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CLASSES AND TAXES: SOCIO-ECONOMIC STATUS, IDEOLOGY AND (UN)WILLINGNESS TO PAY

OLIVIER JACQUES

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Classes and Taxes: Socio-Economic Status, Ideology and (Un)Willingness to Pay

Olivier Jacques *

Abstract/Résumé

While public opinion research has identified the drivers of preferences for tax progressivity, public spending and support for redistribution, the study of willingness to pay taxes remains underdeveloped. This paper uses the 2016 ISSP cross national survey on the Role of Government and the Risks that Matter survey (OECD 2018) to identify which groups of voters are more likely to be willing to pay higher taxes. It shows that ideology and income interact to predict willingness to pay. Among left-wing respondents, socio-economic status, measured by income and education, has a positive effect on willingness to pay additional taxes. Thus, the core constituencies of left-wing parties composed of socio-cultural professionals and of production and service workers have different tax policy preferences. Socio-cultural professionals have a higher socio-economic status and are significantly more willing to pay taxes than production and service workers, who share a lower socio-economic status.

Si les recherches sur l'opinion publique ont permis d'identifier les moteurs des préférences en matière de progressivité de l'impôt, de dépenses publiques et de soutien à la redistribution, l'étude de la volonté de payer des impôts reste peu développée. Cet article utilise l'enquête transnationale 2016 de l'ISSP sur le rôle du gouvernement et les risques qui comptent (OCDE 2018) pour identifier les groupes d'électeurs les plus susceptibles d'être disposés à payer des impôts plus élevés. Elle montre que l'idéologie et le revenu interagissent pour prédire la volonté de payer. Parmi les répondants de gauche, le statut socio-économique, mesuré par le revenu et l'éducation, a un effet positif sur la volonté de payer des impôts supplémentaires. Ainsi, les principaux électeurs des partis de gauche, composés de professionnels socioculturels et de travailleurs de la production et des services, ont des préférences différentes en matière de politique fiscale. Les professionnels socioculturels ont un statut socio-économique plus élevé et sont significativement plus disposés à payer des impôts que les travailleurs de la production et des services, qui ont un statut socio-économique plus faible.

Keywords/Mots-clés: taxation, occupations, ideology, income, education, Europe / fiscalité, professions, idéologie, revenu, éducation, Europe

JEL Codes/Codes JEL: C83; D72; H20; H30; H31

* Université de Montréal, Olivier.jacques@umontreal.ca

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Olivier Jacques, Université de Montréal, Québec, Canada

Olivier.jacques@umontreal.ca

Abstract

While public opinion research has identified the drivers of preferences for tax progressivity, public spending and support for redistribution, the study of willingness to pay taxes remains underdeveloped. This paper uses the 2016 ISSP cross national survey on the *Role of Government* and the *Risks that Matter* survey (OECD 2018) to identify which groups of voters are more likely to be willing to pay higher taxes. It shows that ideology and income interact to predict willingness to pay. Among left-wing respondents, socio-economic status, measured by income and education, has a positive effect on willingness to pay additional taxes. Thus, the core constituencies of left-wing parties composed of socio-cultural professionals and of production and service workers have different tax policy preferences. Socio-cultural professionals have a higher socio-economic status and are significantly more willing to pay taxes than production and service workers, who share a lower socio-economic status.

Keywords: taxation; occupations; ideology; income; education; Europe

JEL classification codes: C83; D72; H20; H30; H31;

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Introduction

Governments wishing to significantly increase public spending face a conundrum: clear majorities of citizens want higher spending, but they seem unwilling to increase their own tax burden to pay for it. Tax revenues are stagnating in advanced democracies (Karczeski & Kiser, 2020) and contemporary political debates are centered around about trade-offs between different types of expenditures: additional spending in one area must be funded by cutbacks elsewhere in the welfare state (Häusermann, Pinggera, Ares, & Enggist, 2021). These fiscal constraints are reflected in comparative political economy research analyzing the spending priorities of different constituencies. This research agenda has been concerned by the different priorities of the left's core constituencies: while socio-cultural professionals prefer social investment policies in education and childcare, service and production workers prefer social consumption policies geared towards income replacement (Beramendi, Häusermann, Kitschelt, & Kriesi, 2015). This article shows that willingness to pay taxes represents another source of tensions between the core constituencies of left-wing parties.

We know from public opinion research that majorities of citizens desire additional public spending but prefer to limit tax increases to high-income citizens (Barnes, 2015; Roosma, 2016). Citizens' preference for higher tax progressivity does not indicate willingness to pay taxes : most citizens prefer to shift the tax burden to high-income citizens, since few individuals consider themselves to be rich (Cansunar, 2021). However, traditionally, the most generous welfare states have been funded by broad-based taxes paid for by a very large proportion of the population, rather than by concentrating tax increases on relatively few richer citizens (Beramendi & Rueda, 2007; Martin, 2015; Prasad and Deng 2009; Steinmo, 1993). Tax competition, the relatively high elasticity of capital income to taxation, and the small number of high-income citizens limits the revenue-generating capacity of higher taxes on the rich (Genschel and Schwarz 2011; Lindert, 2004). Thus, sustaining most citizens' willingness to pay is crucial to ensure the fiscal sustainability of the welfare state.

However, the comparative political economy of taxation literature does not address the fundamental political tension between, on the one hand, voters having a strong preference for higher spending paid for by higher taxes on few rich voters, and on the other hand, the structural constraints on parties' capacity to rely only on taxing the rich to fund higher spending. Which voters are more likely to accept a higher tax burden? How does different constituencies' degree of willingness to pay influence contemporary politics?

This article makes two main contributions. Firstly, it highlights the individual-level determinants of willingness to pay by showing that socio-economic status, defined by income and education, is positively associated with willingness to pay taxes, but only if an individual has a left-wing ideology. A sufficient level of income is necessary to accept higher levels of taxes; poorer voters may want higher spending but may be unwilling or unable to pay more taxes themselves (Edlund & Johansson Sevä, 2013). Higher levels of education are associated with greater knowledge about the relationship between taxes and public spending and increase citizens' patience to reap the benefits of a tax hike (Elkjaer 2020; Wang 2018). For left-wing individuals, socio-economic status has a positive effect on willingness to pay, whereas socio-economic status is negatively associated with willingness to pay for right-wing individuals. Thus, willingness to pay has different determinants than traditional welfare state attitudes since it increases with socio-economic status, while higher socio-economic status is correlated with a preference for lower public spending and less redistribution (Lupia, Levine, Menning, & Sin, 2007).

Secondly, the article contributes to comparative political economy (CPE) research by analyzing how the willingness to pay taxes of different constituencies varies. CPE has long been interested in how political parties try to build a winning coalition by attracting different social classes (Esping-Andersen, 1990), conceptualized in this article as occupational groups (Elsässer and Schäfer 2016). Previous research has shown that occupational groups have different preferences regarding public spending and social values (Häusermann et al. 2021; Kitschelt & Rehm, 2014; Oesch, 2013) but has not identified if willingness to pay taxes systematically varies between these occupational groups. This is a blind spot in the literature, since few political economists have developed theories about the preferences of different groups regarding the fiscal

system (Ansell, Cansunar, & Elkjaer, 2021). By classifying respondents with Oesch's eight occupational groups scheme, this article highlights that willingness to pay differs between occupational groups, particularly amongst those composing center-left coalitions.

Low-skilled service and production workers, who have a lower socio-economic status, are significantly less willing to pay than socio-cultural professionals, who have a relatively high socio-economic status. Hence, not only do these groups differ regarding their spending preferences (Abou-Chadi & Hix, 2021; Häusermann et al., 2021; Piketty, 2019), but tax policy preferences also contribute to tensions within the typical social-democratic coalition composed of low-skilled service and production workers and of socio-cultural professionals. We also find that classes' tax policy preferences differ by welfare state regimes: in Social-Democratic welfare states, there are no significant differences between the willingness to pay of service and production workers and of socio-cultural professionals, whereas the difference between these groups are significant in Liberal and Corporatist-Conservative welfare states.

The next section discusses how socio-economic status and ideology interact to predict willingness to pay taxes and how occupational groups' tax policy preferences differ. The empirical section uses the OECD 2018 *Risks that Matter* survey and the ISSP 2016 survey on the *Role of Government* to identify which voters are willing to pay. The final section discusses the implication of this article for comparative political economy research.

Theory: socio-economic status, occupation, and willingness to pay

Three main topics have been extensively studied by scholars interested in tax policy preferences: “something for nothing” attitudes, tax compliance and tax progressivity. Studies about “something for nothing” aim to identify if voters want more spending without accepting to pay for it (Edlund & Johansson Sevä, 2013; Sears & Citrin, 1982; Tuxhorn, D'Attoma, & Steinmo, 2021). Research on tax compliance highlight the interplay of rational expectations like the tax rate or the audit rate and individual attitudes such

as trust or perceptions about the fairness of the tax system (Kirchler, Muehlbacher, Kastlunger, & Wahl, 2010; Marandu, Mbekomize, & Ifezue, 2015). However, studies about tax compliance and “something for nothing” attitudes are not identifying which voters would be willing to pay additional taxes to fund an expansion of the state, which is the focus of this article.

Building on models assuming that voters want to reduce their own tax burden while maximizing the share of public services they receive (Meltzer & Richard, 1981), political economists have shown that voters prefer to shift the tax burden towards high-income individuals and to reduce taxes on lower and middle-income citizens (Ballard-Rosa, Martin, & Scheve, 2017; Barnes, 2015; Berens & Gelepithis 2019; Franko, Tolbert, & Witko, 2013; Stiers, Hooghe, Goubin, & Lewis-Beck, 2021). Hence, support for progressive taxes is particularly high, especially when the income distribution is perceived as unfair (Boudreau & MacKenzie, 2018; Limberg, 2020), but it remains polarized along income lines and ideology (Jaime-Castillo & Sáez-Lozano, 2016). In general, the public prefers higher progressivity, but lower levels of taxation (Barnes 2015).

This support for progressive taxation may reflect a misperception about the real income distribution: few voters perceive themselves to fit within the “high income” category since they tend to situate themselves within the “middle-class” even if they are richer than the objective position of the middle-class in the income distribution (Cansunar, 2021). Indeed, Karadja, Mollerstrom, and Seim (2017) find that middle- and upper-class citizens perceive themselves to be poorer than they are. Thus, voters’ preference for higher progressivity by increasing taxes on the rich may be revealing a preference to shift the burden of additional taxes on another group. Thus, support for tax progressivity does not indicate willingness to pay.

There is a disconnect between the public opinion research focusing mostly on tax progressivity and the CPE literature on tax systems that highlight the necessity of sustaining high tax levels to fund generous welfare states. Because of a quest for efficiency (Kemmerling 2017) as well as a bargain between capital and labor (Helgason 2017; Martin 2015) and the parties representing them (Beramendi & Rueda 2007; Hays, 2021), the most generous welfare states are funded by a relatively regressive tax mix, while welfare states relying mostly on progressive taxation tend to maintain smaller tax bases and a lesser capacity of delivering

additional public spending. Indeed, in countries relying on corporatist arrangements, the strategy of centre-left governments to fund higher spending has been to raise consumption taxes rather than capital taxes (Beramendi & Rueda, 2007; Helgason 2017). The liberal welfare states of Anglo-American democracies have traditionally been more reliant on capital taxes, whose burden falls on high-income citizens, but have been particularly vulnerable to the effects of tax competition and of globalization on their tax bases (Hays, 2003). Moreover, tax competition, the relatively high elasticity of capital income to taxation, and the small number of high-income citizens limit the potential level of revenue to extract only from higher taxation of the rich (Genschel & Schwarz 2011; Lindert 2004). It is thus crucial to study average citizens' willingness to pay to understand the conditions ensuring the fiscal sustainability of the welfare state.

This article innovates by developing a parsimonious theoretical model based on two variables, socio-economic status and ideology, to explain willingness to pay taxes, and uses one of the rare cross-national surveys directly asking respondents about their own willingness to pay. Left-wing citizens prefer higher levels of taxes since they put a higher value on the public services that taxes are funding. Among left-wing citizens, those with a higher socio-economic status should be more willing to pay taxes than those with a lower socio-economic status. As such, willingness to pay differs from support for additional spending, redistribution or tax progressivity, which tends to be negatively correlated with socio-economic status.

Socio-economic status is a function of education and income, two variables that are strongly related since more educated people tend to have higher income, especially in a knowledge economy. Socio-economic status entails many individual characteristics associated with more willingness to pay. Higher education is associated with a lower discount rate and a greater patience to reap the benefits of today's resource commitments in future periods. Patient voters are socio-tropic voters; they vote for good managers of the economy because they think that it will benefit them in the future, while impatient voters are pocketbook voters who want more money to spend in the short term. Patient citizens should be more likely to accept to pay higher taxes today in order to improve the public services they will receive in the future. In contrast,

impatient voters prefer lower taxes to improve their situation in the present. Since patience is strongly associated with education, education should be positively related to willingness to pay taxes (Wang 2018).

Education should also be related to willingness to pay as it increases political and economic knowledge. Since they have a better understanding of the constraints facing policymakers and have more coherent economic policy preferences (Elkjær, 2020), more educated citizens should have a better understanding of the necessity to pay taxes to sustain public services and appreciate the potential benefits of higher taxes. Education may also be related to a better knowledge of the tax system whereas misperceptions about the functioning of the tax system leads to lower satisfaction with it (Eriksen & Fallan, 1996). Education should also be related to higher political sophistication. Stiers et al. (2021) find that among politically sophisticated respondents, higher income doesn't reduce support for progressive taxes, possibly because these respondents understand that relatively high taxes can lead to positive social outcomes that they value more than a marginal improvement to their own material well-being.

Socio-economic status's effect on willingness to pay is also related to income. We argue that a sufficient level of income is a necessary condition for willingness to pay, but the effect of income on willingness to pay should be conditional on ideology. Higher-income people with a left-wing ideology may be more willing to sustain higher taxes than lower income people because they have the financial capacity to absorb the costs of additional taxes. In contrast, individuals living in precarious financial situations may feel that an additional tax burden is unfair or that it would significantly decrease their well-being. Although they want more public expenditures, they may prefer to shift the tax burden on higher-income individuals. Edlund & Johansson Seva (2013) show that most of the Swedish voters who want "something for nothing" have low incomes or education. Similarly, decreases in real incomes are associated with a decline in preferences for redistribution, because social policies represent a "luxury good" that people discard when their income is reduced (Weisstanner 2020). The Gilets Jaunes protests in France reveal that many citizens from relatively low socio-economic status perceive higher taxes as an unbearable burden and do not feel that the state is providing enough benefits to counterbalance the cost of taxes (Spire, 2018).

The few studies using questions that are directly asking about respondents' willingness to higher taxes tend to find a positive effect of education and income (Habibov, Auchynnikava, Luo, & Fan, 2018; Habibov, Cheung, & Auchynnikava, 2018; Lachapelle et al., 2021; Tuxhorn et al., 2021). However, most of these studies focus on the role of trust, rather than on the conditional effect of ideology and socio-economic status. Such an interaction between self-interest and ideology is put forward by Armingeon and Weisstanner (2021) who show that income isn't negatively correlated with preferences for redistribution among left-leaning citizens. High income leftists may have a material interest in a reduction of redistribution, but this would be conflicting with their ideology. As such, they give ideology more weight than self-interest in determining their preferences for redistribution. Similarly, Abou-Chadi and Hix (2021) show that among left-wing voters, those with higher education support redistribution more so than those with lower levels of education. In contrast, we argue that willingness to pay taxes differs significantly between rich and poor leftists and that rich leftists are more willing to pay than poor leftists, whereas high income leftists' preferences for redistribution are like those of lower income leftists (Armingeon and Weisstanner 2021).

H1a. Socio-economic status has a positive effect on willingness to pay for individuals with a left-wing ideology.

For right-wing citizens, socio-economic status should be associated with a lower willingness to pay. While the left draws on ability-to-pay principles and highlights the importance of taxes in sustaining public services, the right tends to reject higher taxes on all income groups and on the middle-class in particular (Roosma, Van Oorschot, & Gelissen, 2016). We should observe a similar linear negative relationship between socio-economic status and willingness to pay among right-wing respondents than what other studies have found between socio-economic status and lower support for redistribution (Lupia et al. 2007; Rueda & Stegmüller, 2019). People with a higher socio-economic status and a right-wing ideology may prefer to opt out from public services and to favour the private provision of services, further reducing their support for taxation (Busemeyer & Iversen, 2020). Indeed, Sumino (2016) finds that income is negatively correlated with

support for levels of taxes, while Gelepithis and Giani (2020) and Sumino (2019) find that university education depresses support for redistribution.

H1b. *Socio-economic status has a negative effect on willingness to pay for individuals with a right-wing ideology.*

How does this relationship between socio-economic status, ideology and willingness to pay affects contemporary politics? Socio-economic status and ideology relate to the notion of social classes. Occupational groups, which represent social classes in contemporary political sociology, are the foundations of the coalitions that political parties aim to mobilize (Elsässer & Schäfer, 2016). Occupations can be conceived as social groups and networks that cultivate individuals' political preferences by translating external information to their members (Dodson, 2017). Individual characteristics are associated with political preferences and with the choice of occupation, while daily professional experience shape political preferences. Thus, there is an endogenous relationship between occupations and political preferences caused by self-selection, but occupations also have an independent effect on preferences (Kitschelt & Rehm, 2014).

As is common in this literature, we use Oesch's (2013) class scheme which is based on the type of employment contract and the type of tasks conducted, the degree of autonomy and authority related to an occupation and its wage level. The typical centre-left coalition is composed of sociocultural professionals and of low-skilled service and production workers, while the typical centre-right coalition is comprised of small business owners, managers and business professionals preferring less state intervention. Previous research has shown that the trade-offs between investment and consumption policies create tensions about the preferred type of spending within each coalition (Beramendi et al. 2015; Häusermann et al. 2021). Moreover, while socio-cultural professionals are generally in favor of redistribution (Abou-Chadi and Hix 2021), the other occupations associated with the middle classes, such as technical and managerial professionals have lower support for redistribution (Sumino 2019). Still, few studies have analyzed the tax policy preferences of different constituencies. To our knowledge, the only study on the issue reveals that

socio-cultural professionals are the occupational group the least likely to perceive that advanced democracies have reached the limits the levels of taxation (Häusermann, Pinggera, Ares, & Enggist, 2019).

This article argues that willingness to pay represents an additional source of tension within the center-left coalition. With their high socio-economic status and their ideology associated with more state intervention, sociocultural professionals should be the occupational group the most willing to pay higher taxes. In contrast, low-skilled service and manufacturing workers share a lower socio-economic status and should thus be less willing to pay higher taxes, despite their ideology in favor of state intervention.

H2a. Sociocultural professionals are the group the most willing to pay higher taxes,

H2b. Service and production workers are significantly less likely than sociocultural professionals to be willing to pay higher taxes.

Building on studies showing that tax policies cluster around welfare regimes (Prasad and Deng 2009) and influence citizens' preferences (Beramendi & Rehm 2016), we argue that occupations' tax policy preferences are conditioned by welfare state regimes, particularly when comparing the Social-Democratic regimes of Scandinavia to the other regimes. Left-wing parties in Scandinavia used relatively regressive taxes such as value-added taxes to fund an expansion of the welfare state, as part of a corporatist bargain between capital and labour (Beramendi & Rueda 2007; Helgason 2017; Martin 2015). Moreover, power-sharing institutions implied that they could prevent future right-wing coalition governments from cutting back on social expenditures (Andersson 2021; Steinmo 1993). As left-wing parties have been delivering universal social expenditures in exchange for higher taxes on consumption and labour incomes, we expect that service and production workers are more likely to be willing to pay taxes in Social-Democratic regimes. In contrast, left-wing parties in the Liberal regimes of Anglo-American democracies have been reluctant to rely on value added taxes since they could not expect that future single-party right-wing governments would maintain the

additional public spending paid for by higher taxes. Hence, they prefer to rely on progressive taxes on the rich and to reduce taxes on the working class, even if it involves lower social expenditures (Andersson 2021; Kemmerling 2017; Steinmo 1993). In the segmented Corporatist-Conservative welfare regimes of western Europe, welfare states are not universal and do not necessarily offer adequate coverage to labour market outsiders (Beramendi et al. 2015). Hence, in Liberal and Corporatist-Conservative, production and service workers should be less likely to be willing to pay higher taxes since they may not expect to receive additional spending in exchange. We thus propose a final hypothesis:

H2c. Service and production workers are not significantly less likely to be willing to pay higher taxes than sociocultural professionals in Social-Democratic welfare regimes.

Empirical analysis

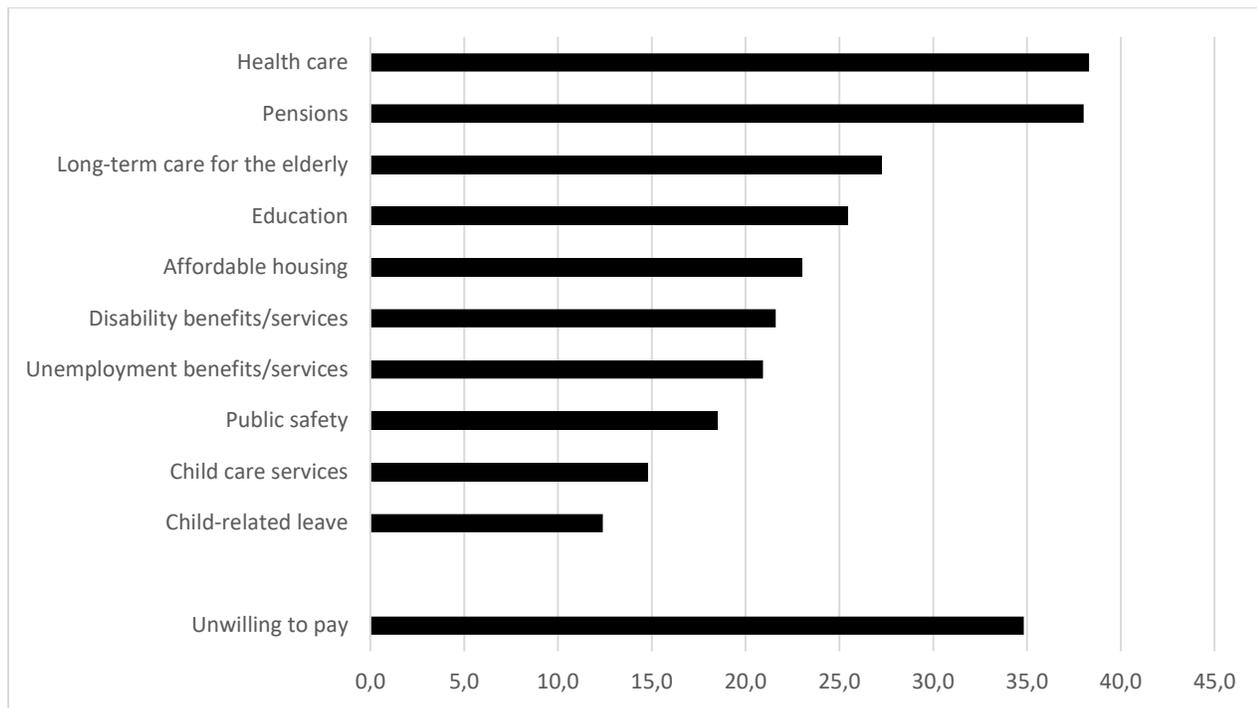
Research on public opinion about taxes tend to use general questions, without specifying to the respondent that she would herself be paying more taxes to fund the additional spending she wants. This is the case of the analyses based on the ISSP *Role of Government* surveys, which are asking questions about the level of taxes on different income groups, rather than directly asking about willingness to pay. This article innovates by being the first academic study using the OECD (2018) *Risks that Matter* (RTM) survey, which is one of the few publicly available cross-national survey asking respondents about their own willingness pay higher taxes. While the RTM survey is perfectly designed to study the determinants of willingness to pay, the ISSP survey has useful questions on vote choice and on respondents' occupations and it includes questions on trust and on political sophistication, which could be important confounders for willingness to pay (Habibov, Auchynnikava, et al., 2018; Habibov, Cheung, et al., 2018; Lachapelle et al., 2021; Stiers et al.,

2021; Tuxhorn et al., 2021). The RTM survey includes 20 OECD countries (N=22 488), while the ISSP survey includes 22 OECD countries (N= 28 508).¹

Analysis with the *Risks that Matter* survey

The RTM survey asks a question about willingness to pay (WTP) for different types of expenditures. The question is “would you be willing to pay an additional 2% of your income in taxes/social contributions to benefit from better provision and access to: (10 different policy choices are offered, the respondent can choose more than one option).” For the first dependent dummy variable, respondents that are considered as unwilling to pay (UWTP) if they do not accept to pay 2% higher taxes. Figure 1 shows the distribution of the willingness to pay question. About 35% of respondents are unwilling to raise their own taxes².

Figure 1. Willingness to pay higher taxes for different types of expenditures, RTM survey.



¹ Austria, Canada, Estonia, Greece, Ireland, Israel, Italy, Netherlands, Poland, and Portugal are included in RTM, but not in ISSP. Australia, Czech Republic, Hungary, Iceland, Japan, Korea, Latvia, New Zealand, Slovakia, Spain, Sweden, UK are included in ISSP, but not in RTM. Belgium, Denmark, Finland, France, Germany, Lithuania, Norway, Slovenia, Switzerland, and the USA are included in both surveys.

² This relatively low proportion may be because the survey prompts respondents to think about the role of the state as an insurer against social risks.

Two additional questions in the RTM survey are useful to measure willingness to pay. They ask whether: “the government should make housing more affordable, even if it means that taxes will rise” and if: “the government should provide a basic level of financial support to everyone, even if it means that taxes will rise, and some people may choose to work less.” Respondents who agree with at least one of the two statements and who do not disagree with the other are coded 1 since they are willing to pay higher taxes (WTP), while the others are coded 0. However, unlike the previous question on UWTP, these questions on WTP are not specifying to the respondent that she would herself be paying higher taxes. To solve this problem, respondents coded as unwilling to pay with the previous question presented above and who answered that they were willing to pay using this second set of questions are coded as missing since their answers reveal that they want something for nothing: they want more benefits, even if taxes will rise, but they explicitly mentioned they were unwilling to raise their own personal taxes in the previous question. 30.36% are coded as willing to pay.

Two main explanatory variables are used: socio-economic status and ideology. Income and education can be summarized into a socio-economic status index. Socio-economic status is based on a principal component analysis of income deciles and highest education level achieved ($\text{Alpha} = 0.41$). This index is used as a tool to facilitate interpretation, rather than presenting the effects of income and education separately. However, as shown in the appendix, using income and education separately does not alter the results.

Ideology is measured as an additive index based on three questions. The first question is about support for fiscal redistribution, while the other two questions ask about the deservingness of the poor and of the beneficiaries of public social spending. These questions resemble conventional measures of attitudes towards redistribution, are close to citizens’ perceptions of the meaning of left and right (Larsen, 2008; Roosma, 2016) and are the most relevant questions in the RTM survey to measure ideology. The first question, “should the government tax the rich more than they currently do in order to support the poor?”, has a five-degree scale answer ranging from “definitely not” (scored -2) to “definitely yes” (scored 2). The

second question: “why do you think people live in poverty?” is scored as the sum of respondents who say that people are poor because they are unlucky and/or because of injustice, minus the sum of responses mentioning that poverty is caused by laziness and/or is inevitable. The third question: “to what extent you agree or disagree that most people receive public benefits without deserving them?” is scored between -2 for respondent who strongly agree and 2 for respondents who strongly disagree. Hence, each variable is a five-category scale ranging from -2 (right) to 2 (left), summed to create an additive index ($\text{Alpha} = 0.63$). Since fewer than 0.5% of respondents score -6 or 6, they are collapsed to -5 and 5 to create a right/left index ranging from -5 to 5. Using each question separately as a measure of left-wing ideology leads to similar results.

Several individual-level control variables that should influence willingness to pay, ideology or socio-economic status are used. We control for demographic characteristics such as age, gender, being a public employee, the place of living and being a parent. Older individuals tend to be richer and prefer more state intervention in certain areas like pensions, parents have a keen interest in more spending on education while women tend to be poorer and to prefer more state intervention. The place of living could also influence the perception of an individual about the role of the state (Spire, 2018). We also add economic controls like housing status (which should influence answers to the willingness to pay question about housing) and employment status (full time, part time and unemployed), as previous research has shown that labour market insiders have different preferences than outsiders (Rueda & Stegmueller, 2019). We also include three attitudinal controls that could represent omitted variables in the relationship between socio-economic status and taxation preferences: political efficacy, perception about whether it is justifiable to cheat on taxes and perception about access to public benefits.

At the macro level, we control for public social expenditures as a percentage of GDP to control for positive feedback or for thermostatic effects of the level of spending (Busemeyer, Abrassart, & Nezi, 2019).

We also control for tax levels as a percentage of GDP and tax progressivity³, which have been shown to impact individual attitudes towards taxation (Sumino, 2016). Finally, we control for poverty rates, which can affect citizens' perception of the poor, along with inequality, which could have an effect on the preferences of high-income respondents (Rueda & Stegmueller, 2019) and the share of private social expenditures, which could affect how people perceive the role of the state in social protection (Busemeyer & Iversen, 2020). A summary of the wording of the questions, the distribution and the coding of the main variables used both in the *Risks that Matter* and in the ISSP survey is presented in the appendix.

Intraclass correlations reveal that only 3% of the variation in UWTP and WTP is explained by differences between countries, suggesting that very little relevant data can be extracted from a mixed effect multilevel model. Moreover, we refrain from using cross-level interactions since Stegmueller (2013) suggests that a second level of about 20 countries is not enough to produce reliable estimates. We thus use a logistic multilevel model with country-level random intercepts, along with standard errors clustered at the country level. We focus on a graphical representation of the results and present the result tables in the appendix. Note that for both surveys, models using survey weights are very similar to those presented below.

Results from RTM survey

Figure 2 presents the interaction of the left index and of socio-economic status to predict unwillingness and willingness to pay, holding all other covariates constant. The left and right panels show the very clear moderating effect of ideology on socio-economic status's impact on unwillingness to pay (left panel) and willingness to pay (right panel). For right-wing respondents, increasing socio-economic status is associated with more unwillingness to pay (significant for the 18% of the sample most to the right) and less willingness to pay (for a third of the sample most to the right). For left-wing respondents, a higher socio-

³ This is calculated as the sum of taxes on income, profits, capital gains and property taxes (which are progressive taxes) divided by the sum of social security contributions and taxes on goods and services (which are regressive or proportional taxes) as a percentage of GDP.

economic status decreases unwillingness to pay (significant for respondents scoring above 0 on the left index, which is about 50% of the sample) and increases willingness to pay (significant for the 13% of the sample that is the most left-wing). An increase of one standard deviation in socio-economic status for a right-wing respondent scored -2 (which is about one SD below the mean of the ideological index) increases the probability of being unwilling to pay by 1.59 percentage point and decreases the probability of willingness to pay by 1.7 percentage points. For a left-wing respondent scored 2.5 (which is about one SD above the mean of the ideological index), a one SD increase in socio-economic status decreases the probability of unwillingness to pay by 3.8 percentage point and increases the probability of willingness to pay by 1.6 percentage points.

All relationships are robust to using income or education separately rather than as an index of socio-economic status and to alternative coding of ideology. One could argue that above a certain threshold of income, a citizen's ability to pay is high enough so that only ideology, and not income, explains willingness to pay. Plotting the marginal effect of a kernel smoothing estimator with locally weighted regressions still shows a linear effect, suggesting that there are no threshold effects (Hainmueller, Mummolo, and Xu (2019)). The results of this estimation are shown in the appendix.

In brief, this analysis of the RTM survey's precise question about willingness to pay shows that socio-economic status reduces unwillingness to pay taxes, especially if the respondent has a left-wing ideology. We can reject the null of hypothesis 1a: a higher socio-economic status decreases unwillingness to pay and increases willingness to pay if the respondent has a left-wing ideology. We also reject the null of hypothesis 1b: more privileged respondents are less willing to pay if they have a right-wing ideology.

Figure 2. Average marginal effect of socio-economic status, conditional on ideology, predicting unwillingness to pay (left) and willingness to pay (right), controlling for demographic, economic and attitudinal predictors and for country-level variables.

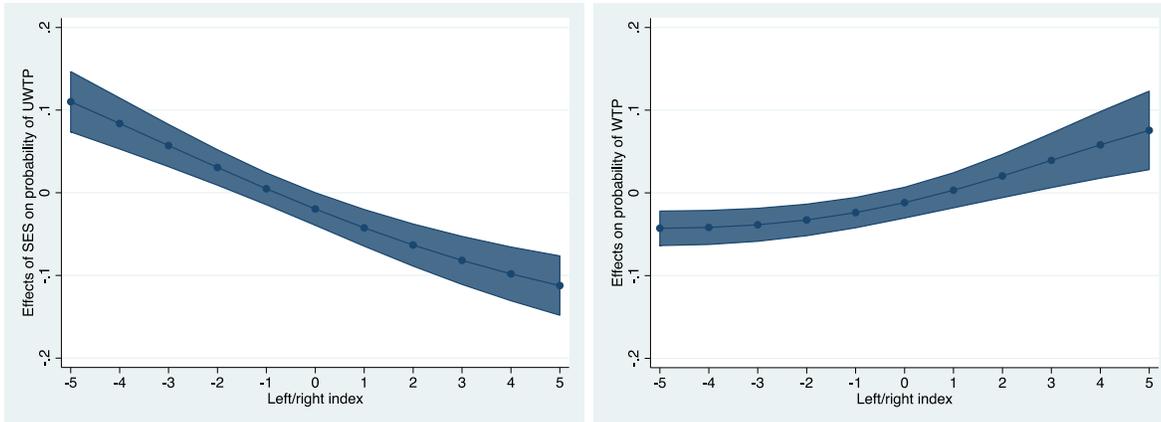
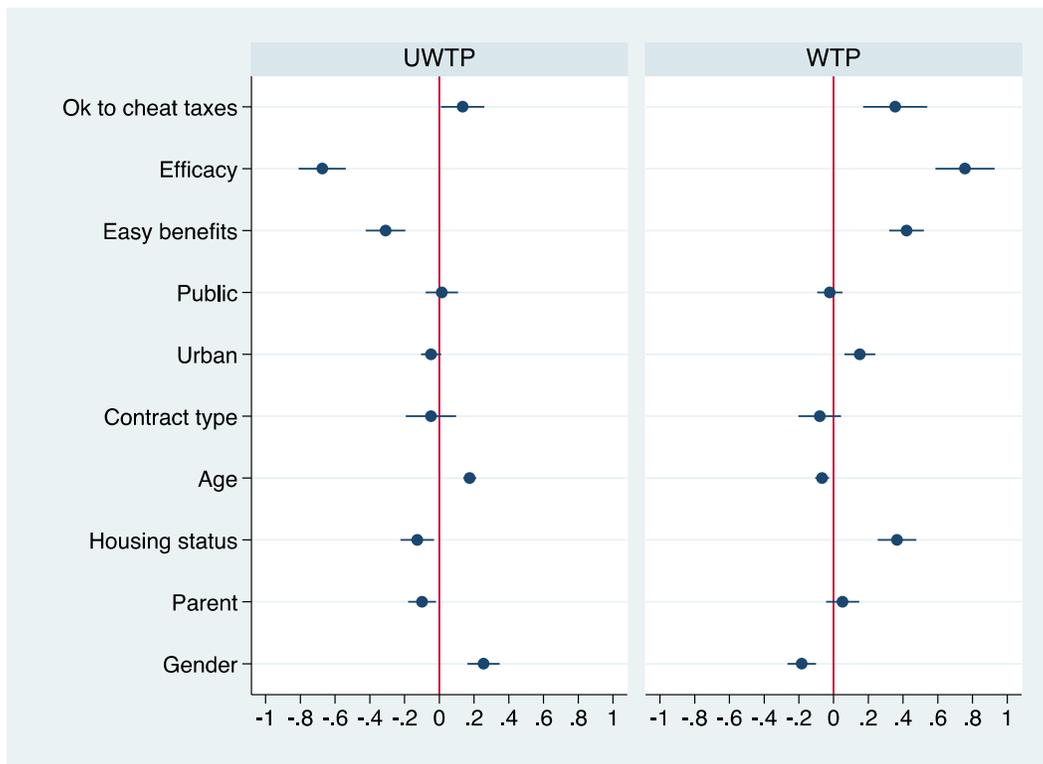


Figure 3 presents the effects of the control variables included in the regression models, except for the interaction of ideology with socio-economic status, which is graphically depicted in figure 2. The country-level control variables are included in the models, but not presented in figure 3 since the small number of countries included in our dataset prevents us from making correct inference about the significance and the size of their coefficients (Stegmueller, 2013). One notable finding reveals that women are 28.8% more likely to be unwilling to pay and 16.1% less likely to be willing to pay than men. This result suggests that willingness to pay is different than preferences for higher spending or for redistribution since many studies have found that women are more in favour of income redistribution (Sumino, 2019). Sumino (2016) and Spire (2018) also finds that women prefer lower tax levels, but higher tax progressivity. Women’s lower willingness to pay taxes, also confirmed by the ISSP analysis (see in the appendix), deserves further research. It may be explained by higher childrearing costs, greater uncertainty on the labor market and expectations of lower pay relative to men.

Urban voters are 10.1% less likely to be unwilling to pay and 21.6% more likely to be willing to pay than non-urban voters, confirming Spire (2018) findings. A one standard deviation increase in age increases

unwillingness to pay by 27% and decreases willingness to pay by 8.4%, while a perception that it is acceptable to cheat on taxes increases unwillingness to pay by 17%, but also increases willingness to pay by 39.3%, which is counter-intuitive. Being one of the relatively rare respondents (16% of the sample) who feel that the government considers their views when reforming public benefits, which is our measure of political efficacy, decreases unwillingness to pay by a staggering 47.5% and increases willingness to pay by 113.6%. Similarly, a respondent feeling that she would have an easy access to public benefits if she needed them would be 23.5% less likely to be unwilling to pay and 52.8% more likely to be willing to pay. Being a parent, a public employee and the type of employment contract does not have a significant effect on (un)willingness to pay.

Figure 3. Coefficients of the control variables to predict unwillingness and willingness to pay.



Analysis with the ISSP

In the ISSP “Role of Government” survey, the main question about tax policy preferences asks respondents about their perception of current levels of taxes (much too high, too high, about right, too low or much too low) on different income groups (high, middle and low incomes). In contrast to the main question analyzed with the RTM survey, it is not a direct question on willingness to pay. Still, three variables measuring support for higher levels of taxation can be created with these questions. The first one is a measure of unwillingness to pay: a dummy variable coded 1 if the respondent thinks that taxes on middle incomes are too high or much too high and coded 0 otherwise. As discussed in the theoretical section, most people consider themselves to be in the middle-class even if they are richer than objective middle-income groups. Support for taxing middle incomes varies little across income groups (Ansell et al., 2021), suggesting that respondents of all income groups may be thinking about themselves when revealing their preferred level of taxes on middle-income groups. As a robustness check presented in the appendix, we create subsamples of perceived middle-class respondents based on answers to questions on self-perception of class position⁴. Within this middle-class subsample, we assume that respondents are thinking about taxes on themselves when answering the question on perceptions of the level of tax on middle incomes. Note, however, that about the same proportion of respondents (50%) think that taxes on the middle are too high in the middle-class subsample than in the full sample and that the results are not different when using one sample or the other. We thus focus on the full sample in the main manuscript.

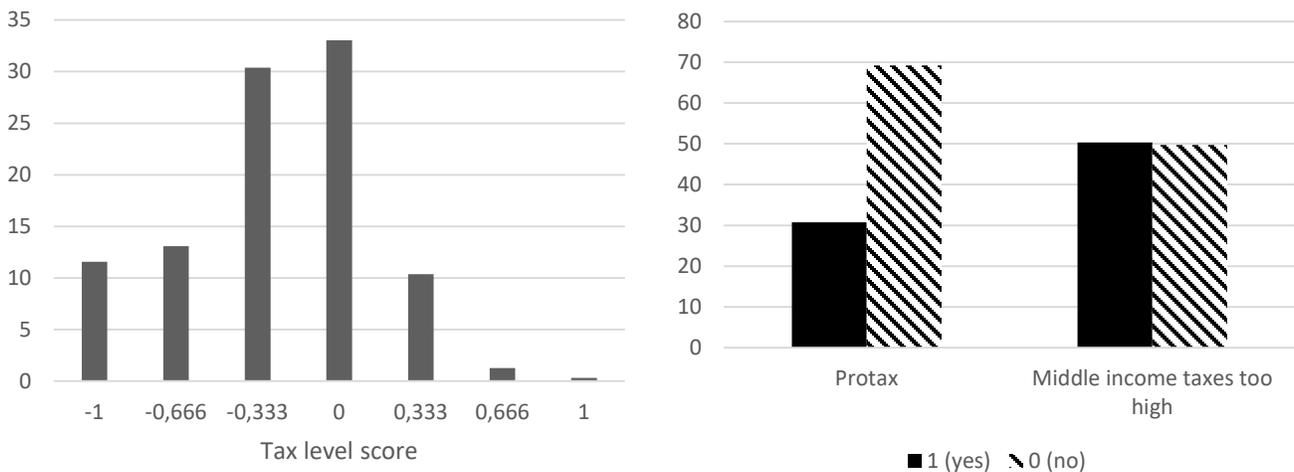
The two other measures of tax preferences aim to identify respondents who would be willing to sustain a higher overall level of taxes. *Protax* is a dummy variable coded 1 if respondents think that taxes on high incomes are too low (53.28%) and that taxes on middle incomes are either about right (45.49%) or too low (4.59%). These respondents prefer higher levels of taxes overall since higher taxes on the rich would not

⁴ The question on self-perception of class position is asking the respondent to place herself in the group where she thinks she belongs using a 0 (bottom group) to 10 (top group) scale. Only 25% of respondents place themselves in the top and bottom 3 groups. We create a subsample of middle-class respondents with the remaining 75% of respondents who place themselves in the middle groups (4, 5, 6, 7 on the scale).

be compensated by lower taxes on the middle. This question excludes taxes on the poor because 72% of respondents think that taxes on the poor are too high and because perceptions about taxes on the poor may reflect fairness considerations more than (un)willingness to raise taxes.

The third tax question measures preferences for tax levels and is inspired by Sumino (2016). Respondents receive a score of +1 each time they consider that taxes on one of the three income groups are too low, 0 when they think they are about right and -1 when they are too high. The sum is then divided by 3, so the variable *Taxlevels* ranges from -1 (thinking taxes are too high on each income group) to 1 (thinking taxes are too low on each income group). As shown in figure 4, very few respondents prefer a higher tax burden, reflecting Barnes (2015) findings. The three tax questions (taxes on the middle are too high, *Protax* and *Taxlevels*) are not measuring exactly the same thing, as their correlation ranges from $R=0.66$ to 0.71 . Figure 4 presents the distribution of the dependent variables in the ISSP survey.

Figure 4. Distribution of the tax preference variables, % of respondents ISSP 2016.



To test hypotheses 1a and 1b, we create an index of socio-economic status. We create a measure of socio-economic status using a principal component analysis of income deciles, highest education level

achieved and top-bottom self-placement⁵ ($\alpha=0.54$). To calculate respondents' income from the ISSP, we divide each countries' household incomes into deciles, taking into account the size of the household, by dividing the household's income by the square root of the number of household members (Armingeon and Weisstanner 2021; Cansunar 2021).

Vote choice is used as a measure of ideology. We use the ISSP's coding of parties and code respondents as 1 if they voted for left or far left parties, 2 for center and liberal parties and 3 for right, conservative and far-right parties. Since only respondents who say they voted in the last election are included, the sample size is smaller than with other questions (16 812). The appendix reveals that the results are robust to using preference for redistribution as an alternative measure of ideology.

As common in the CPE literature (Beramendi et al. 2015) occupations are measured by using Oesch's (2013) regrouping technique of all occupational subcategories into eight main occupational categories, computed with the command *oesch* in Stata (Kaiser, 2018). Socio-cultural professionals, service and production workers are significantly more likely than other occupations to vote for the left, as shown in the appendix.

The ISSP allows to control for two other confounders that we not included in the RTM questions: trust and the level of political sophistication. Both have been shown to predict preferences about taxation (Lachapelle et al. 2021; Stiers et al. 2021; Tuxhorn et al. 2021). Political sophistication is measured with a subjective assessment of respondents' understanding of political issues. An index of institutional trust is created by using two questions about trust in the impartiality of tax authorities and one question asking if most civil servants can be trusted ($\alpha = 0.55$). We also control for potential individual-level confounders similar to those of the RTM, such as gender, having a job, being a retiree, a public employee, place of living, having a child, age and political efficacy. Country-level controls are the same as in the RTM survey.

⁵ The results are not different if I remove Top-bottom self-placement from the scale to mirror the analysis conducted with the RTM survey.

The same regression models are used as in the ISSP survey: a logistic multilevel model with country-level random intercepts, along with standard errors clustered at the country level. The *Taxlevel* variable is treated as a continuous variable modelled with OLS regressions but using ordered logistic model doesn't alter the results. The intra-class correlation is higher with the ISSP (5 to 10%, conditional on the dependent variable), but the random effects models display very similar results to mixed effect multilevel models, which are not reported to save space.

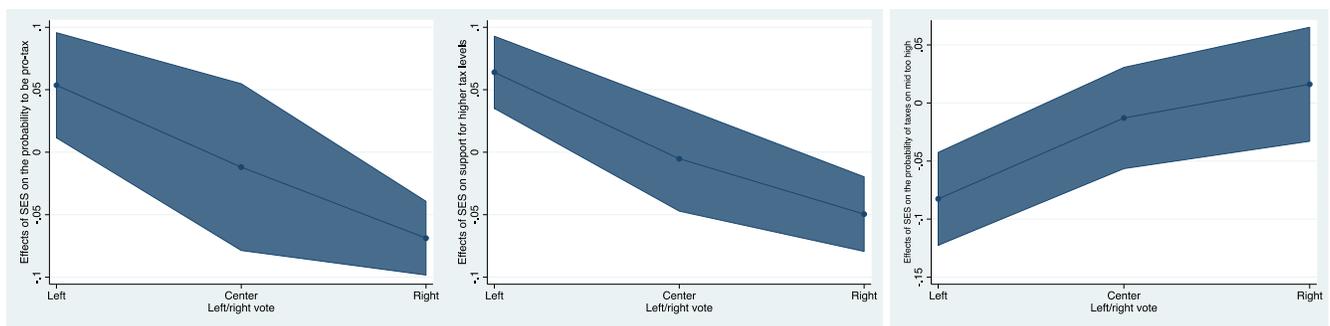
Results from the ISSP survey

Figure 5 presents the interaction between socio-economic status and vote choice. The effects are very similar for all three tax preference variables. Socio-economic status is significantly associated with more willingness to pay taxes among left-wing voters, whereas an increase in socio-economic status decreases willingness to pay among right-wing voters. The results are slightly different for the dependent variable using taxes on middle incomes since socio-economic status has an insignificant effect for both centrist and right-wing voters. Among left voters, a one unit increase in socio-economic status increases support for higher tax levels by 0.064, which is 15% of a standard deviation, whereas it decreases support for higher tax levels by 0.05 among right-wing voters (12.5% of a standard deviation). The effect of socio-economic status on willingness to pay is insignificant among centrist voters. Again, the results are robust to using income or education separately rather than together in an index of socio-economic status. These results confirm those of the RTM survey and allow us to reject the null of hypotheses 1a and 1b: socio-economic status has a positive (negative) effect on willingness to pay among respondents with a left (right)-wing ideology.

The differences of tax policy preferences between occupational groups are presented in figure 6, which displays the average marginal effect of each occupation relative to socio-cultural professionals, used as a reference category to test hypothesis 2a. We are also interested in comparing socio-cultural professionals more specifically with service and production workers to test hypothesis 2b. The regressions presented in figure 6 control for all individual and country-level variables also included in the regressions of figure 5,

except for socio-economic status, since occupational categories and socio-economic status are measuring the similar concepts.

Figure 5. Average marginal effect of socio-economic status, conditional on vote choice to predict *Protax* (left panel), *Tax levels* (center panel) and support for taxes on the middle income (right panel), controlling for demographic, economic and attitudinal predictors and for country-level variables.

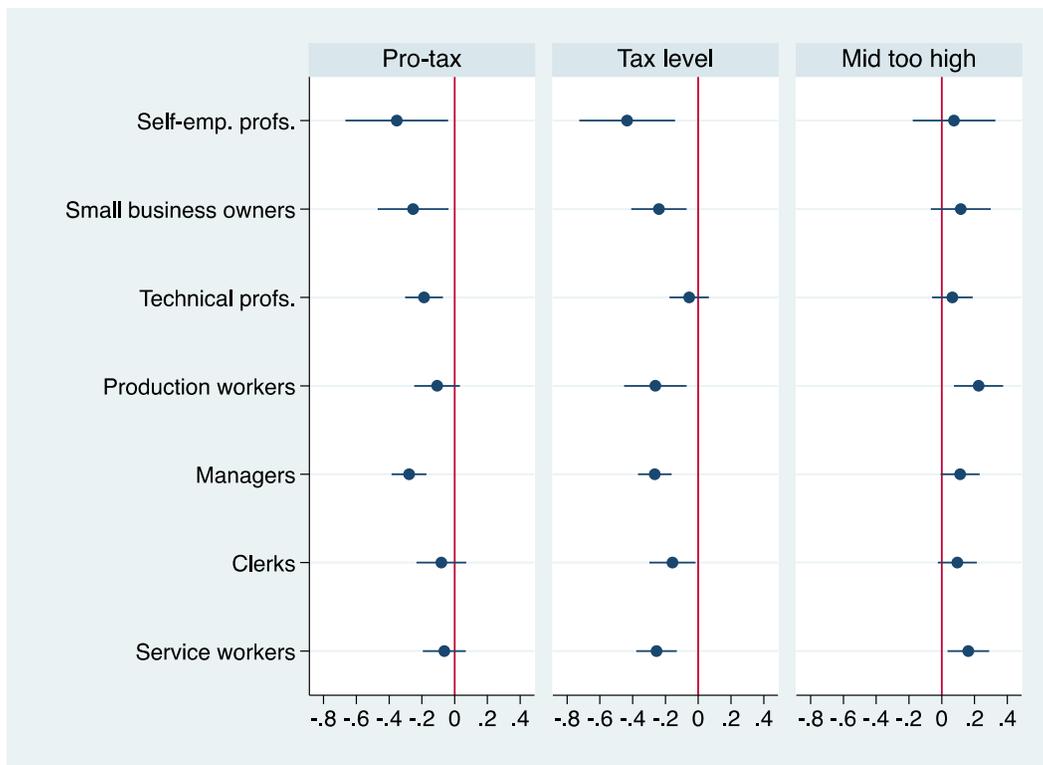


The middle panel of figure 6 shows that all occupational groups except technical professionals prefer a lower tax level than socio-cultural professionals. Being a production or a service worker relative to a socio-cultural professional reduces the tax level variable by 0.053, which is about 13% of a standard deviation. The right panel shows that service and production workers are the only occupations that are significantly more likely than socio-cultural professionals to believe that taxes on the middle are too high. Being a production worker relative to a socio-cultural professional increases the probability of thinking taxes on the middle-income groups are too high by 26.7% (17.7% for service workers). While socio-cultural professionals tolerate the current tax burden on the middle class, service and production workers tend to consider it as too high.

For both the *Protax* and *Taxlevel* variables, the difference between socio-cultural professionals and service and production workers remains significant when controlling for income but becomes insignificant when controlling for education. This is because education comes prior to occupations and reduces the impact of occupations on preferences (Sumino, 2019). Although several occupations are less likely to be *Pro-tax* than

socio-cultural professionals, there are no differences between socio-cultural professionals and production and service workers, as shown in the left panel. This is because the *Protax* variable is influenced by perceptions of taxes on the rich, and all of the three left-wing constituencies tend to prefer higher taxes on the rich. When controlling for income in the models predicting *Protax*, the difference between socio-cultural professionals and service and production becomes significant. These results allow us to reject the null of hypotheses 2a and 2b: socio-cultural professionals are the group that is the most willing to pay and they are significantly more willing to pay than service and production workers. A discussion of the graphical representation of the effect of the control variables in the ISSP survey is presented in the appendix.

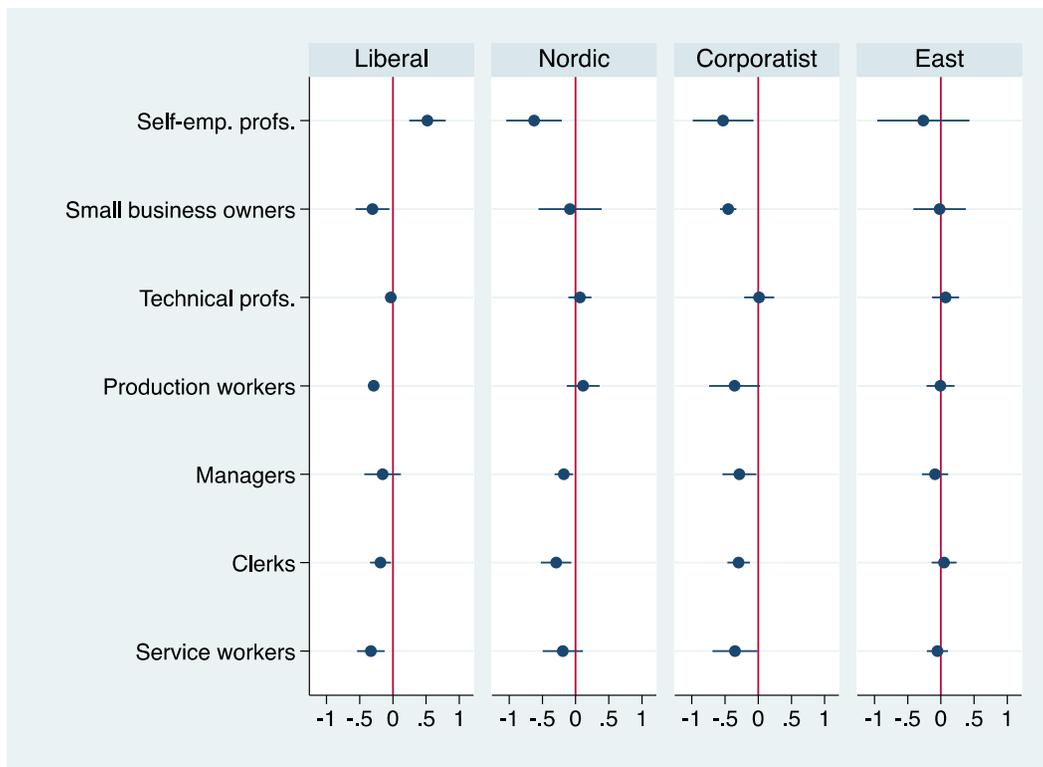
Figure 6. Average marginal effect of occupations to predict *Protax* (left panel), *Tax levels* (center panel) and support for taxes on the middle income (right panel), controlling for demographic, economic and attitudinal predictors and for country-level variables.



Finally, to test hypothesis 2c, we clustered respondents by four welfare state regimes in the ISSP survey and run the same models associating occupations with tax policy preferences. Following common practice (Beramendi et al. 2015; Esping-Andersen 1990), Denmark, Finland, Iceland, Norway and Sweden compose the Social-Democratic regime, whereas Belgium, France, Germany and Switzerland are included in the Corporatist-Conservative regime, while Australia, New Zealand, UK and the USA compose the Liberal regime. We combine Czech Republic, Hungary, Latvia, Lithuania, Slovakia and Slovenia in an eastern European welfare regime.⁶ Figure 7 presents the effect of occupations on the *tax level* variable in the four welfare state regimes. It shows that in Social-Democratic Regimes, managers, business professionals and clerks are less likely than socio-cultural professionals to support higher tax levels, but production and service workers do not have different preferences for tax levels than socio-cultural professionals. In contrast, in Liberal and Corporatist-Conservative regimes, service and production workers prefer significantly lower tax levels than socio-cultural professionals, following the overall pattern revealed in figure 6. In the appendix, we present the regression table and confirm, using the two other willingness to pay variables that the difference between socio-cultural professionals, on the one hand, and service and production workers, on the other hand, is not significant in Social-Democratic regimes, but remains significant in Liberal and Corporatist-Conservative regimes.

Figure 7. Average marginal effect of occupations to predict *Tax levels* in four welfare state regimes controlling for demographic, economic and attitudinal predictors and for country-level variables.

⁶ We do not include a southern European regime since Spain is the only Southern European country in the ISSP survey.



In Eastern Europe, occupations are not correlated with tax policy preferences. Note that both in the RTM and in the ISSP survey, the interaction between socio-economic status and left-wing ideology or vote choice is a significant predictor of willingness to pay in every welfare regime, except in Eastern Europe where the interaction is insignificant. These findings suggest that in Eastern Europe, tax policy preferences relate considerably less to class, socio-economic status, and ideology, than in other advanced democracies. Institutional trust may be a particularly important explanatory factor of tax policy preferences in Eastern Europe (Habibov, Cheung, et al., 2018).

Discussion and conclusion

This study highlights the importance of interacting ideology with material interests to analyze individual preferences (Armingeon and Weisstanner 2021). Among individuals with a left-wing ideology, a higher socio-economic status is correlated with more willingness to pay. In contrast, for individuals with a

right-wing ideology, higher socio-economic status tends to be associated with less willingness to pay. While preferences for additional spending and redistribution tend to decrease with income, the opinions about willingness to pay are more complex: for individuals sharing a similar ideology, low-income citizens tend to be less willing to pay than high-income citizens. Citizens need to have the means to pay additional taxes and a sufficient level of education to connect taxation and spending.

The analysis conducted in this article reveals an additional tension within center-left coalitions concerning taxes: not only is there a tension between sociocultural professionals on one side and low-skilled service and production workers on the other side concerning social values (the universalistic/particularistic divide) (Oesch & Rennwald 2018) and the prioritization of investment and consumption (Beramendi et al. 2015; Häusermann et al. 2021), but the analysis of tax policy preference reveals that they also diverge on their willingness to pay. Service and production workers tend to believe that taxes on middle incomes are too high, and to be unwilling to raise their own tax burden. In contrast, sociocultural professionals tend to be willing to raise their own tax burden considerably more than production and service sector workers. The unwillingness to pay of service and production workers is related to income and education: even if they would benefit from more public services, they may feel that additional taxes are a cost that they cannot afford to bear. However, in Social-Democratic welfare states, a pro-tax coalition exists since all the left-wing constituencies are similarly willing to pay taxes. This is quite possibly because the universal welfare state has been funded by taxes on all income groups, thus forming a taxpaying habit among the working and middle classes.

Our results suggest that many progressive voters prefer increasing tax progressivity by taxing the rich and reducing taxes on the middle and the poor, while refusing to raise their own tax burden. The unwillingness to pay of a large proportion of their constituents put center-left parties in a difficult situation: they need to raise taxes if they want to increase spending, otherwise they must implement cutbacks in some policy areas to fund additional spending in other policy domains. If they choose not to raise taxes, center-left governments have to pick between social consumption, preferred by the working class and social

investment, which is preferred by their new main constituency, middle-class sociocultural professionals. Cutbacks in one of these areas to fund expansion in the other risk alienating one of their main constituencies and provoke the migration of voters towards other parties; of the working class to populist parties of the left and the right if they cut consumption and of sociocultural professionals to green or centrist parties if they don't deliver investments in education and the environment (Oesch & Rennwald 2018).

Nevertheless, the willingness to pay of sociocultural professionals offers a silver lining for center-left parties. Piketty (2019) criticized the shift in the electoral constituencies of left-wing parties, describing contemporary social-democratic parties as the “Brahmin left” attracting educated citizens who are less interested in income redistribution. However, these educated progressive voters are willing to pay higher taxes. This contrasts with the traditional core constituency of the left which doesn't have the means and the will to sustain higher taxes. If progressive parties can propose a unifying policy agenda bridging tensions between groups, social-cultural professionals might represent key voters willing to contribute to a more generous welfare state.

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