universität wien

The Effect of Income Tax Knowledge on Preferences for Redistribution

Fabian Kalleitner, Department of Economic Sociology, University of Vienna

Bernhard Kittel, Department of Economic Sociology, University of Vienna

Young Economists Conference: Welfare state under attack 10 08 2018

universität wien

Redistribution preferences and taxation

- Canonical model: (Meltzer and Richard 1981)
- Empirical results are mixed
- Strong intervening factors in the relationship between individual interest and redistribution preferences
  - Trust in the state (Svallfors 2013)
  - Past Social Mobility (Piketty 1995)
  - Anticipated social mobility (Alesina and Giuliano 2015)
  - Knowledge / Information

universität wien

The importance of knowledge as a moderating factor

- Information problems in public economy focused on problems of fiscal illusion (misinterpretation of one's own tax burden)
- Recent literature focuses on misinformation and perceptions of individuals on issues regarding one's own position with regard to others:
  - Political information (Iversen and Soskice 2015)
  - Degree of Inequality (Gimpelson and Treisman 2018)
  - Relative income position (Cruces et al. 2013)
  - Tax rates (Liebig and Mau 2005; Gideon 2017)
  - Tax model (Slemrod 2006)

universität wien

Three interdependent questions

- Does knowledge about the present tax model moderate the impact of financial self-interest on preferences for a progressive vs. a proportional tax model?
- How can tax knowledge questions help to explain differences between taxation preferences and redistribution preferences?
- Are lower income groups at a substantive disadvantage regarding the impact of misinformation on tax preferences?

universität wien

Tax- and redistribution preferences in survey research

- Knowledge questions are difficult
- “The best” way to integrate knowledge questions in survey research has not been found yet
- Focus on one question solution:
  - ISSP 2009: Preferences for progressive taxation in Austria 78%
  - ESS 2008: Preferences for progressive taxation in Austria 34%

- Highlights the (mostly ignored) methodological dimension of the knowledge problem in preferences for redistribution: Validity (Kalleitner and Kittel 2017; Liebig et al. 2015; Roberts et al. 1995)

universität wien

Sample

- Web survey of a representative sample of 1,051 respondents fielded 2016 in Austria
- question wording of the ESS 2008 avoids a percentage bias (Roberts et al.1994) and does not hide complexity

PUMA

Plattform für Umfragen,
Methoden und empirische Analysen (PUMA)

The Questionnaire

Think of two people with different incomes. One individual earns twice as much taxable income as the other.
Which statement comes closest to how you think those two <u>should</u> be taxed?

- The percentage of taxes should be equal, so that the person earning twice as much pays double in tax.
- The percentage of taxes should be higher for the higher earner, so the person earning twice as much pays more than double in tax.
- The percentage of taxes should be lower for the higher earner, so the person earning twice as much pays less than double in tax.
- (None of these)
- (Don’t know)

The Questionnaire

Think of two people with different incomes. One individual earns twice as much taxable income as the other.
Which statement comes closest to how you think those two should be taxed?

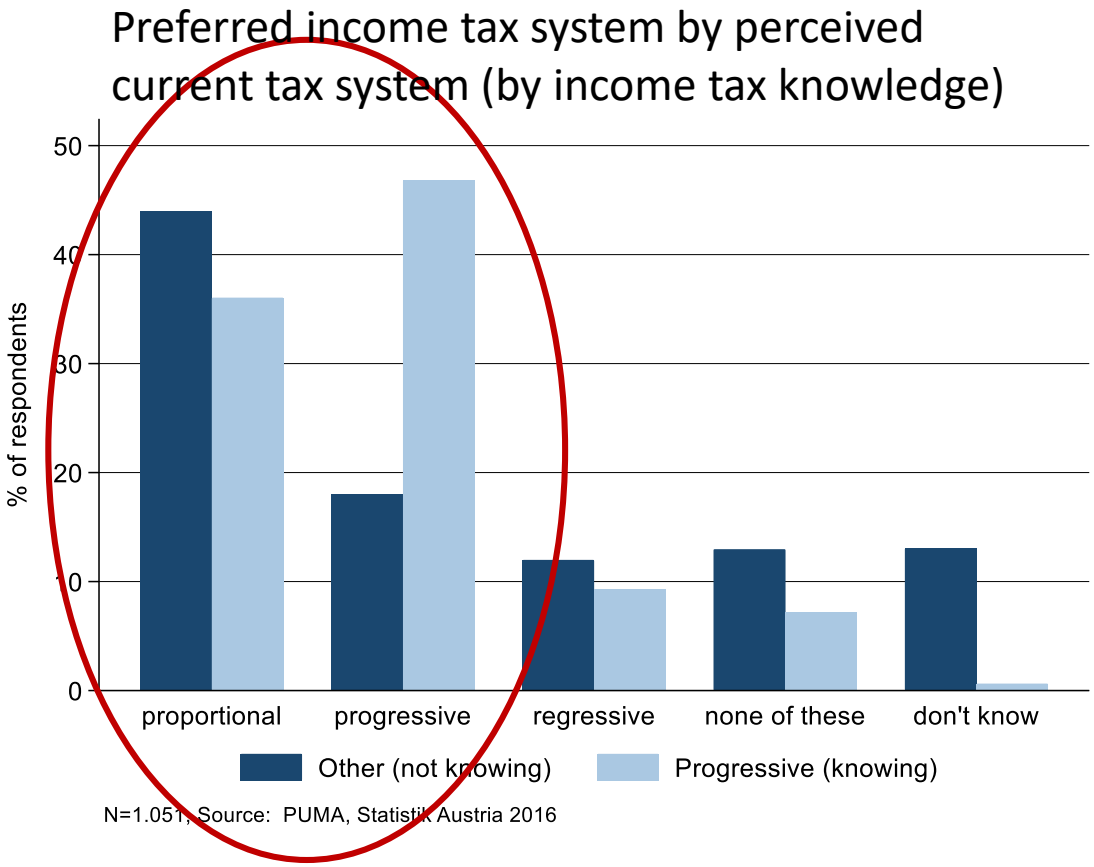
- The percentage of taxes should be equal, so that the person earning twice as much pays double in tax.
- The percentage of taxes should be higher for the higher earner, so the person earning twice as much pays more than double in tax.
- The percentage of taxes should be lower for the higher earner, so the person earning twice as much pays less than double in tax.
- (None of these)
- (Don’t know)

Which statement comes closest to how you think those two are actually taxed in Austria?

- The percentage of taxes is equal, so that the person earning twice as much pays double in tax.
- The percentage of taxes is higher for the higher earner, so the person earning twice as much pays more than double in tax.
- The percentage of taxes is lower for the higher earner, so the person earning twice as much pays less than double in tax.
- (None of these)
- (Don’t know)

Descriptive results

- Majority choose the proportional tax option
- Only 37 % perceive current tax system as progressive
- Large amounts of avoiding answers especially in the knowledge question with 18% of respondents choosing “don’t know”



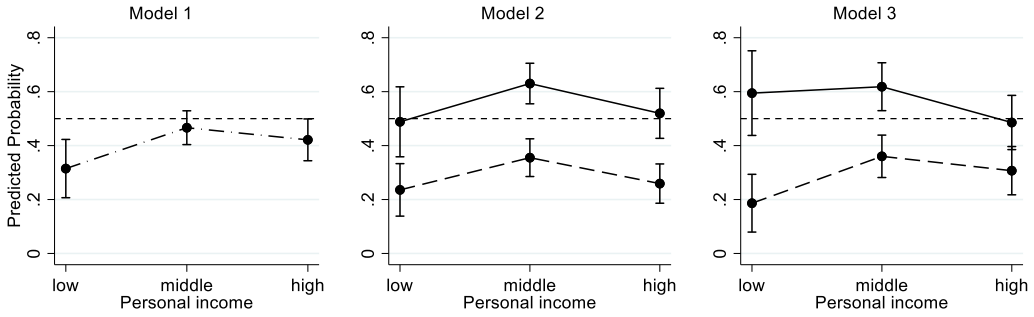
universität wien

Binary logistic regression model

- $\mathrm{P}(prog_i) = \frac{e^{\beta_0 + \beta_1 inc_i + \beta_2 know_i + \beta_3 inc_i * know_i + \beta_j \mathrm{X}_{ji}}}{1 + e^{\beta_0 + \beta_1 inc_i + \beta_2 know_i + \beta_3 inc_i * know_i + \beta_j \mathrm{X}_{ji}}}$
- probability that an individual i prefers a progressive tax ($prog_i$)
- financial self-interest (inc_i),
- tax information ($know_i$),
- a set of control variables (X_{ji}) (education, sex, age, tax information source, labor market integration, employment group)
- Interaction between income group and tax knowledge ($inc_i * know_i$)
- Robustness checks using KHB and OGLM models resulted in similar results

universität wien

The effect of tax knowledge and income on preferences for progressive taxation



Accounting for misinterpretations of the current tax system

Expected direction of intended change in tax progression

Preferred / Current	Proportional	Progressive	Regressive
Proportional	=	↑	↓
Progressive	↓	=	↓
Regressive	↑	↑	=

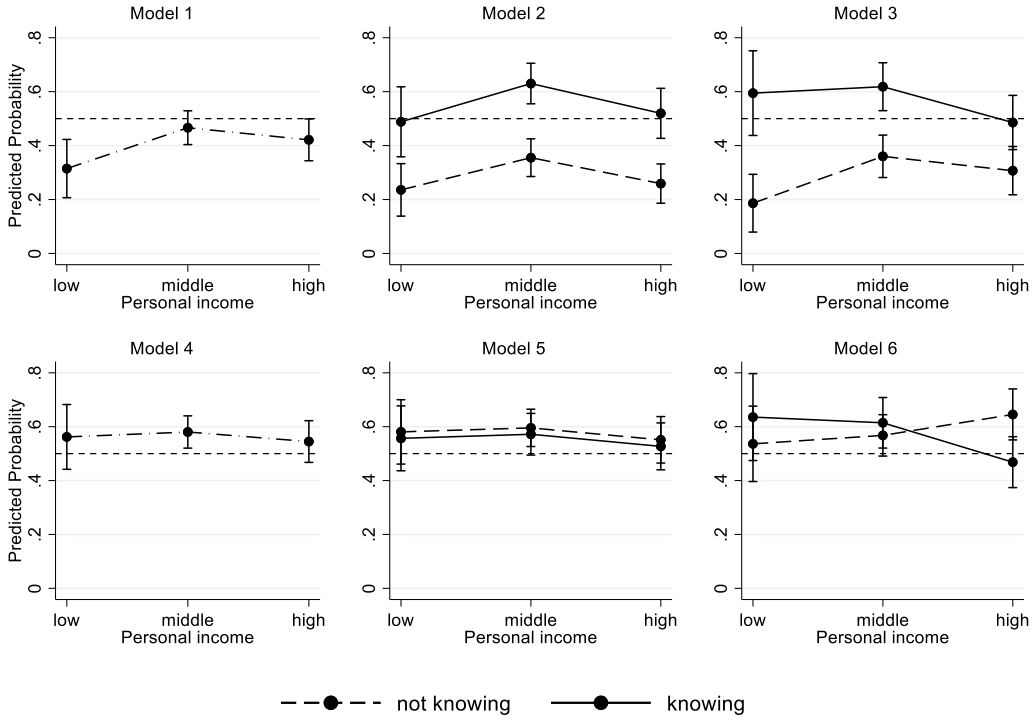
53% of respondents choosing regressive

Change depended variable from preferred income tax system to intended income tax change -> what can that tell us about the impact of tax knowledge?

The effect of tax knowledge and income on preferences for progressive taxation II

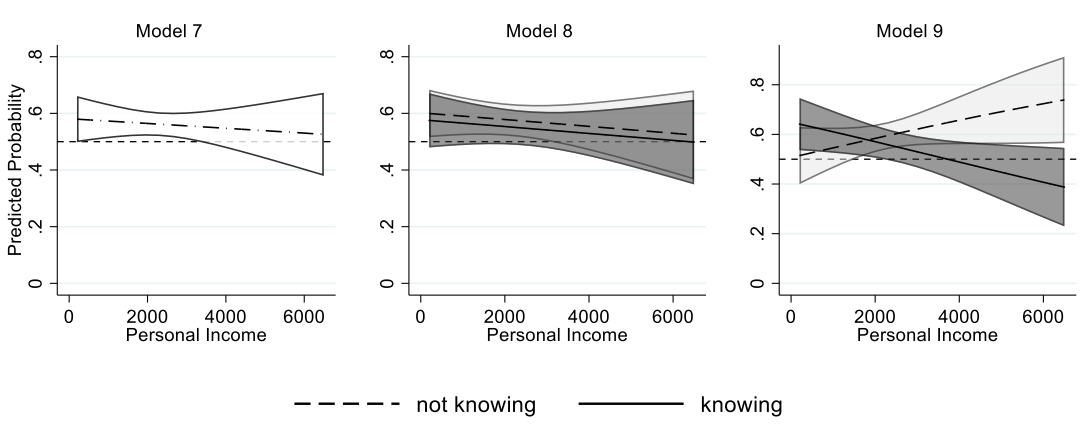
Not accounting for redistribution intention

Accounting for redistribution intention



The effect of tax knowledge and income on preferences for progressive taxation III

Accounting for redistribution intention (continuous income variable)



universität wien

Three interdependent answers

- Does knowledge about the present tax model moderate the impact of financial self-interest on preferences for a progressive vs. a proportional tax model?
  - Yes information enables individuals to act in their own interest and the results suggest that they do so more if they can.
- How can tax knowledge questions help to explain differences between taxation preferences and redistribution preferences?
  - People preferring stronger redistribution are not necessary able to transfer this idea into tax preferences which would lead to more progressive taxation.
- Are lower income groups at a substantive disadvantage regarding the impact of misinformation on tax preferences?
  - Low income groups have two disadvantages: They are not that informed about taxation, and they misinterpret the current tax system in a way that leads them to favor disadvantages changes in tax progressivity.

universität wien

Literature

- Alesina, Alberto, and Paola Giuliano. 2015. Culture and Institutions. *Journal of Economic Literature* 53 (4): 898–944.
- Cruces, Guillermo, Ricardo Perez-Truglia, and Martin Tetaz. 2013. Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment. *Journal of Public Economics* 98 (Supplement C): 100–112.
- Dalton, Hugh Dalton. 1954. *Principles of Public Finance*. 4. ed., rev. And reset, 21. impr. London: Routledge.
- Gideon, Michael. 2017. Do Individuals Perceive Income Tax Rates Correctly? *Public Finance Review* 45 (1): 97–117.
- Gimpelson, Vladimir, and Daniel Treisman. 2018. Misperceiving Inequality. *Economics & Politics* 30 (1): 27–54.
- Iversen, Torben, and David Soskice. 2015. Information, Inequality, and Mass Polarization: Ideology in Advanced Democracies. *Comparative Political Studies* 48 (13): 1781–1813.
- Kalleitner, Fabian, and Bernhard Kittel. 2017. Das Einkommensverständnis in Österreich. Wissen und Zustimmung zur progressiven Besteuerung. In *Aktuelle Probleme der Finanzsoziologie: die Fragestellungen von Rudolf Goldscheid heute*, 173–91. Beiträge der Wiener Gesellschaft für Soziologie ; Band 1. Wien: LIT.

universität wien

Literature

- Liebig, S., and S. Mau. 2005. When is a tax system just? Attitudes towards general principles of taxation and the justice of tax burdens. *Zeitschrift für Soziologie* 34 (6): 468–91.
- Liebig, Stefan, Meike May, Carsten Sauer, Simone Schneider, and Peter Valet. 2015. “How Much Inequality of Earnings Do People Perceive as Just? The Effect of Interviewer Presence and Monetary Incentives on Inequality Preferences.” Methods, Data, Analyses 9 (1): 30.
- Meltzer, Allan H., and Scott F. Richard. 1981. A Rational Theory of the Size of Government. Journal of Political Economy 89 (5): 914–27.
- Piketty, Thomas. 1995. Social Mobility and Redistributive Politics. The Quarterly Journal of Economics 110 (3): 551–84.
- Roberts, Michael L., Peggy A. Hite, and Cassie F. Bradley. 1994. Understanding Attitudes Toward Progressive Taxation. The Public Opinion Quarterly 58 (2): 165–90.
- Slemrod, Joel. 2006. The Role of Misconceptions in Support for Regressive Tax Reform. National Tax Journal 59 (1): 57–75.
- Svallfors, Stefan. 2013. Government Quality, Egalitarianism, and Attitudes to Taxes and Social Spending: A European Comparison. European Political Science Review 5 (3): 363–80.

universität wien

Possible mechanisms affecting the misinterpretation of tax burdens

- Fiscal illusion
- Differentiating between different taxes and their impact is difficult
- Fairness perception of equal tax rates
- Labor market integration and rational interest of tax knowledge
- Marginal tax illusion
- Austrian school system

universität wien

Preferred Income tax system and knowledge about the current tax system

	Proportional	Progressive	Regressive	None of these	Don't know	Total
Preferred	41.0%	28.8%	11.0%	10.8%	8.4%	100.0%
Current	14.2%	37.4%	21.2%	9.4%	17.8%	100.0%
Preferred ESS[1]	40.9%	34.3%	6.8%[2]	7.7%	10.3%	100.0%

N=1,051, weighted [1]Weighted with Design und post stratification weight refer to ESS4; N=2,255. [2]Due to different question wording not fully comparable to the PUMA-data used here.

Logistic regression estimates of preferred income tax system (log-odds)

	(4) Modelinfo1 Pref. tax	(8) Model_6 Pref. tax2	(11) Model_9 Pref. tax2
Ind. Income (Ref=low income)			
Middle income	1.08**	0.13	
	(0.53)	(0.38)	
High income	0.82	0.45	
	(0.57)	(0.46)	
Tax system knowledge	1.85***	0.41	0.59
	(0.54)	(0.51)	(0.40)
MTR knowledge	0.54**	0.75***	0.72***
	(0.23)	(0.23)	(0.22)
Interaction Income*knowledge			
Middle income * sys. knowledge	-0.91	-0.22	
	(0.62)	(0.58)	
High income * sys. knowledge	-1.07*	-1.14*	
	(0.63)	(0.59)	
Information sources			
Media	-0.41*		
	(0.23)		
Tax reform	0.021		
	(0.23)		
Education	0.91***		
	(0.22)		
Work	-0.77***		
	(0.26)		
Tax counseling	-0.28		
	(0.24)		
Self-study	0.070		
	(0.23)		
Friends	0.25		
	(0.23)		
Monthly gross income			0.00016
			(0.00012)
knowledge * m. gross income			-0.00032**
			(0.00014)
Constant	-0.97	0.16	-0.047
	(0.88)	(0.76)	(0.76)
Observations	680	728	728
Controls	YES	YES	YES
AIC	4779844	5613774	5622827
Pseudo R-squared	0.125	0.042	0.040

Note: Depending variables (Pref. tax & Pref. tax2) preferred income tax system coded as 0= proportional income tax system, 1= progressive income tax system. Robust standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01. Controls: Gender, age, dummies for education (ISCED 1-2; 3; 4-5; 6-8) and dummies for employment group (white collar; blue collar; federal employee; self-employed; unemployed; not-employed).