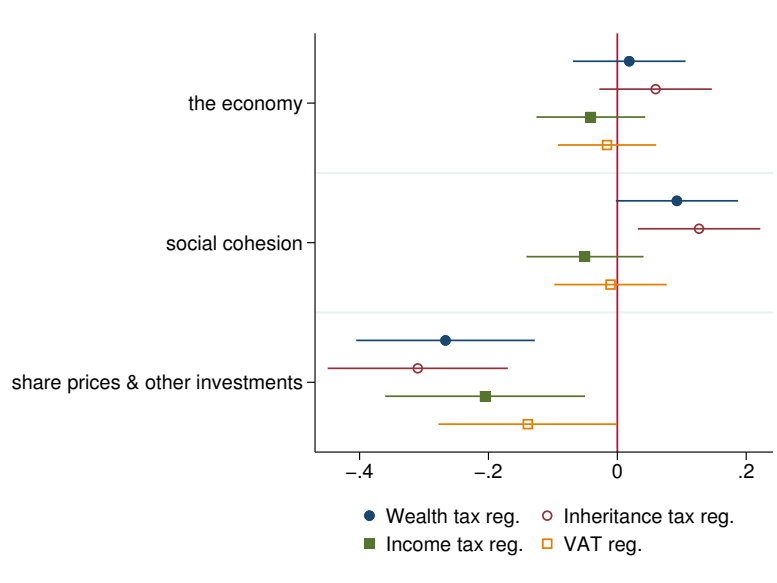
Notes: The figure plots the estimated coefficients of the covariates about societal concerns reported in Table 5. Confidence intervals are calculated at 90% of confidence.

4.4 Policy implications

Figures 4 and 5 show the relationship between the potential tax revenues and the conditional support for tax policies. In general, we observe an expected negative relationship between revenues and tax support. Due to non-linearities in the tax scenarios and the heterogenous public opinion about taxation, there is not unanimity about which is the dominant scenario for each tax policy. We cannot determine which is the policy with both more public support and expected revenues. However, there are policy scenarios that could dominate many others. For example, in the case of wealth taxation, it is interesting to note that the policy $1.5\% \times 2m$ dominates four other policies ($0.5\% \times 2m$; $1.0\% \times 2m$; $1.5\% \times 4m$ and $2.0\% \times 4m$). Since this policy shows a very similar public support as the policy $1.0\% \times 4m$ and a much larger revenue (1,721 against 714 EUR millions), the government may prefer $1.5\% \times 2m$ to $1.0\% \times 4m$. A possible workable compromise could be setting a one-time wealth tax policy closer to the scenario $1.0\% \times 2m$, which could raise 1.8% of GDP.

The expected revenues from the policy scenarios of inheritance taxation are small, which is a common trend in other European tax systems (OECD (2021)). The policy raising the largest level of revenues is the one applying a tax rate of 10% to the inheritance amounts in excess of 1 EUR million.[6] This implies a revenue of 167 EUR (0.26% of GDP), which is larger than the 114 EUR millions collected in 2019 under the concept of *estate, inheritance and gift taxes*. Thus, introducing the taxation of inheritances above 1 EUR million received in direct

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[6]The exemption amount of 1 million has previously been advocated in the country by Caritas (2016) in its analysis of the last comprehensive fiscal reform of Luxembourg (that kicked off in 2018).

line together with a 10% tax rate could more than double the current inheritance tax revenues. Keeping the same tax rate of 10% but applying it to inheritances larger than 2 millions may raise 105 EUR millions. The advantage of this last policy over the previous one is that this has higher public support (62.3% vs 53.9% according to conditional estimates). The bottom panel of Figure 4 plots the expected tax revenues and the conditional public support for each policy scenario. There is not a dominant inheritance tax policy, but we find that policy $10\% \times 2m$ clearly dominates two policies ($7.5\% \times 2m$, $10\% \times 5m$ and $5.0\% \times 1m$). It seems the government could chose an scenario closer to $10.0\% \times 2m$.

Figure 4: Public support (conditional estimates) for wealth and inheritance taxes and estimated revenues
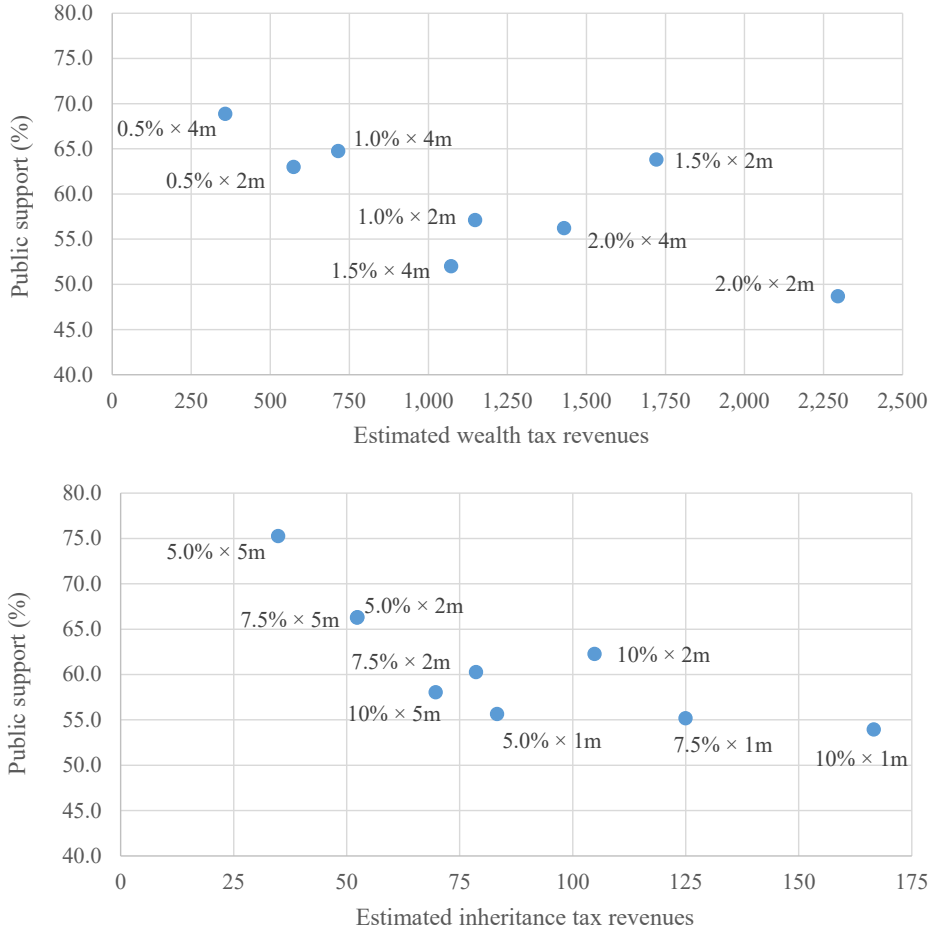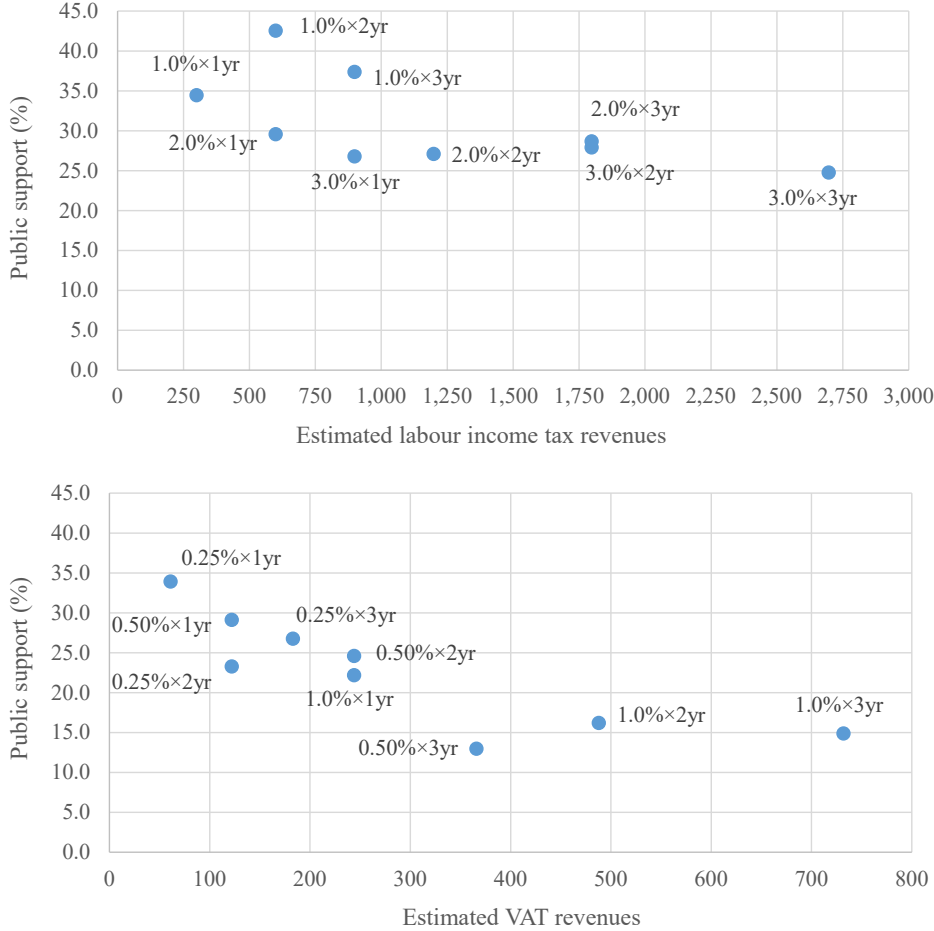

Notes: The graphs plot the predicted percentage of individuals who support each type of tax policy against the estimated tax revenue implied by the policy. These values are computed with the regressions of table 4, and use calibrated population weights. The upper panel shows the results for the 8 scenarios of the wealth tax policy, and the bottom panel shows the results for the 9 scenarios of the inheritance tax policy.

Table 1 also includes the expected revenues from a temporary flat tax levied on labour incomes and a temporary increase in the VAT, although we only report the estimations performed for 2021 in order to compare the revenues across all the tax policies. We plot in Figure 5 the ex-

pected revenues of all the alternatives of the income tax and VAT policy and their (conditional) public support.[7] As already mentioned in our descriptive analysis, individuals express low support both for labour income taxes and for increases in VAT rates. Across all the alternatives for the income tax, only an average of 31.2% of individuals support such a tax, whilst an average of 24.0% of individuals support an increase in the VAT. Given these results, the government may find difficult to introduce temporary labour income taxes or increases in VAT.

Figure 5: Public support (conditional estimates) for income and value added taxes and estimated revenues

Notes: The graphs plot the predicted percentage of individuals who support each type of tax policy against the estimated tax revenue implied by the policy. These values are computed with the regressions of table 4 and use calibration weights. The upper panel shows the results for the 9 scenarios of the labour income tax policy, and the bottom panel shows the results for the 9 scenarios of the VAT policy.

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[7]For this, we simply multiply by 2 or 3 the estimations done for the corresponding one-year tax revenues.

5 Conclusions

Relying on survey data from Luxembourg, we have found that respondents would generally be supportive of the introduction of new, mostly temporary, taxes to bear to cost of COVID-19. However, although support for wealth and inheritance taxation is broad, opinions are less favourable to increases in VAT and income taxes.

Back-of-the-envelope calculations indicate that a one-time net wealth tax could raise substantial revenues and could obtain important public support. The introduction of a one-off wealth tax, as opposed to a permanent tax, has attractive attributes. For example, Scheuer and Slemrod (2021) mention that this tax may not have behavioral distortions because it is only taxing past wealth accumulation and not future wealth. However, the authors note that this feature depends on the ability of governments to implement the policy on short notice and on the credibility of the government to stick to the temporary attribute of the policy and no re-introducing it.

An inheritance tax would also obtain support but would collect much less tax revenues. Cowell et al. (2019) show however that while inheritance taxation may involve low contemporaneous revenues, this tax has the ability to reduce the long-run distribution of wealth, i.e. lowering the equilibrium inequality in the future. It is standard to criticize inheritance taxes as unfair due to their double-taxation mechanism, i.e. the bequests have already paid taxes when they were earned in the past (e.g. accumulated savings from earnings). Against this critique, IMF (2017) argues that some incomes were never taxed in the past, so that taxing bequests may be seen as an opportunity to ensure minimum taxation; and any double taxation will mostly affect the very rich individuals if there is a sufficiently large exemption amount for the tax, which will strengthen the tax systems' overall progressivity.

Scope for policy action is however constrained since our results also show that support for taxation declines with the size of expected revenues, irrespectively of the tax instrument proposed.

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Appendix

A   Evaluation of tax revenues

We detail here the calculations of the expected tax revenues from each of the four types of tax proposed.

Wealth tax

The case of wealth taxes is straightforward. We rely on the Eurosystem Household, Finance and Consumption Survey (HFCS) fielded in Luxembourg in 2018. The HFCS is a harmonized household survey initiated and coordinated by the European Central Bank. The survey has been implemented in all Eurozone countries and is nationally representative of the resident household population in each participating country. The HFCS resembles the US Survey of Consumer Finances, which is considered the gold standard for household surveys on wealth.

We use the net worth variable available in HFCS, which is the value of total assets (excluding public and private occupational pension entitlements) minus household's total liabilities and compute the potential revenue. The taxable net wealth is determined for each household according to the alternative exemption amounts of 2 and 4 EUR, and them we apply the alternative marginal rates of 0.5%, 1.%, 1.5% and 2.0%. Once we sum up the tax revenues across all households and apply their corresponding population-wide weights, we update the amount by a factor of 1.174. This factor indicates how much would increase the total wealth in Luxembourg from 2018 to 2021. This is based on a simple 5.51% annual growth rate observed between the Luxembourg's HFCS available surveys of 2010 and 2018.

Inheritance tax

The computation of potential revenues from inheritance taxes also relies on the HFCS but is more complex and involves several assumptions and additional data sources. We use a reverse of the estate multiplier method used to study wealth inequality in countries where there are not wealth taxes but there are inheritances or estate taxes (Alvaredo et al., 2018; Zucman, 2019). In such a method, wealth distribution of the living population is computed by applying the inverse of mortality rates to the estates at the year of death.

The computation of revenues from inheritance taxes involves more assumptions and an additional data source. We need to use the probability of dying in one-year time to obtain the expected amount of inheritances that could be left the following year. These probabilities are specific by sex and age of the resident population of Luxembourg and are drawn from EURO-STAT's 2017-2019 life tables. We match the corresponding probability of death to both the HFCS's reference person and his/her spouse. These individuals are generally the head of the

household and her/his spouse. When there is a couple in the household, we assume that each household can potentially leave inheritances to the spouse of the reference person and two children if the reference person dies, and to the reference person and two children if the spouse dies.[8] If the reference person is single, we assume that there are two children who are the only heirs. Thus, for each household we divide the net worth by three or two if the reference person lives with the spouse or if he/she is single, respectively. This means that the wealth of each household can be transformed into two or three inheritance amounts over one year. The exemption thresholds and tax rates of the policies are applied on those inheritance amounts because inheritance taxation in Luxembourg (and in our survey questions) occurs over the inheritance received by the heirs and not over the estate.

To clarify the procedure, assume that the net worth w_i of household i can be transformed into inheritance amounts $h_i = w_i/3$ or $h_i = w_i/2$ for the households where the reference person (r) has an spouse (s) or the reference person is single, respectively. Then, for a given inheritance tax policy j (with exemption amount E_j and tax rate r_j), the taxable inheritance $\bar{h}_i$ can be defined as $\bar{h}_i = Max\{0, h_j - E_j\}$. These amounts must be multiply by death probabilities in order to obtain the expected taxable inheritances according to following relationships:

$$
inh_i =
\begin{cases}
2\bar{h}_i q_r & \text{if } r \text{ has no spouse} \\
3\bar{h}_i q_r (1-q_s)\pi_a + 3\bar{h}_i q_s (1-q_r)\pi_b + 2\bar{h}_i q_r q_s \pi_c & \text{if } r \text{ has spouse}
\end{cases}
\tag{4}
$$

$$
\pi_a = \frac{3\bar{h}_i q_r (1-q_s)}{3\bar{h}_i q_r (1-q_s) + 3\bar{h}_i q_s (1-q_r) + 2\bar{h}_i q_r q_s}
\tag{5}
$$

$$
\pi_b = \frac{3\bar{h}_i q_s (1-q_r)}{3\bar{h}_i q_r (1-q_s) + 3\bar{h}_i q_s (1-q_r) + 2\bar{h}_i q_r q_s}
\tag{6}
$$

$$
\pi_c = \frac{2\bar{h}_i q_r q_s}{3\bar{h}_i q_r (1-q_s) + 3\bar{h}_i q_s (1-q_r) + 2\bar{h}_i q_r q_s}
\tag{7}
$$

Where q_r and q_s are the probabilities of dying in one year for the reference person and the spouse, respectively. The first row of equation 4 shows that a household headed by a reference person with no spouse produces two taxable expected inheritance amounts. The second row shows that there are three possible events in households with spouses: i) r dies and s survives, ii) r survives and s dies, iii) both r and s may die. The probability of the spouse surviving the reference person is $q_r (1-q_s)$, whilst the probability of the reference person surviving the spouse is $q_s (1-q_r)$. The joint probability of dying is $q_r q_s$. When either the reference person or the spouse dies, the household produces three inheritance amounts; but when both die the

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[8]The assumption of having two children resembles the information from the Survey of Health, Ageing and Retirement in Europe (SHARE) of Luxembourg. In this survey, that is applied to people aged 50 and over, the average number of alive children of the respondents is 1.97.

household produces two inheritance amounts. This is why equation 4 include 2 or 3 multiplying the expected taxable inheritance amounts. The expressions for π indicate the weight for each of the outcomes arising from the three possible events occurring in households with spouses. If we do not include these weights, we could artificially increase the number of inheritances left by the household and therefore overestimate the size of the tax revenues. Finally, the amount collected under inheritance tax policy j is:

$$revenue_j = r_j \sum inh_i \tag{8}$$

Equation 8 expresses the sum of expected taxable inheritance amounts across all households multiplied by the tax rate, which will be equal to the total expected tax revenues raised by a given inheritance tax policy j.

Income tax

For computation of the revenues from labour income taxes, we use data from the account *D11 salaries and wages* drawn from the National Accounts of Luxembourg for 2010-2018. We apply the alternative rates of 1%, 2% and 3% to the salary mass of 2018 (25,704 EUR millions) and update the amount by a factor of 1.166. This factor indicates how much would increase the total salary mass in Luxembourg from 2018 to 2021. This is based on a simple 5.24% annual growth rate of the account *D11* observed between 2010 and 2018. To make consistent comparisons with other policies, we only report the expected tax revenues for 2021.

Value-added tax

Regarding the proposed increases in VAT, we use tax revenue data from OECD Statistics. Note that Luxembourg has a general VAT rate of 17% since 2015 (it was 15% until 2014), although some goods and services have different tax rates. We obtain the additional revenue implied by the increase of the VAT for each alternative scenario (i.e. VAT increasing in 0.25, 0.50 and 1.0 percentage points) considering the amount of value added taxes collected in 2019 (3,872 EUR millions). We update this amount by a factor of 1.071, which indicates how much would increase VAT revenues in Luxembourg from 2019 to 2021. This is based on a simple 3.50% annual growth rate of VAT revenues observed between 2015 and 2019.

B   Descriptive statistics

Table B–1: Means and non-missing values for dependent and control variables in alternative subsamples

Variable	Unweighted						Weighted			
	Sample I		Sample II		Sample III		Sample IV		Sample V	
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N
Support for wealth tax	0.58	702	0.58	686	0.58	686	0.59	615	0.59	607
Support for inheritance tax	0.58	701	0.58	687	0.55	687	0.56	615	0.57	607
Support for income tax	0.31	701	0.31	686	0.31	686	0.31	615	0.32	607
Support for VAT	0.22	701	0.22	687	0.24	687	0.25	615	0.25	607
Age<40	0.35	787	0.35	780	0.39	780	0.40	615	0.41	607
Age 40–59	0.52	–	0.52	–	0.39	–	0.37	–	0.37	–
Age 60+	0.13	–	0.12	–	0.22	–	0.22	–	0.22	–
Male	0.27	802	0.27	780	0.50	780	0.51	615	0.51	607
Married	0.67	802	0.67	780	0.53	780	0.50	615	0.50	607
Low education	0.09	795	0.09	780	0.20	780	0.20	615	0.20	607
Middle education	0.32	–	0.32	–	0.51	–	0.49	–	0.49	–
High education	0.59	–	0.59	–	0.29	–	0.31	–	0.31	–
Doing paid work	0.67	802	0.68	780	0.43	780	0.42	615	0.42	607
Household income per capita (log)	7.68	724	7.68	708	7.58	708	7.59	615	7.60	607
Financial difficulties	0.17	729	0.17	714	0.19	714	0.19	615	0.19	607
Home-owner	0.79	797	0.78	775	0.74	775	0.75	615	0.75	607
Luxembourgish spoken at home	0.57	800	0.57	778	0.63	778	0.61	615	0.62	607
Concerned with the economy in general	0.20	734	0.19	717	0.21	717	0.19	614	0.19	607
Concerned with social cohesion	0.14	728	0.14	712	0.11	712	0.11	609	0.11	607
Concerned with evolution of share prices and other investments	0.06	728	0.06	712	0.06	712	0.06	609	0.06	607
Sample size (including entries with partially missing data)	802		780		780		615		607	

Notes: Column 'N' reports number of non-missing values. Sample I contains all entries (no listwise deletion). Sample II excludes from Sample I entries for which no calibration weight is available (due to missing data on calibration variables). Sample III is Sample II with calibration weights applied. Sample IV reflects the main estimation sample: entries with non-missing value on *all* dependent and independent variables in main regression models (listwise deletion). Note that five entries with a missing response in one of the four tax support variable are included in the regression models for the non-missing tax types but excluded from the descriptives for Sample IV here. Sample V is estimation sample when variables on 'societal concerns' are included. Statistics for samples III, IV and V are weighted.

C   Additional results

Figure C–1: Estimated marginal effects of scenarios on tax policy support (using dummies for each scenario)
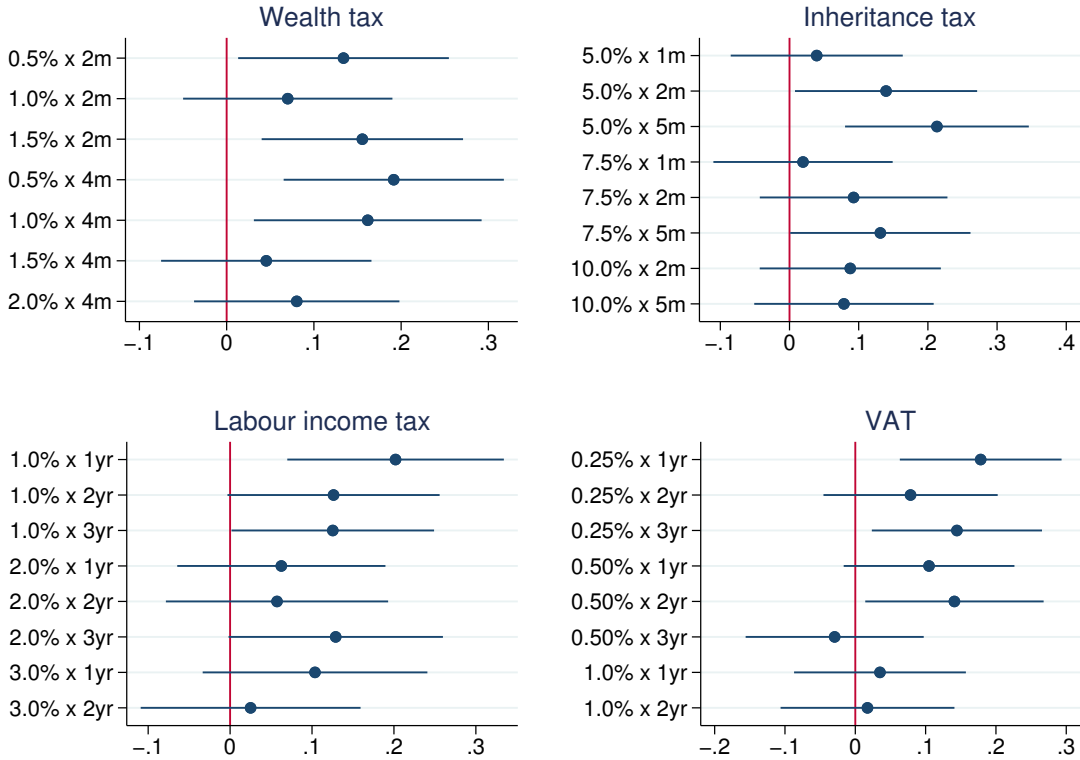
Notes: The figures plot the estimated coefficients of Table 4 for each indicator variable capturing the attributes of the scenarios for each tax policy. The reference variable for the tax attributes is the combination of marginal tax rate and exemption amount or period leading to the highest potential tax revenue. For the wealth tax is 2.0% and 2 million; for the inheritance tax is 10% and 5 million; for the labour income tax is 3.0% and 3 years; and for the VAT is 1.0% and 3 years. Confidence intervals are calculated at 90% of confidence.