

Understanding Economic Policies: What do People Know and Learn

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Do People Understand Economic Policies?

What do people **know** about economic policies?

How do they **reason** about them?

Can **economics** lessons change their views?

Can we improve the policy debate with better understanding of economic policies?

Five major policies: i) income tax; ii) estate tax; iii) health insurance; iv) trade; v) monetary policy.

This talk: only i)+ ii); Open to comments, can still improve a lot!

Will try and give a higher-level overview of all that can be done.
Data can be used in future too.

Method: Online Surveys and Experiments

Large-scale surveys & experiments: \approx 3,000 respondents per survey.

Done through commercial survey companies in Jan -April 2019.

Representative samples.

Surveys are a key tool:

Customizable, controllable, interactive;

Some things can not be seen in other data, no matter how good it is:
Perceptions, attitudes, knowledge, views.

Unlike older generation surveys measuring variables now better captured in admin data.

Representativeness of the Survey Sample

	US Population	Income Tax Survey	Estate Tax Survey
Male	0.48	0.48	0.46
18-29 years old	0.26	0.24	0.24
30-39 years old	0.18	0.20	0.21
40-49 years old	0.19	0.19	0.19
50-59 years old	0.21	0.20	0.19
60-69 years old	0.16	0.17	0.19
\$0-\$19,999	0.15	0.16	0.17
\$20,000-\$39,999	0.18	0.18	0.19
\$40,000-\$69,999	0.21	0.23	0.24
\$70,000-\$109,999	0.19	0.19	0.20
\$110,000+	0.25	0.23	0.20
Four-year college degree	0.22	0.33	0.31
High-school Graduate or Less	0.39	0.18	0.19
Employed	0.58	0.57	0.61
Unemployed	0.08	0.07	0.7
Married	0.49	0.54	0.54
White	0.61	0.76	0.76
Black/African-American	0.13	0.06	0.06
Hispanic/Latino	0.18	0.06	0.06
Asian/Asian American	0.06	0.07	0.07

Survey Outline

1. Background of respondent

Survey Outline

1. Background of respondent

Standard: income, education, family situation...

Political Views

Media exposure

Survey Outline

1. Background of respondent
2. Own exposure to policy

Survey Outline

1. Background of respondent

2. Own exposure to policy

Do people feel personally affected?

Survey Outline

1. Background of respondent
2. Own exposure to policy
3. Open-ended questions

Survey Outline

1. Background of respondent

2. Own exposure to policy

3. Open-ended questions

Main considerations?

Goals of 'good' system

Shortcomings of the system.

Goal: identify topics without priming.

Survey Outline

- 1. Background of respondent**
- 2. Own exposure to policy**
- 3. Open-ended questions**
- 4. Knowledge about policy and underlying economic phenomena**

Survey Outline

- 1. Background of respondent**
- 2. Own exposure to policy**
- 3. Open-ended questions**
- 4. Knowledge about policy and underlying economic phenomena**

Factual, quantitative questions (top tax rate, concentration of wealth...)

Goal: get an idea of how much the respondent knows about the economic policies.

Survey Outline

1. Background of respondent
2. Own exposure to policy
3. Open-ended questions
4. Knowledge about policy
6. Mechanisms.

Survey Outline

1. Background of respondent

2. Own exposure to policy

3. Open-ended questions

4. Knowledge about policy

6. Mechanisms.

Efficiency: Ask how people react to the economic policies?

How do they impact the economy?

Fairness: Who benefits and who loses? Fairness considerations?

Randomize: How would **YOU** react? How does a tax cut on families with income levels similar to **yours**...?

Randomize: How would high-income **women** react? How does a tax cut on high-income **women**.. ?

Survey Outline

- 1. Background of respondent**
- 2. Own exposure to policy**
- 3. Open-ended questions**
- 4. Knowledge about policy**
- 6. Mechanisms**
- 7. Mini Video courses**

Survey Outline

1. Background of respondent

2. Own exposure to policy

3. Open-ended questions

4. Knowledge about policy

6. Mechanisms

7. Mini Video courses

Redistribution: Distributional impacts of policy.

Efficiency: Efficiency costs of policy.

Economist: Trade-off between redistribution and efficiency.

Survey Outline

- 1. Background of respondent**
- 2. Own exposure to policy**
- 3. Open-ended questions**
- 4. Knowledge about policy**
- 6. Mechanisms**
- 7. Mini Video courses**
- 8. Questions on Policy Outcomes**

Survey Outline

- 1. Background of respondent**
- 2. Own exposure to policy**
- 3. Open-ended questions**
- 4. Knowledge about policy**
- 5. Attitudes**
- 6. Mechanisms**
- 7. Mini Video courses**
- 8. Questions on Policy Outcomes**

Some specific, some general.

Perceptions of fairness of the economic policy

Satisfaction with current policies

Survey Outline

1. Background of respondent
2. Own exposure to policy
3. Open-ended questions
4. Knowledge about policy
6. Mechanisms
7. Mini Video courses
8. Questions on Outcomes
9. Government Questions

Survey Outline

1. Background of respondent

2. Own exposure to policy

3. Open-ended questions

4. Knowledge about policy

6. Mechanisms

7. Mini Video courses

8. Questions on Outcomes

9. Government Questions

Specific & general. Do you trust government to do what is good ...?

Does the government have the tools to...?

Do you support increased intervention along dimension...?

Survey Outline

1. Background of respondent
2. Own exposure to policy
3. Open-ended questions
4. Knowledge about policy
6. Mechanisms
7. Mini Video courses
8. Questions on Outcomes
9. Government Questions
10. Feedback

Survey Outline

1. Background of respondent

2. Own exposure to policy

3. Open-ended questions

4. Knowledge about policy

6. Mechanisms

7. Mini Video courses

8. Questions on Outcomes

9. Government Questions

10. Feedback

Willingness to pay for correct information

Feedback on survey, self-reported attention.

Randomization Paths

	Incentives	Video Treatment	Mechanisms Framing
Group 1	Yes	Redistribution	Neutral
Group 2	Yes	Efficiency	Neutral
Group 3	Yes	Economist	Neutral
Group 4	Yes	No Treatment	Neutral
Group 5	Yes	No Treatment	You
Group 6	Yes	No Treatment	Gender
Group 7	No	Economist	Neutral

Ensuring Comprehension and Attention

Appeal to people's social responsibility. [▶ Detail](#)

Warn that “careless answers” will be flagged.

Incentivize correct answers with randomized amounts (includes no incentives).

Use of multiple choices, then text entry; sliders; images.

Time spent on separate questions & overall survey. [▶ Time Distributions](#)

Ask for feedback post survey, whether felt survey was biased.

Check careless response patterns (clicking same “middle” answer).

Screening questions, interspersed throughout survey.

Outline of the Talk

1. Misperceptions about Policies
2. Textual Analysis of Open-Ended Questions
3. Perceived Mechanisms
4. Effects of Video Lessons

Main Findings:

Misperceptions vary by aspect of the policy.

Very large for some (e.g: % of people in top tax bracket; % of people paying estate tax, wealth concentration).

Small for others (top tax rate, estate tax rate,..)

Misperceptions are “partisan.” (Accuracy is not, as direction of bias differs).

Text analysis identifies key topics: income/wealth concentration, loopholes/double taxation, & fairness (which is in the eye of the beholder).

Heterogeneities by political affiliation, as well as age and income.

Perceived behavioral responses **very** heterogeneous by political views.

Respondents view themselves as responding quite differently from anyone else; also view women as largely responding differently.

“Economist” Video course ↑ support for policies & govt.

Misperceptions about Policies

Respondents Who Say They “Do Not Know” about Policy

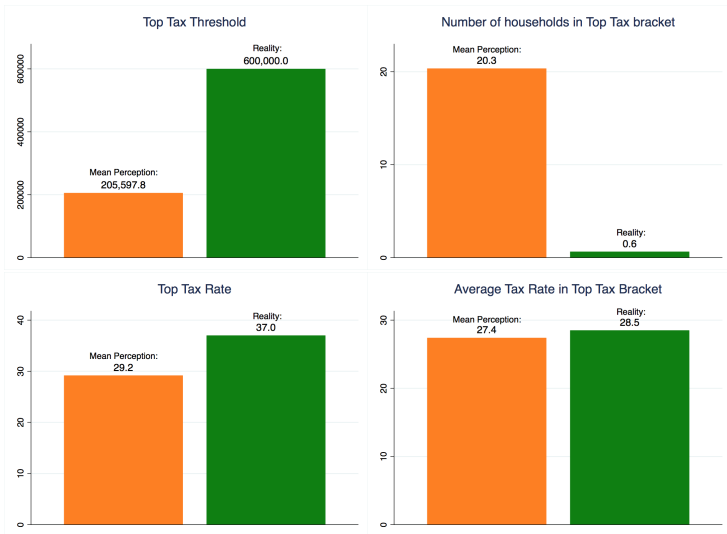
	Considerations	Effects economy	Goals	Shortcomings	Who gains	Who loses
Estate	0.02*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.08*** (0.01)	0.02*** (0.01)	0.00 (0.01)
women	0.01** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.02*** (0.01)
Black	0.01 (0.01)	0.04*** (0.02)	0.04** (0.02)	0.01 (0.02)	0.06*** (0.02)	0.02* (0.01)
College Degree	-0.01 (0.01)	-0.01* (0.01)	-0.03*** (0.01)	-0.03*** (0.01)	-0.02*** (0.01)	-0.03*** (0.01)
Economics related major	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	-0.00 (0.01)
Knowledgeable	-0.04*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)	-0.06*** (0.01)	-0.04*** (0.01)
Clinton Moderates	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.03** (0.01)	-0.01 (0.01)	0.02* (0.01)
Trump Moderates	0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.02* (0.01)	0.01 (0.01)	0.00 (0.01)
Trump Conservatives	-0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.00 (0.01)
Control Group Mean	0.02	0.06	0.06	0.06	0.05	0.05
Observations	5147	5147	5147	5147	5147	5147

Many more respondents say they do not know enough about the estate tax than about the income tax.

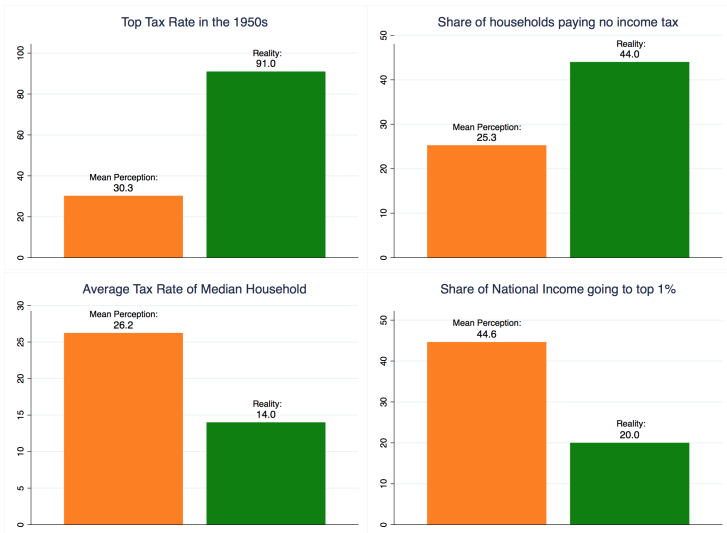
Women, black respondents, and those without college more likely to say they don't now.

No relation to political views.

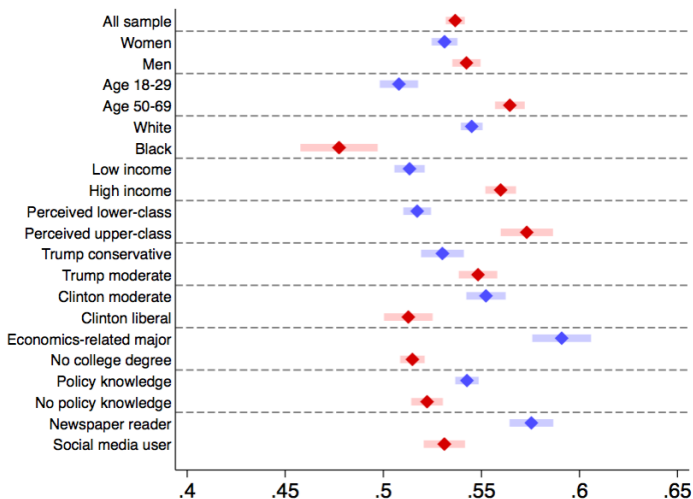
Misperceptions about the Income Tax



Misperceptions about the Income Tax

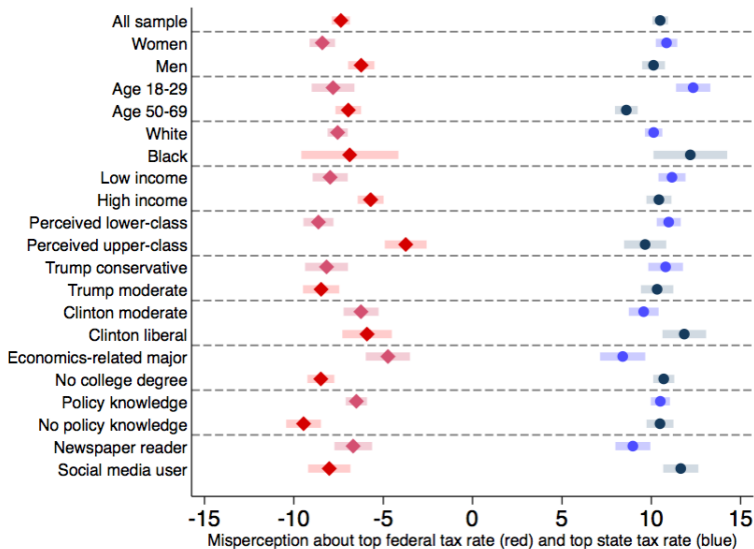


Accuracy Index by Group in Income Tax Survey

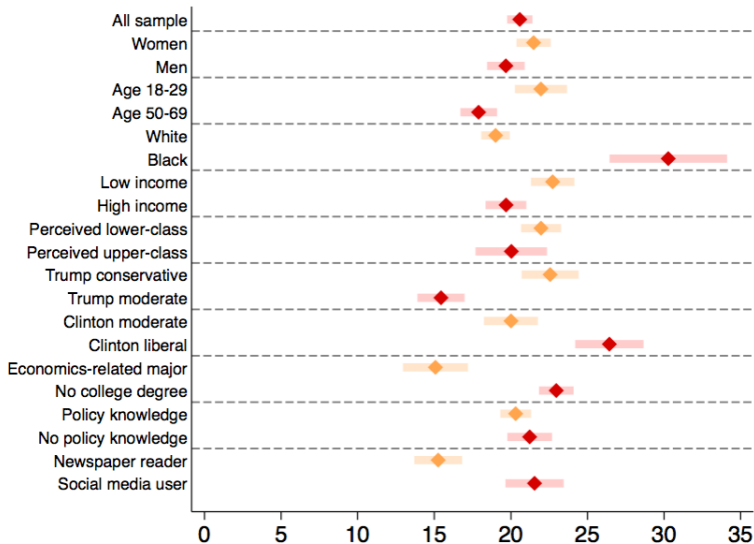


More "center" political groups more accurate on average. Higher income, being older, having an econ-related major (or college degree too), being a newspaper reader (rather than social media user) are correlated with better knowledge.

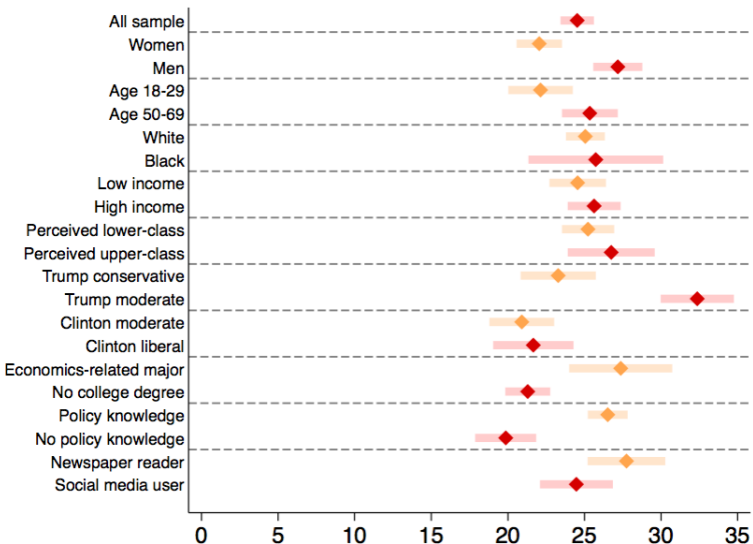
Perceived vs. Actual Top Federal and State Tax Rates



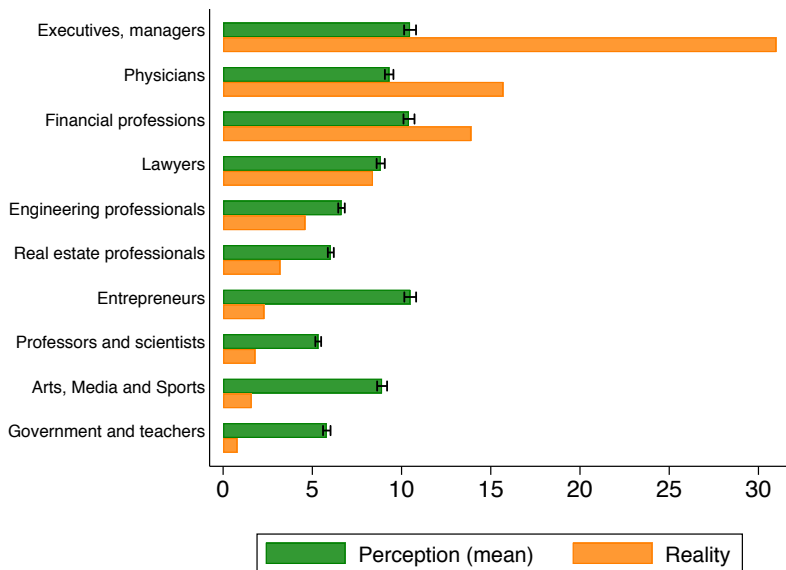
Misperception about Share of Households in Top Tax Bracket



Misperception of Share of Income to the Top 1%

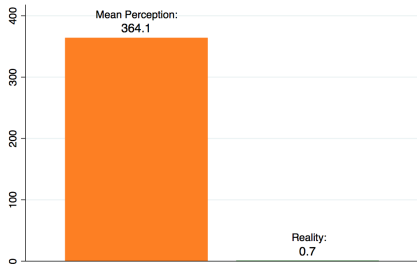


Misperception About Composition of Top 1%

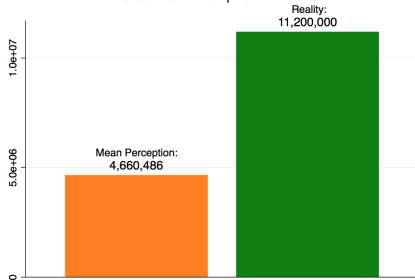


Misperceptions about the Estate Tax

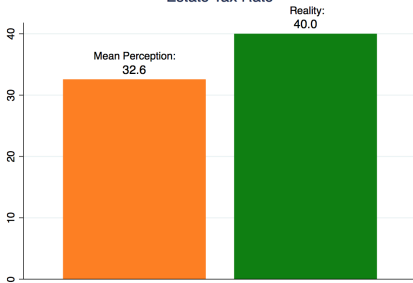
Share who pays Estate Tax



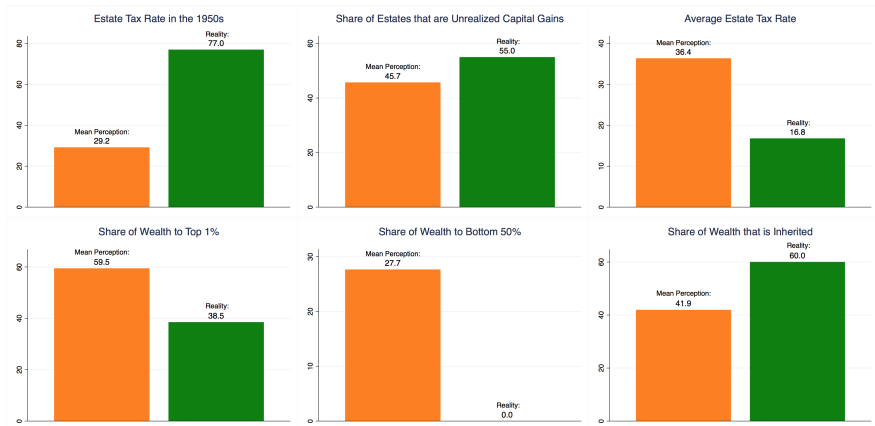
Estate Tax Exemption Threshold



Estate Tax Rate



Misperceptions about the Estate Tax



Just for Fun: The Step-Up of Basis

- 8.73% of respondents say they know what the step-up cost basis at death is.
- 38.7% of respondents get the correct answer at the first technical question on how the stepped-up cost basis at death works. 51% get second question about plain capital gains right. 18.5% of respondents are correct for both.

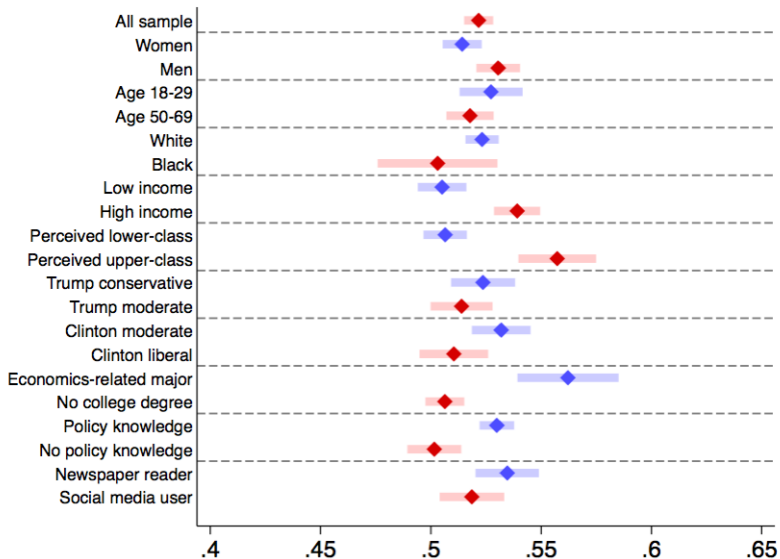
Let's work through a concrete example about the federal estate tax now. Jack inherits a house from his father. His father paid **\$50,000** for the house **30 years ago**. This house is now **worth \$350,000** at the time of the father's death. But Jack manages to sell the house for **\$400,000**.

What is the amount that the IRS will consider as capital gains that Jack made and that will be **taxed at the capital gains tax rate**?

Imagine now that the father had sold the house for **\$350,000** before his death.

What is the amount that the IRS will consider as capital gains that Jack's father made and that will be **taxed at the capital gains tax rate**?

Accuracy Index for the Estate Tax by Groups



Willingness to Pay for Information about Policies

	Income	Estate
Accuracy Index	0.21*** (0.07)	0.04 (0.06)
Women	-0.07*** (0.02)	-0.03 (0.02)
College Degree	0.03 (0.02)	0.06** (0.02)
Economics related major	-0.04 (0.03)	-0.08** (0.04)
Policy knowledge	0.07*** (0.02)	0.11*** (0.02)
Clinton Moderates	-0.10*** (0.03)	-0.06** (0.03)
Trump Moderates	-0.13*** (0.03)	-0.03 (0.03)
Trump Conservatives	-0.14*** (0.03)	-0.09*** (0.03)
Cost of information: 2 dollars	-0.03 (0.03)	-0.04 (0.03)
Cost of information: 5 dollars	-0.04 (0.03)	-0.09*** (0.03)
Cost of information: 10 dollars	-0.09*** (0.03)	-0.05* (0.03)
Control Group Mean	0.37	0.40
Observations	2787	2360

< 50% of respondents willing to pay for info. Accuracy & self-declared knowledge positively related to WTP. Republicans less willing to pay.

Personal Exposure to Tax Policies

	Affected by Tax	Income Survey	Estate Survey
College Degree	0.02 (0.02)	0.03 (0.02)	0.02 (0.02)
Economics related major	-0.01 (0.02)	-0.04 (0.03)	0.03 (0.03)
Policy knowledge	0.13*** (0.02)	0.16*** (0.02)	0.09*** (0.02)
Clinton Moderates	-0.00 (0.02)	-0.02 (0.03)	0.01 (0.03)
Trump Moderates	0.06*** (0.02)	0.01 (0.03)	0.12*** (0.03)
Trump Conservatives	0.08*** (0.02)	0.06** (0.03)	0.11*** (0.03)
Control Group Mean	0.52	0.52	0.33
Observations	5145	2787	2358

Textual Analysis of Open-Ended Questions

Text Analysis Roadmap

Questions asked: Main Considerations? Goals of a good system? Shortcomings? Who wins/who loses? What are the effects?

Topic Analysis: Wordclouds, Keyness graphs, Probability distribution of “topics.”

Keyness: Which words are typical of a group of respondents? Score for a n-gram is χ^2 -test statistic testing null that use is equal across groups.

Topic Modeling: Semi-supervised algorithm: Correlation Explanation (CorEx) (Gallagher et al. 2017). Define “anchor” words, algorithm finds clusters of words around anchors and elsewhere.

Sentiment Analysis: Positive or Negative Tone?

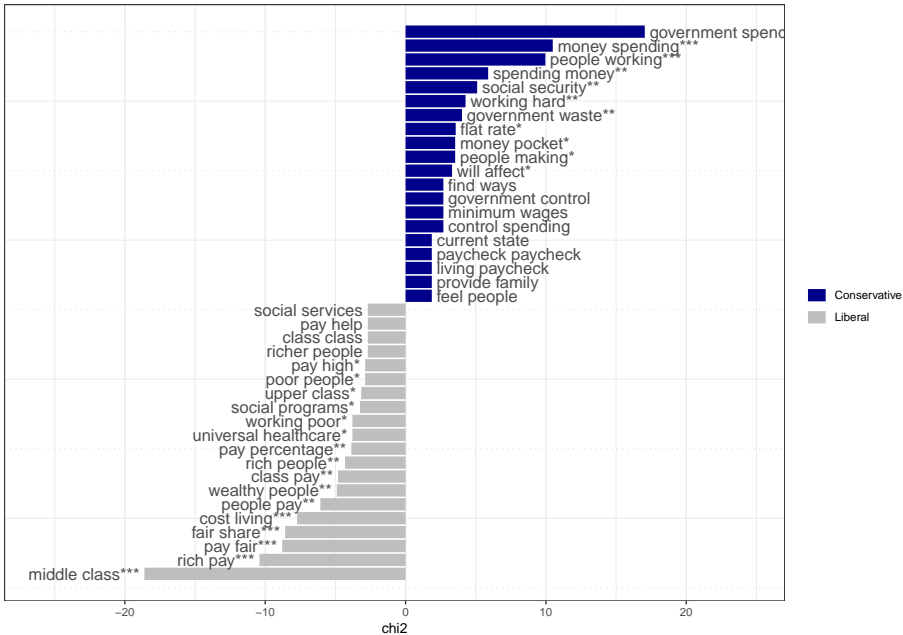
Details

Stanford Sentiment Treebank (Socher et al. 2013), deep learning model, uses whole sentence structure (not just words, also order, less easily fooled as previous models). E.g.: identifies “This movie was actually neither that funny, nor super witty” as overall negative.

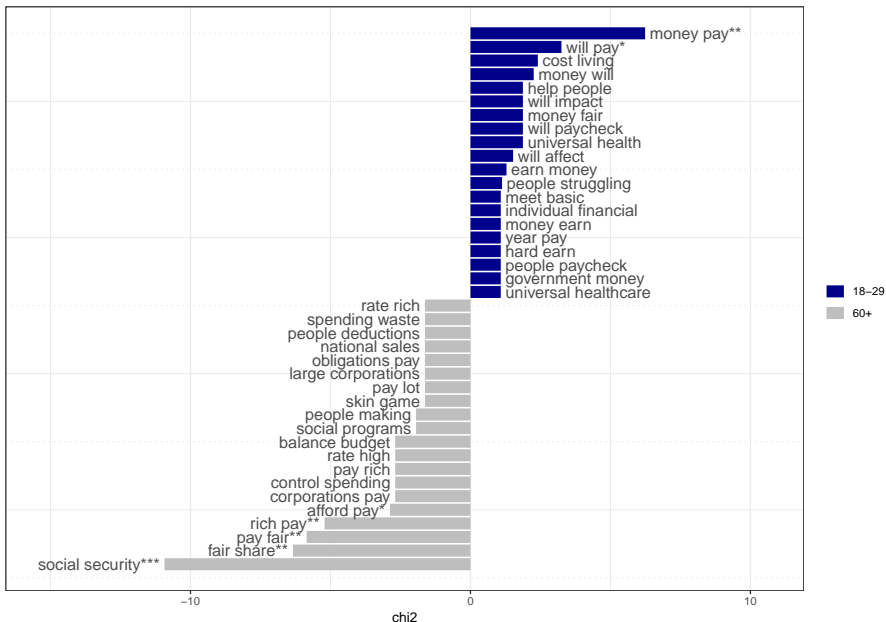
Goals of the Federal Income Tax System



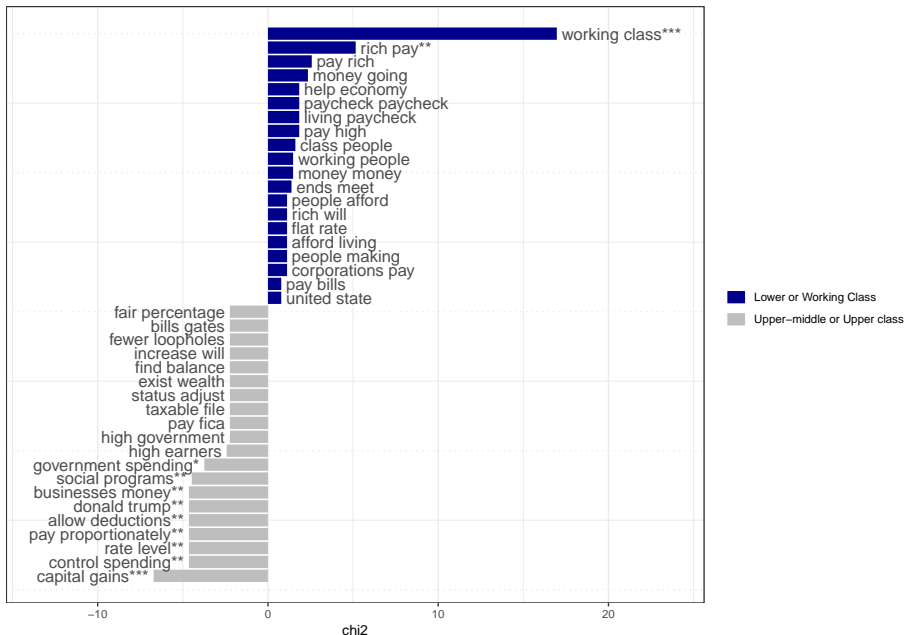
By Political Views: Main Considerations About the Income Tax



By Age: Main Considerations About the Income Tax



By Income: Main Considerations About the Income Tax



Main Topics Identified: Representative words

- 1. Equity:** 'fairness', 'inequality', 'redistribution', 'progressive', 'equitable'
- 2. Efficiency:** 'flat', 'cost', 'negative effect', 'negative'
- 3. Debt:** 'government', 'debt'
- 4. Wealth concentration:** 'wealthy', 'rich', 'billionaire', 'millionaire'
- 5. Loopholes:** 'loopholes', 'lawyers', 'accountants', 'tax evasion', 'tax avoidance'
- 6. Double Taxation** [Only in Estate Tax Survey]: 'already paid', 'already tax', 'double', 'double taxation', 'money already', 'wealth already'
- 7. Grieve** [Only in Estate Tax Survey]: 'grieve', 'family member', 'love', 'pass away', 'parents', 'lose', 'hardship'

Main Considerations about the Income Tax - 1

1. **Equity:** fairness, inequality, redistribution, progressive, equitable

“Fairness is the first thing that comes to mind. I do not want people to be under nor over taxed. Everyone should have fair prices in my personal opinion.”

“Everyone, including the rich and corporations should pay their fair share.”

“Taxes should be fair: people who make more should pay more.”

2. **Efficiency:** flat, cost, negative effect, negative

“Not in favor of federal income tax, I believe that everyone should pay the same rate no matter the income level;

“I have trouble with the concept of tax brackets that punish an individual for being successful”

“People who make more money generally work harder than those of lower income brackets; Everybody should pay a flat rate.”

Main Considerations about the Income Tax - 2

3. Debt: government, debt

“Current tax rates being raised are a result of government mismanagement of funds and over spending without appropriate oversight. Taxes really can’t effectively be lowered until government spending is properly controlled;”

“Taxes are implemented to help cover the cost of government services and programs. They are a necessary evil;

“ Why tax us more when we are so far in debt. It is obvious that the federal government cannot budget properly so why give them more money? Higher taxes will not solve the spending problem in Washington.”

Main Considerations about Income Tax - 3

4. **Wealth concern:** wealthy, rich, billionaire, millionaire

“I would prefer taxes that do not increase the separation of the poor, middle and upper classes”

“That the middle class and the working class are being taxed higher than the millionaires”

“We should tax the wealthy more and the poor less”

5. **Loopholes:** loopholes, lawyers, accountants, tax evasion, tax avoidance

“That the tax loopholes for the wealthy need to be closed immediately

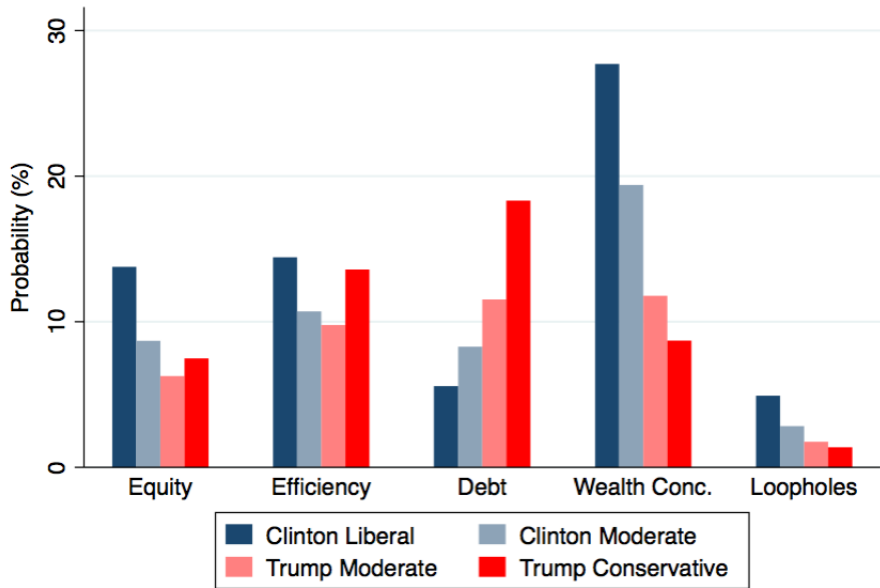
“My current concern is that the very wealthy be obliged to pay their fair share of taxes, and not be allowed loopholes to get out of this responsibility everyone has”

“There shouldn't be loopholes that the rich can use to not pay their fair share.”

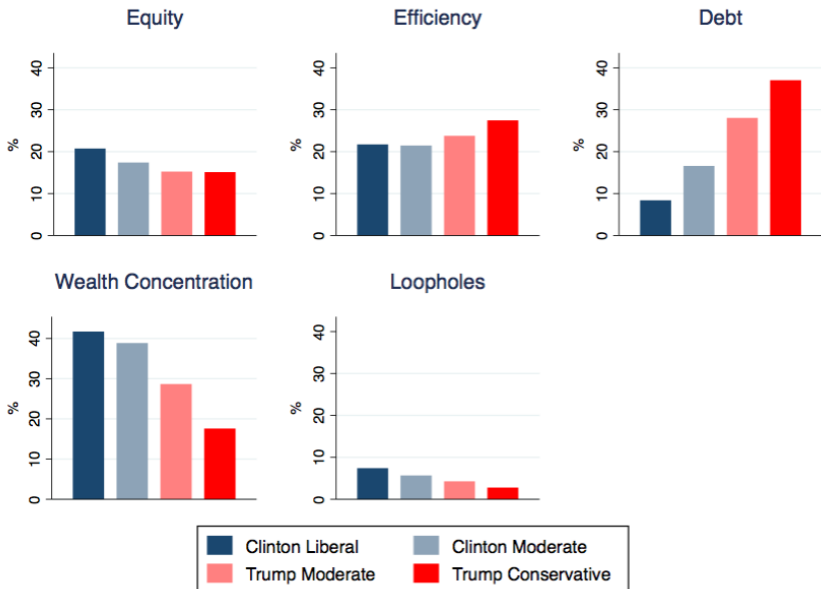
Goals of a Good Federal Income Tax System

- 1. Equity:** *“I think a “good” federal tax system would include fair taxation for each income level with the goal of people relying less on government assistance.”*
- 2. Efficiency:** *“A good federal tax system is one that every person regardless of income would pay the same percentage of their gross.”*
- 3. Debt:** *“Appropriate government spending with unbiased non-political/lobbied oversight.”*
- 4. Wealth concern:** *“Taxing the wealthy more due to their ability to pay.”*
- 5. Loopholes:** *“Close all of the loopholes and get rid of all of the abuse that takes place.”*

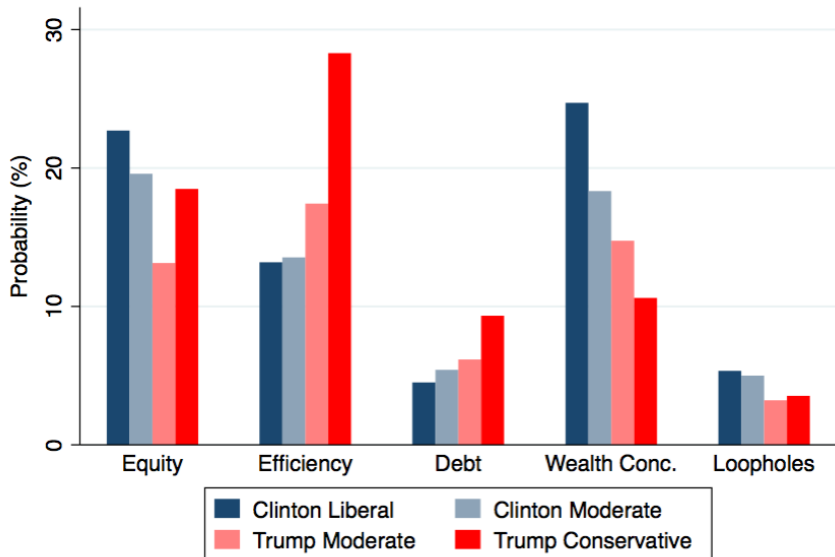
Prob. of Mentioning Topic by Political Views (Considerations)



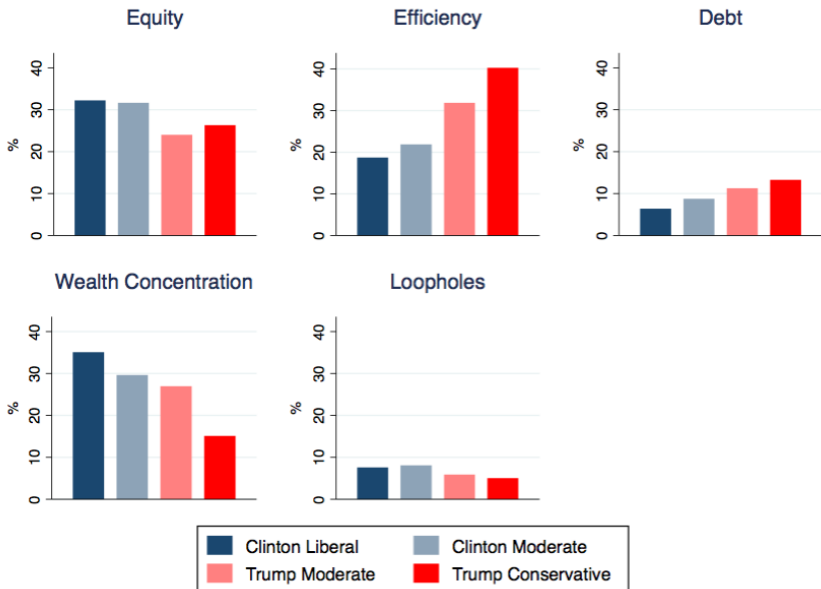
Within-political Views Frequency of Topics (Considerations)



Probability of Mentioning Topic by Political Views (Goals)



Within-political Views Frequency of Topics (Goals)



Considerations about the Federal Estate Tax system - 1

1. **Equity:** fairness, inequality, redistribution, progressive, equitable

“It should be totally eliminated because of fairness. The government did not create that wealth and should keep their hands off.”

“Passing wealth from one generation to the next contributes to wealth inequality. Federal estate tax should be much higher.”

2. **Efficiency:** flat, cost, negative effect, negative [not a well-identified topic for estate tax].

“I think that federal estate tax should be lowered because it negatively affects the working class. I have to pay so much to the government in taxes that I struggle to make from paycheck to paycheck.”

Considerations about the Federal Estate Tax system - 2

3. Debt: government, debt

“How it benefits the wealthy vs. non-wealthy. The overall debt situation that the US finds itself in. We have to start to pay down debt somehow.”

4. Wealth concern: wealthy, rich, billionaire, millionaire

“How a vast amount of wealth is accumulating in a small group of super wealthy because they are not taxed fairly. An increase in estate taxes would help correct that issue”

“For the upper class the tax should be higher, For the lower income the tax should be lower if not eliminated. I would like to leave something for my kids and not have it be taxed.”

5. Loopholes: loopholes, lawyers, accountants, tax evasion, tax avoidance

“Many people will try to avoid this tax. I am unsure that raising this tax will accomplish much, as people will find loopholes to avoid it.”

Considerations about the Federal Estate Tax System - 3

6. Double Taxation

“Is it fair to tax money that has been saved and likely already taxed?”

“This money was already taxed. It isn't fair to tax it again”

“Why should my children have to pay taxes on things I've already paid taxes on during my lifetime?”

7. Grieve

“A person who has lost a love one should not have to pay taxes on there inheritance”

“Well I personally don't feel that people should be taxed for receiving money from the death of a loved one.”

Goals of a Good Federal Estate Tax System

1. Equity: *“I think a progressive estate tax would be the best system as well as one that closes some of the common loopholes that allow the uber wealthy to avoid paying their fair share of taxes.”*

2. Efficiency: *“a rate low enough so that those who inherit can afford the tax and not have to sell the goods or property”*

3. Debt: *“3% for relatives and 10% for non relatives. Should be used to help pay off our national debt.”*

4. Wealth concern *“A “good” federal estate tax would be applicable to more wealthy families than it currently covers. Concentrated wealth in this country is causing most of the societal problems we are encountering in the present day.”*

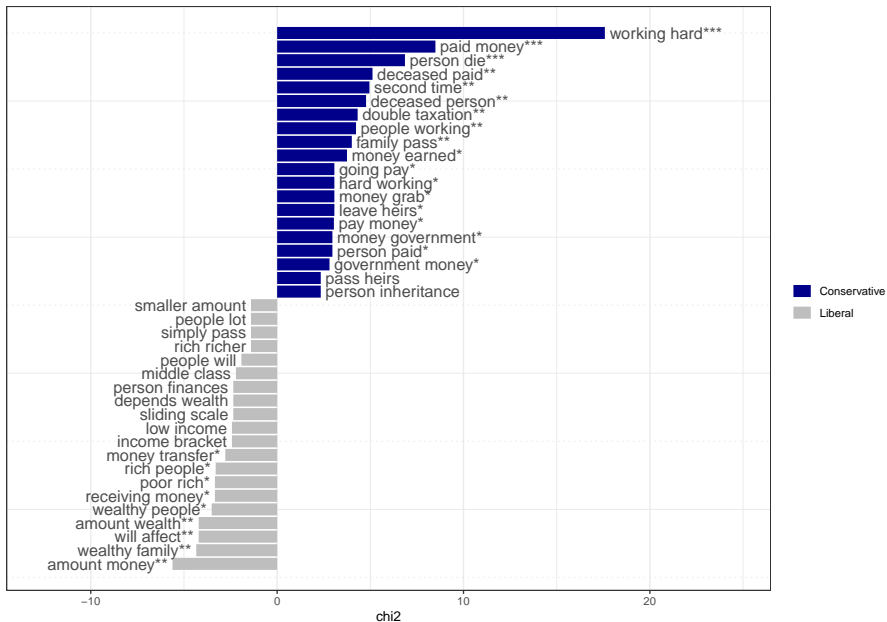
5. Loopholes: *“A good estate tax system would recoup some of the taxes that have typically been lost through loopholes exploited by the wealthy”*

6. Double Taxation: *A good federal estate tax would be none at all. Taxes were already paid on that money.”*

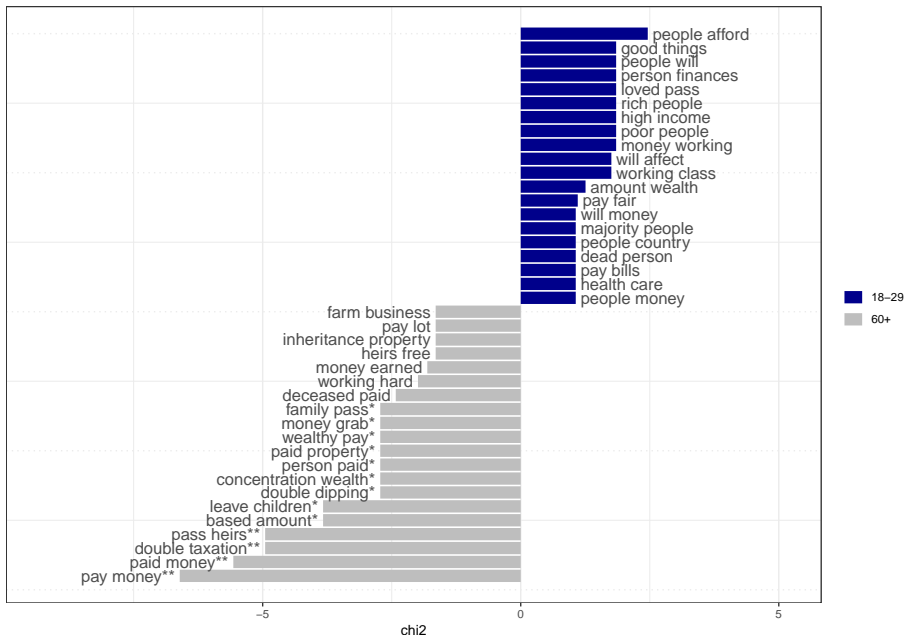
Shortcomings of Federal Estate Tax System

- 1. Equity:** *"It's not taxing enough and some people find sneaky ways to hide the money which isn't fair."*
- 2. Efficiency:** *"I think it really double taxes money. I think it is a dis-incentive to pass money through family and just causes people to come up with tax loop-holes to avoid it. I think it actually has a negative effect on the tax codes."*
- 3. Debt:** *"Government gets too much tax money "*
- 4. Wealth concern:** *"it allows wealth to remain in the hands of the ultra wealthy"*
- 5. Loopholes:** *"That there are loopholes that are not available for those of us who cannot afford to hire tax attorneys to handle their money."*
- 6. Double Taxation:** *"It taxes money that has already been taxed, and probably discourages wealth building"*
- 7. Grieve:** *"I think it's a way to get money out of grieving families."*

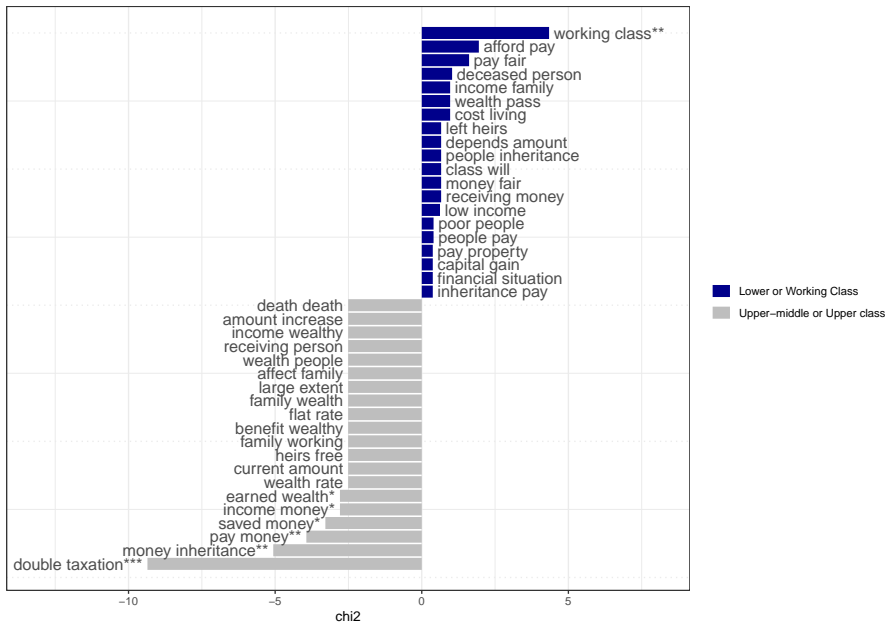
By Political Views: Main Considerations on Federal Estate Tax



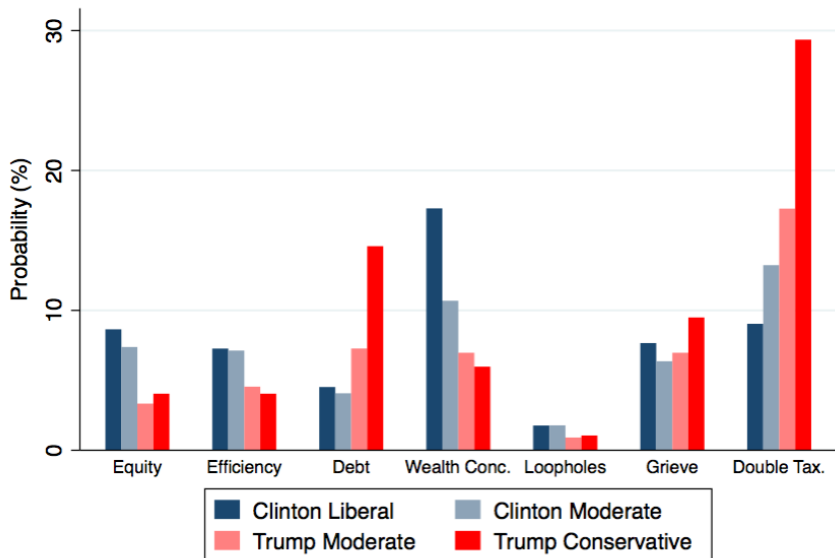
By Age: Main Considerations About the Federal Estate Tax



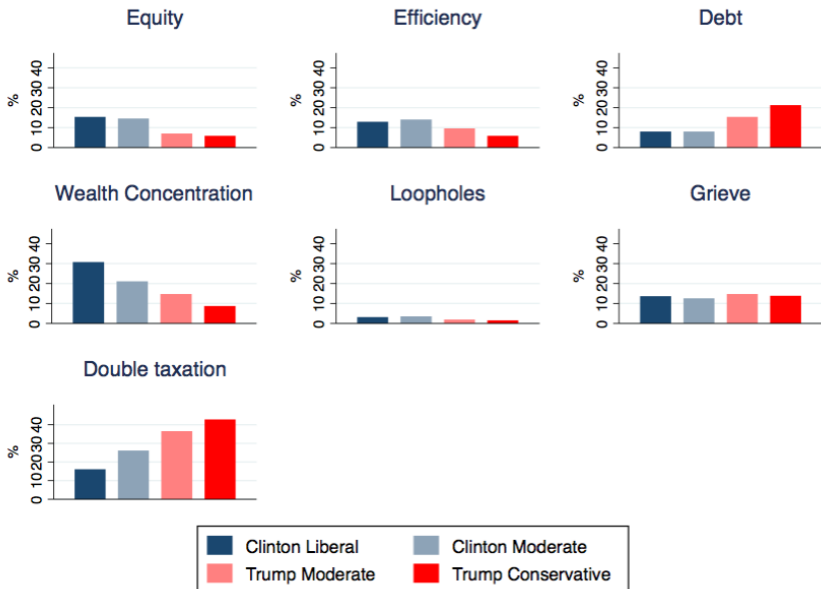
By Income: Main Considerations About the Federal Estate Tax



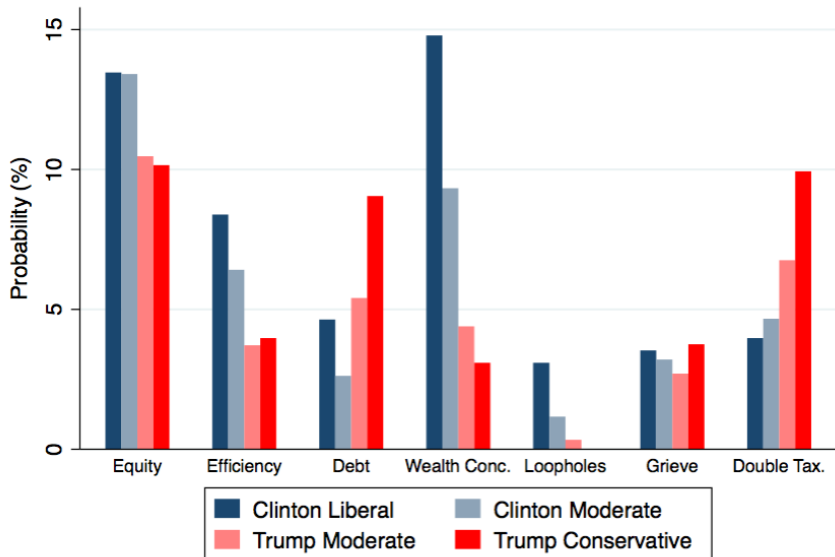
Prob. of Mentioning Topic by Political Views (Considerations)



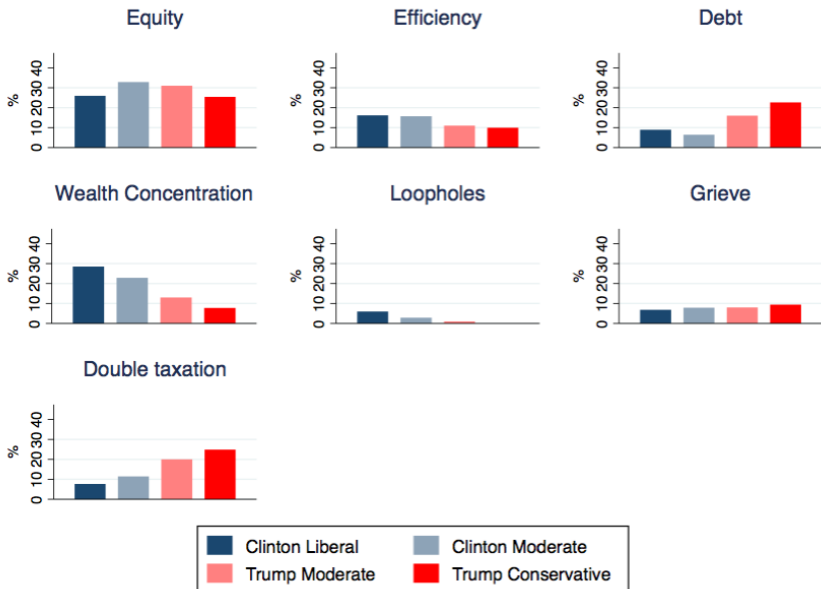
Within-political Views Frequency of Topics (Considerations)



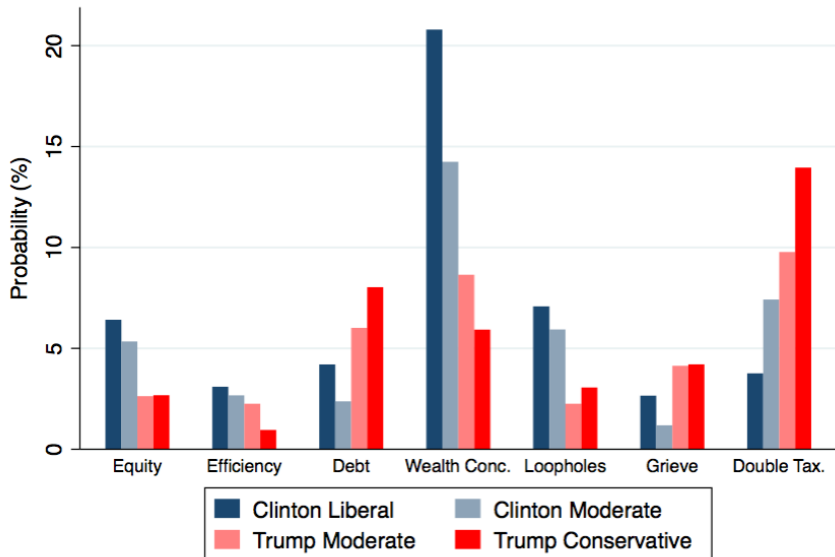
Prob. of Mentioning Topic by Political Views (Goals)



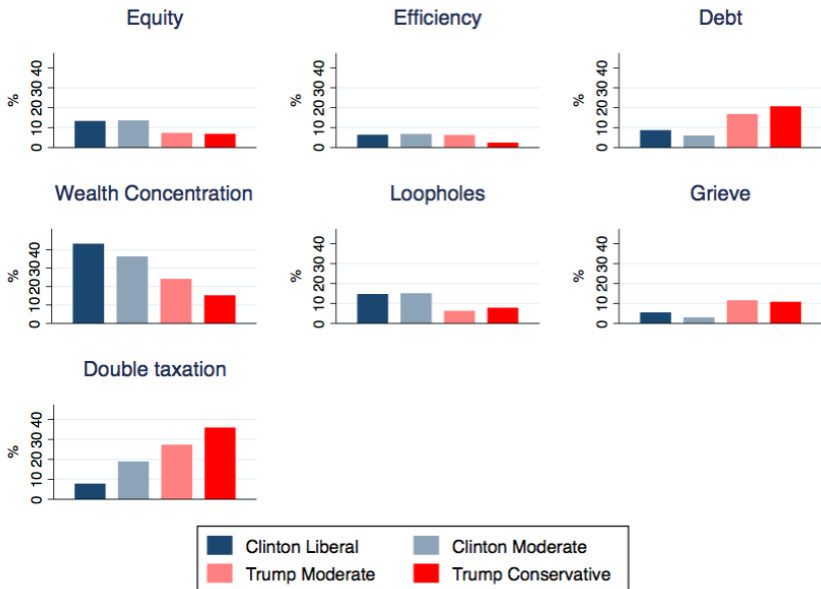
Within-political Views Frequency of Topics (Goals)



Prob. of Mentioning Topic by Political Views (Shortcomings)



Within-political Views Frequency of Topics (Shortcomings)



Topics By Age and Income

Older groups:

Write longer answers; need to normalize.

More likely to mention efficiency as a goal.

Less likely to mention wealth concentration.

More likely to mention loopholes as shortcoming

Much more likely to think about double taxation.

Higher income groups more likely to think about “fairness” and debt; but not wealth concentration. (Fairness is in the eye of the beholder).

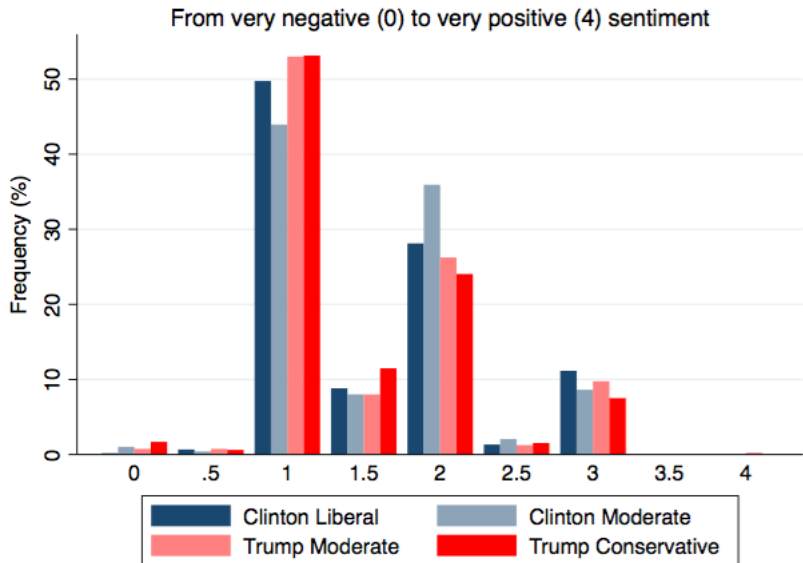
▶ [Income Taxation by Income](#)

▶ [Income Taxation by Age](#)

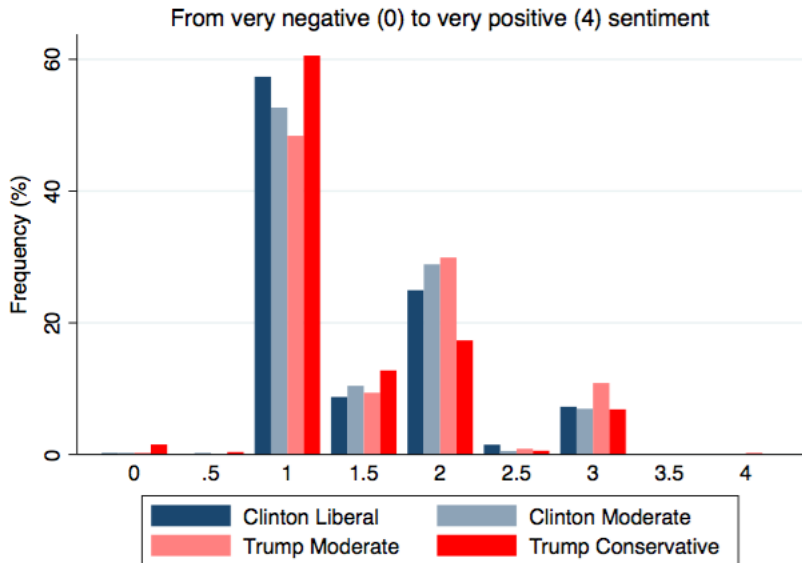
▶ [Estate Tax by Income](#)

▶ [Estate Tax by Age](#)

Sentiment About Income Tax System by Political Views



Sentiment About Estate Tax System by Political Views



▸ By Age

▸ By Income

Perceived Mechanisms

Perceived Behavioral Responses: Tax Increases on High-Income

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial
You	-0.51*** (0.03)	-0.15*** (0.04)	-0.10*** (0.03)	-0.19*** (0.04)	-0.24*** (0.03)	-0.12*** (0.04)
Gender	-0.19*** (0.03)	-0.04 (0.04)	-0.02 (0.03)	-0.10*** (0.04)	-0.09*** (0.03)	-0.06* (0.04)
Women	-0.05*** (0.02)	0.01 (0.02)	-0.00 (0.02)	0.02 (0.02)	-0.04** (0.02)	-0.00 (0.02)
College Degree	-0.03 (0.02)	-0.03 (0.02)	0.00 (0.02)	0.01 (0.02)	-0.00 (0.02)	-0.01 (0.02)
Economics related major	-0.02 (0.03)	-0.07** (0.03)	-0.08*** (0.03)	-0.02 (0.03)	-0.02 (0.03)	0.01 (0.03)
Policy knowledge	0.06*** (0.02)	0.05** (0.02)	0.07*** (0.02)	0.01 (0.02)	0.04** (0.02)	0.04* (0.02)
Clinton Moderates	-0.01 (0.02)	0.03 (0.03)	0.01 (0.03)	-0.00 (0.03)	0.06** (0.02)	0.06** (0.03)
Trump Moderates	-0.03 (0.02)	0.16*** (0.03)	0.13*** (0.03)	0.12*** (0.03)	0.12*** (0.03)	0.20*** (0.03)
Trump Conservatives	-0.05** (0.02)	0.16*** (0.03)	0.11*** (0.03)	0.16*** (0.03)	0.14*** (0.02)	0.23*** (0.03)
Others	-0.04* (0.02)	0.05* (0.03)	0.04 (0.03)	0.07** (0.03)	0.08*** (0.03)	0.08*** (0.03)
Control Group Mean	0.80	0.48	0.33	0.43	0.78	0.50
Observations	2786	2787	2785	2787	2787	2786

Answer options: "A great deal; A lot; A moderate amount; A little; None at all."; Dep. variables are = 1 if response \geq "A moderate amount." Political gradient; Relative to high-incomes, respondents think they respond less (to **own** taxes), regardless of their income! Women perceived to respond less; their

Perceived Behavioral Responses: Tax Increases on Middle Class

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial
You	-0.31*** (0.04)	-0.03 (0.04)	-0.01 (0.03)	-0.05 (0.04)	-0.11*** (0.03)	-0.04 (0.04)
Gender	-0.16*** (0.04)	-0.01 (0.04)	0.07** (0.03)	-0.07* (0.04)	-0.04 (0.03)	0.00 (0.04)
Women	-0.09*** (0.02)	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)	0.03 (0.02)	0.01 (0.02)
College Degree	-0.03 (0.02)	-0.03 (0.02)	-0.04** (0.02)	-0.00 (0.02)	-0.01 (0.02)	-0.02 (0.02)
Economics related major	-0.01 (0.03)	-0.06** (0.03)	-0.08*** (0.03)	-0.06** (0.03)	-0.09*** (0.03)	-0.03 (0.03)
Policy knowledge	0.05** (0.02)	0.02 (0.02)	0.03 (0.02)	0.00 (0.02)	0.03* (0.02)	0.03 (0.02)
Clinton Moderates	0.06** (0.03)	0.09*** (0.03)	0.07*** (0.03)	0.08*** (0.03)	0.12*** (0.03)	0.10*** (0.03)
Trump Moderates	0.14*** (0.03)	0.18*** (0.03)	0.18*** (0.03)	0.15*** (0.03)	0.18*** (0.03)	0.22*** (0.03)
Trump Conservatives	0.10*** (0.03)	0.19*** (0.03)	0.17*** (0.03)	0.19*** (0.03)	0.22*** (0.03)	0.26*** (0.03)
Others	0.07** (0.03)	0.08*** (0.03)	0.07** (0.03)	0.09*** (0.03)	0.13*** (0.03)	0.10*** (0.03)
Control Group Mean	0.60	0.39	0.28	0.32	0.64	0.45
Observations	2786	2785	2785	2785	2786	2786

Responses of middle-class perceived smaller than those of high-incomes; but stronger political gradient. Relative to middle-class-incomes, respondents think they respond less along some margins only. Women perceived to respond less on evasion, more on participation.

Perceived Behavioral Responses of Wealthy: Estate Tax increase

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial	Save Less
You	-0.50*** (0.03)	-0.18*** (0.04)	-0.16*** (0.04)	-0.32*** (0.04)	-0.34*** (0.03)	-0.15*** (0.04)	-0.17*** (0.04)
Gender	-0.18*** (0.03)	-0.02 (0.04)	-0.03 (0.04)	-0.17*** (0.04)	-0.09*** (0.03)	-0.00 (0.04)	-0.05 (0.03)
Women	-0.02 (0.02)	-0.03 (0.02)	-0.06*** (0.02)	-0.05** (0.02)	-0.07*** (0.02)	-0.02 (0.02)	-0.01 (0.02)
College Degree	0.00 (0.02)	-0.05** (0.02)	-0.02 (0.02)	-0.04* (0.02)	-0.01 (0.02)	-0.02 (0.02)	-0.01 (0.02)
Economics related major	0.04 (0.03)	0.09** (0.03)	0.07* (0.04)	0.08** (0.04)	-0.01 (0.03)	0.05 (0.04)	0.07** (0.03)
Policy knowledge	0.01 (0.02)	0.03 (0.02)	0.06** (0.02)	0.03 (0.02)	0.08*** (0.02)	0.04* (0.02)	0.02 (0.02)
Clinton Moderates	-0.01 (0.02)	0.04 (0.03)	0.04 (0.03)	0.04 (0.03)	-0.01 (0.03)	-0.01 (0.03)	-0.02 (0.03)
Trump Moderates	0.01 (0.02)	0.11*** (0.03)	0.11*** (0.03)	0.14*** (0.03)	0.02 (0.03)	0.10*** (0.03)	0.11*** (0.03)
Trump Conservatives	0.01 (0.02)	0.08*** (0.03)	0.03 (0.03)	0.08*** (0.03)	0.07*** (0.03)	0.08*** (0.03)	0.07*** (0.03)
Others	0.02 (0.02)	-0.00 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	-0.01 (0.03)	0.00 (0.03)
Control Group Mean	0.88	0.50	0.39	0.57	0.83	0.50	0.59
Observations	2357	2356	2357	2355	2356	2356	2356

Very strong perceived evasion, migration, and savings responses. Relative to high-incomes, respondents think they respond less (to **own** taxes), regardless of their income! Women perceived to respond less. More right-wing respondents perceive more behavioral responses.

Perceived Behavioral Responses of Young: Estate Tax increase

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial	Save Less
You	-0.23*** (0.03)	-0.09** (0.04)	-0.04 (0.04)	-0.11*** (0.04)	-0.13*** (0.04)	-0.07* (0.04)	-0.08** (0.04)
Gender	-0.18*** (0.03)	-0.10*** (0.04)	-0.02 (0.04)	-0.09** (0.04)	-0.08** (0.03)	-0.03 (0.04)	-0.11*** (0.04)
Women	-0.00 (0.02)	0.00 (0.02)	-0.04* (0.02)	-0.03 (0.02)	0.01 (0.02)	-0.00 (0.02)	0.01 (0.02)
College Degree	0.01 (0.02)	-0.04* (0.02)	-0.02 (0.02)	-0.03 (0.02)	0.03 (0.02)	-0.01 (0.02)	-0.01 (0.02)
Economics related major	0.04 (0.03)	0.09** (0.04)	0.05 (0.04)	0.08** (0.04)	0.04 (0.03)	0.06 (0.04)	0.05 (0.04)
Policy knowledge	0.03 (0.02)	0.08*** (0.02)	0.06** (0.02)	0.06** (0.02)	0.05** (0.02)	0.06** (0.02)	0.06*** (0.02)
Clinton Moderates	0.01 (0.03)	0.08** (0.03)	0.08** (0.03)	0.06* (0.03)	-0.03 (0.03)	0.04 (0.03)	0.06** (0.03)
Trump Moderates	0.05 (0.03)	0.16*** (0.03)	0.12*** (0.03)	0.14*** (0.03)	0.07** (0.03)	0.17*** (0.03)	0.12*** (0.03)
Trump Conservatives	0.03 (0.03)	0.12*** (0.03)	0.08*** (0.03)	0.12*** (0.03)	0.11*** (0.03)	0.17*** (0.03)	0.15*** (0.03)
Others	-0.03 (0.03)	0.05 (0.03)	0.00 (0.03)	0.07** (0.03)	0.00 (0.03)	0.06* (0.03)	0.02 (0.03)
Control Group Mean	0.78	0.53	0.37	0.46	0.73	0.52	0.61
Observations	2356	2356	2354	2356	2357	2356	2356

Still strong anticipatory perceived responses. Relative to currently young, respondents think they respond less (to **own** taxes), but less so than relative to wealthy. Women perceived to respond less. More right-wing respondents perceive (even) more behavioral responses.

Perceived Distortion Effects of Income Taxes

	Trickle down	Taxes high-inc. hurt economy	Laffer effect high-incomes	Laffer effect middle-class	Oppose taxes support low-inc.	Oppose taxes fund investment	Belief distortion index
You	-0.00 (0.03)	0.03 (0.03)	0.21*** (0.04)	0.02 (0.04)	-0.01 (0.03)	0.01 (0.04)	-0.26*** (0.04)
Gender	0.06* (0.03)	0.05 (0.03)	-0.05 (0.04)	-0.08** (0.04)	0.03 (0.03)	0.03 (0.04)	-0.11*** (0.04)
Women	0.02 (0.02)	-0.02 (0.02)	0.07*** (0.02)	0.05*** (0.02)	0.04** (0.02)	0.09*** (0.02)	0.00 (0.02)
College Degree	0.04** (0.02)	0.04** (0.02)	-0.04* (0.02)	-0.04* (0.02)	-0.01 (0.02)	-0.04* (0.02)	-0.02 (0.02)
Economics related major	-0.01 (0.03)	-0.00 (0.03)	-0.03 (0.03)	-0.03 (0.03)	0.05 (0.03)	-0.04 (0.03)	-0.11*** (0.03)
Policy knowledge	0.07*** (0.02)	0.06*** (0.02)	-0.01 (0.02)	0.03 (0.02)	-0.07*** (0.02)	-0.11*** (0.02)	0.10*** (0.02)
Clinton Moderates	0.11*** (0.03)	0.05** (0.03)	0.10*** (0.03)	-0.04 (0.03)	0.15*** (0.03)	0.04 (0.03)	0.12*** (0.03)
Trump Moderates	0.37*** (0.03)	0.28*** (0.03)	0.16*** (0.03)	-0.02 (0.03)	0.33*** (0.03)	0.11*** (0.03)	0.39*** (0.03)
Trump Conservatives	0.54*** (0.02)	0.46*** (0.02)	0.30*** (0.03)	0.07*** (0.03)	0.53*** (0.03)	0.17*** (0.03)	0.49*** (0.03)
Others	0.23*** (0.03)	0.19*** (0.03)	0.11*** (0.03)	0.00 (0.03)	0.37*** (0.03)	0.13*** (0.03)	0.20*** (0.03)
Control Group Mean	0.32	0.31	0.48	0.65	0.43	0.45	-0.05
Observations	2785	2786	2784	2785	2786	2786	2777

“Trickle down” = 1 if respondent thinks ↓ taxes better for ↓ inequality. “Laffer effect”

high-incomes/middle-class = 1 if respondent thinks tax cuts ↓ deficit. Belief distortion index: when thinking about “your” responses, conservatives think like liberals about everyone else. Stark political gradient. ↓ taxes on HHs like “yours” has stronger Laffer effect (regardless of your income)!

Perceived Distortion Effects of Estate Tax

	Tax wealthy HH hurt economy	Laffer effect	Higher tax not good tool	Belief distortion index
You	0.16*** (0.04)	0.11*** (0.04)	0.17*** (0.04)	-0.33*** (0.04)
Gender	0.04 (0.03)	0.01 (0.04)	0.06* (0.04)	-0.17*** (0.04)
Women	-0.02 (0.02)	0.06*** (0.02)	0.02 (0.02)	-0.05** (0.02)
College Degree	0.03 (0.02)	-0.06*** (0.02)	0.00 (0.02)	-0.03 (0.03)
Economics related major	0.06* (0.03)	0.08** (0.04)	0.04 (0.03)	0.09** (0.04)
Policy knowledge	0.07*** (0.02)	-0.03 (0.02)	-0.03 (0.02)	0.09*** (0.03)
Clinton Moderates	0.02 (0.03)	0.01 (0.03)	0.15*** (0.03)	0.08** (0.04)
Trump Moderates	0.15*** (0.03)	0.08** (0.03)	0.21*** (0.03)	0.23*** (0.04)
Trump Conservatives	0.25*** (0.03)	0.23*** (0.03)	0.42*** (0.03)	0.28*** (0.03)
Others	0.08*** (0.03)	0.14*** (0.03)	0.23*** (0.03)	0.09** (0.04)
Control Group Mean	0.28	0.46	0.47	0.02
Observations	2358	2356	2357	2351

Who wins - Cuts on Income Taxes for richest households

	Lower Class	Working Class	Middle Class	Upper-middle Class	Upper Class
You	0.12*** (0.04)	0.12*** (0.04)	0.10*** (0.04)	-0.27*** (0.04)	-0.39*** (0.03)
You × 70k+	0.06 (0.05)	0.04 (0.05)	0.08 (0.05)	0.11* (0.06)	0.10** (0.05)
Gender	-0.02 (0.03)	0.01 (0.03)	0.02 (0.03)	-0.03 (0.03)	-0.03 (0.03)
Women	-0.01 (0.02)	-0.02 (0.02)	-0.03* (0.02)	-0.01 (0.02)	-0.01 (0.02)
College Degree	-0.02 (0.02)	-0.01 (0.02)	-0.02 (0.02)	0.02 (0.02)	0.03 (0.02)
Economics related major	0.05* (0.03)	0.03 (0.03)	-0.00 (0.03)	-0.01 (0.03)	-0.02 (0.03)
Policy knowledge	0.04** (0.02)	0.08*** (0.02)	0.04** (0.02)	0.05** (0.02)	0.03* (0.02)
Clinton Moderates	0.07*** (0.03)	0.06** (0.03)	0.05** (0.03)	-0.00 (0.03)	-0.03 (0.02)
Trump Moderates	0.19*** (0.03)	0.20*** (0.03)	0.17*** (0.03)	-0.02 (0.03)	-0.09*** (0.03)
Trump Conservatives	0.33*** (0.03)	0.34*** (0.03)	0.33*** (0.03)	0.12*** (0.03)	0.03 (0.02)
Others	0.11*** (0.03)	0.11*** (0.03)	0.10*** (0.03)	0.07** (0.03)	0.00 (0.03)
Control Group Mean	0.32	0.32	0.33	0.69	0.82
Observations	2766	2760	2750	2747	2769

Respondents think more likely to win except relative to upper classes (mitigated if own income is higher). Conservatives believe much more in trickle down/Laffer effects.

Who wins - Estate Tax cuts

	Lower Class	Working Class	Middle Class	Upper-middle Class	Upper Class
You	0.22*** (0.04)	0.18*** (0.04)	0.11** (0.04)	-0.06 (0.04)	-0.10** (0.04)
You × 70k+	0.09 (0.06)	0.08 (0.06)	0.08 (0.06)	0.09 (0.06)	0.07 (0.05)
Gender	0.05 (0.04)	0.04 (0.04)	0.05 (0.04)	-0.05 (0.04)	-0.04 (0.04)
Women	0.01 (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.02 (0.02)	-0.03 (0.02)
College Degree	-0.03 (0.02)	-0.01 (0.02)	-0.01 (0.02)	0.02 (0.02)	0.03 (0.02)
Economics related major	-0.01 (0.04)	-0.02 (0.04)	0.03 (0.04)	0.04 (0.04)	0.03 (0.03)
Policy knowledge	0.00 (0.02)	0.03 (0.02)	0.04* (0.02)	-0.00 (0.02)	-0.02 (0.02)
Clinton Moderates	0.00 (0.03)	-0.01 (0.03)	-0.02 (0.03)	0.02 (0.03)	0.04 (0.03)
Trump Moderates	0.08** (0.03)	0.12*** (0.03)	0.10*** (0.03)	0.03 (0.03)	-0.03 (0.03)
Trump Conservatives	0.13*** (0.03)	0.14*** (0.03)	0.16*** (0.03)	0.11*** (0.03)	0.06** (0.03)
Others	0.03 (0.03)	0.02 (0.03)	0.05 (0.03)	0.08*** (0.03)	0.08*** (0.03)
Control Group Mean	0.42	0.47	0.53	0.70	0.75
Observations	2329	2314	2306	2312	2304

Perceptions of Fairness of Inheritance (Estate Tax)

	Worked harder	Inherited a lot	Access better amenities	Inherit more	Support Wealth Transmission	Fairness Index
You	0.17*** (0.04)	0.22*** (0.04)	0.01 (0.04)	0.12*** (0.04)	0.14*** (0.04)	0.22*** (0.05)
You × 70k+	-0.09* (0.06)	-0.13** (0.06)	0.07 (0.06)	0.02 (0.06)	-0.02 (0.06)	-0.05 (0.07)
Gender	0.04 (0.04)	0.04 (0.04)	0.13*** (0.04)	0.02 (0.04)	0.05 (0.04)	0.08* (0.05)
Women	0.04** (0.02)	0.04** (0.02)	-0.09*** (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.02 (0.03)
College Degree	-0.05** (0.02)	-0.01 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	-0.04 (0.03)
Economics related major	0.07** (0.03)	0.10*** (0.04)	0.07** (0.04)	0.04 (0.04)	-0.01 (0.04)	0.14*** (0.05)
Policy knowledge	-0.06*** (0.02)	-0.04 (0.02)	0.03 (0.02)	0.02 (0.02)	-0.02 (0.02)	-0.01 (0.03)
Clinton Moderates	0.12*** (0.03)	0.04 (0.03)	0.06* (0.03)	0.17*** (0.03)	0.16*** (0.03)	0.27*** (0.04)
Trump Moderates	0.25*** (0.03)	0.20*** (0.03)	0.16*** (0.03)	0.18*** (0.03)	0.31*** (0.03)	0.55*** (0.04)
Trump Conservatives	0.36*** (0.03)	0.35*** (0.03)	0.27*** (0.03)	0.38*** (0.03)	0.41*** (0.03)	0.93*** (0.04)
Others	0.24*** (0.03)	0.15*** (0.03)	0.14*** (0.03)	0.21*** (0.03)	0.21*** (0.03)	0.47*** (0.04)
Control Group Mean	0.61	0.47	0.32	0.53	0.58	-0.01
Observations	2358	2358	2357	2357	2356	2356

Effects of Video Courses

Three different video courses

Redistribution: Distributional impacts of policy.

Efficiency: Efficiency costs of policy.

Economist: Trade-off between redistribution and efficiency.

Estate Tax: Redistribution Treatment (I)

The top 0.1% richest agents, or just 1 person in 1000, hold around 22%, almost one quarter of all the wealth in the U.S.

Top 0.1%

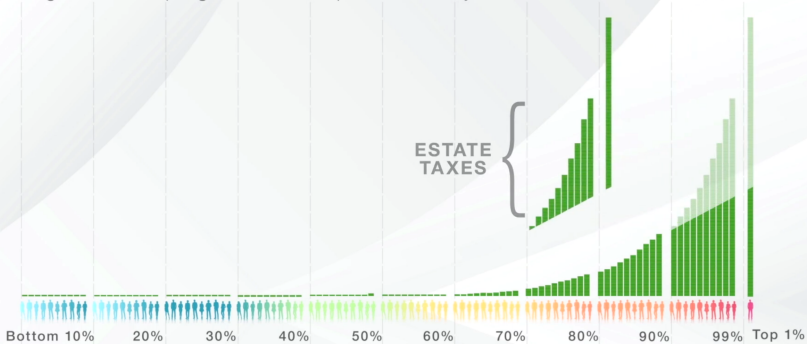


TOTAL U.S. WEALTH

Bottom 10% 20% 30% 40% 50% 60% 70% 80% 90% 99% Top 1%

Estate Tax: Redistribution Treatment (II)

Revenues from the estate tax go to fund other tax cuts, transfers, or government programs that help less wealthy families.



Estate Tax: Redistribution Treatment (III)

Leveling the playing field through the estate tax is even more important since children from wealthy families already start with many more advantages in life, such as:



better schools



better health



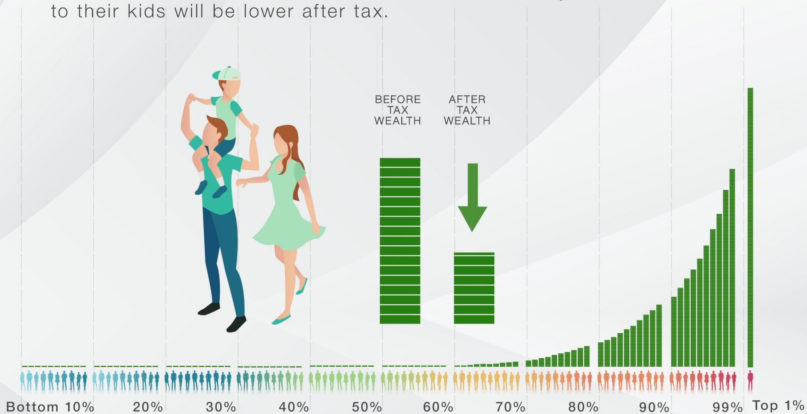
better neighborhoods



better social and professional networks

Estate Tax: Efficiency Treatment (I)

When the estate tax is higher, wealthy parents may decide to work less or start fewer businesses since the wealth they create to transmit to their kids will be lower after tax.



Estate Tax: Efficiency Treatment (II)

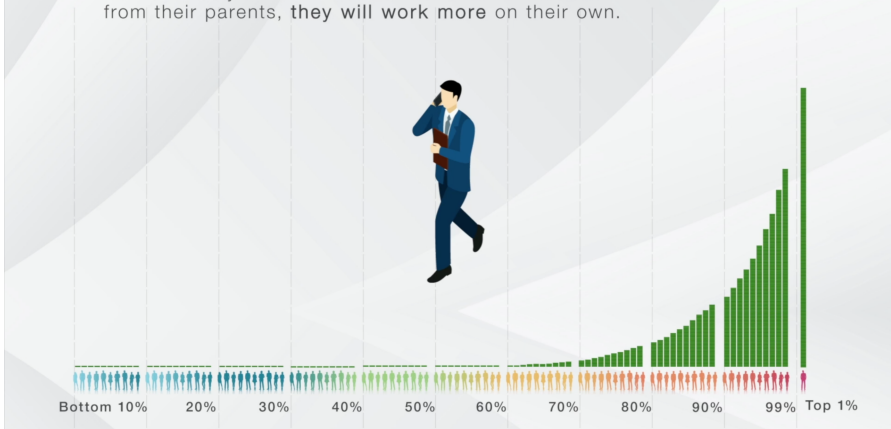
When the estate tax is higher, wealthy parents may also want to hide more of their wealth from the tax authorities.

There are many sophisticated tax evasion and avoidance channels and loopholes.



Estate Tax: Efficiency Treatment (III)

But there are also economic benefits from a higher estate tax:
When wealthy children receive less after-tax wealth handed down from their parents, they will work more on their own.



Estate Tax: Economist Treatment (I)

To sum up, like all taxes, the estate tax has economic costs and benefits. An estate tax makes the wealth distribution more equal and fair and levels the playing field between children from poor and wealthy families.

The right level of the estate tax will be the one that balances its costs and benefits.

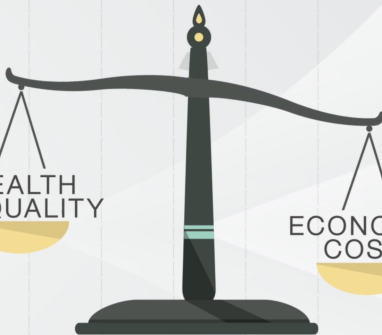
RAISE TAXES

WEALTH
INEQUALITY



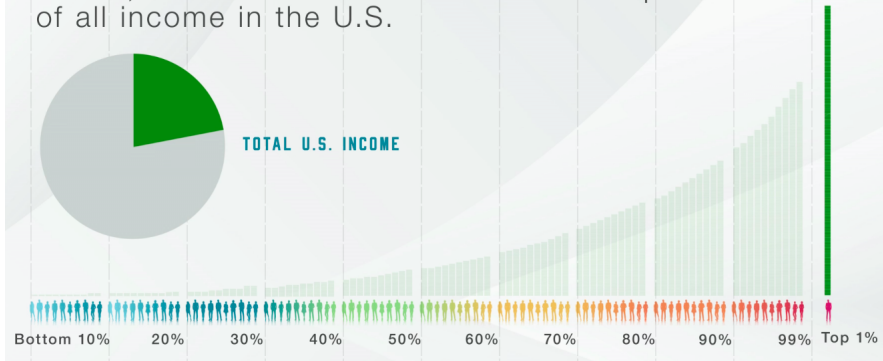
LOWER TAXES

ECONOMIC
COSTS



Income Tax: Redistribution Treatment (I)

The top 1% richest agents, just one person in 100, earn around 22% or almost one quarter of all income in the U.S.



Income Tax: Redistribution Treatment (II)

A progressive income tax system means that higher income households pay a higher share of their income in taxes.

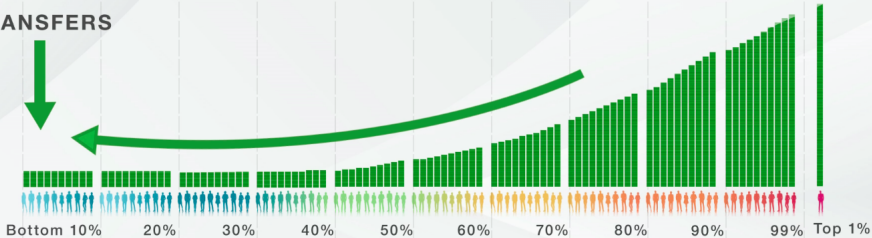
TAXES



Income Tax: Redistribution Treatment (III)

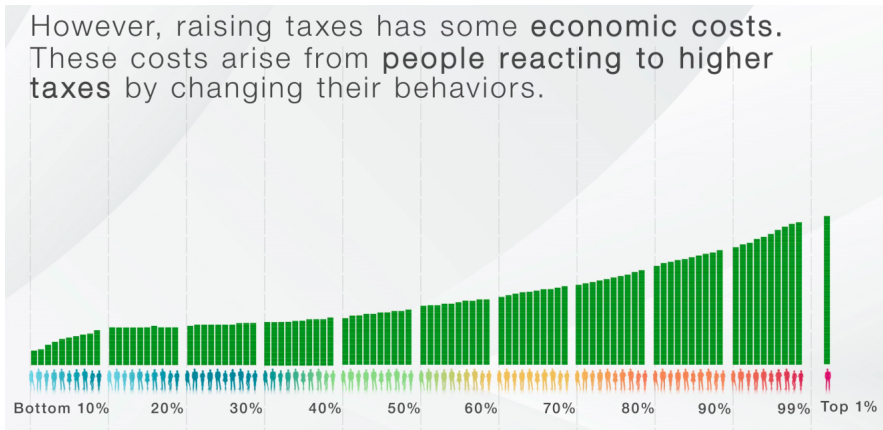
Revenues from the income tax go to fund tax cuts or transfers for lower income families.

TRANSFERS



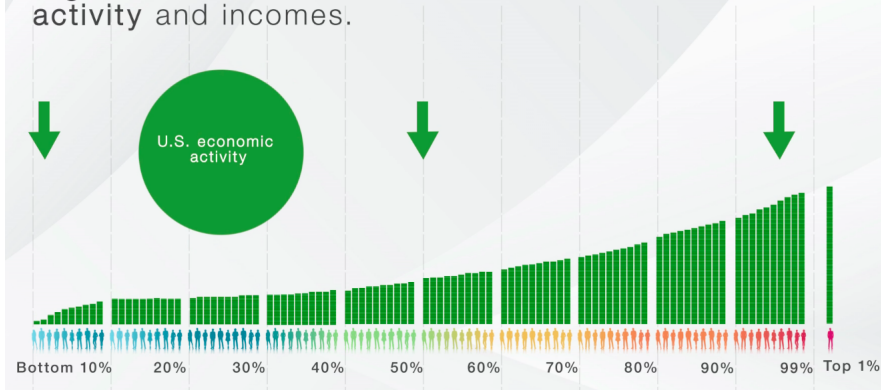
Income Tax: Efficiency Treatment (I)

However, raising taxes has some **economic costs**. These costs arise from **people reacting to higher taxes** by changing their behaviors.



Income Tax: Efficiency Treatment (II)

Higher taxes could thus reduce overall economic activity and incomes.



Income Tax: Efficiency Treatment (III)

When the tax rate rises, Martha may decide to not look for a job anymore, since the cost of searching and working may no longer be worth the lower post-tax income.



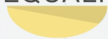
Income Tax: Economist Treatment (I)

All taxes have an **economic cost** and too high taxes can discourage economic activity.

But there are also **benefits**. Progressive taxes make the income distribution **more equal and fair** by redistributing some income from richer to poorer people. The ideal income tax system will be the one that balances these costs and benefits.

RAISE TAXES

INCOME
INEQUALITY



LOWER TAXES

ECONOMIC
COST



Courses Increase Perc. Behavioral Responses to Income Tax

Tax increases for the highest income households:

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial
Redistribution T	0.01 (0.03)	-0.02 (0.04)	-0.01 (0.03)	-0.05 (0.04)	-0.03 (0.03)	-0.03 (0.04)
Efficiency T	0.09*** (0.03)	0.16*** (0.04)	0.07** (0.03)	0.13*** (0.04)	0.03 (0.03)	0.14*** (0.04)
Economist T	0.08*** (0.03)	0.17*** (0.03)	0.04 (0.03)	0.11*** (0.03)	0.03 (0.03)	0.15*** (0.03)
Control Group Mean	0.80	0.48	0.33	0.43	0.78	0.50
Observations	2786	2787	2785	2787	2787	2786

Tax increases for the middle-class:

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial
Redistribution T	0.06 (0.04)	0.09** (0.04)	0.11*** (0.03)	0.09** (0.04)	0.03 (0.03)	0.11*** (0.04)
Efficiency T	0.08** (0.04)	0.31*** (0.04)	0.21*** (0.03)	0.22*** (0.04)	0.11*** (0.03)	0.21*** (0.04)
Economist T	0.06** (0.03)	0.31*** (0.03)	0.21*** (0.03)	0.24*** (0.03)	0.10*** (0.03)	0.20*** (0.03)
Control Group Mean	0.60	0.39	0.28	0.32	0.64	0.45
Observations	2786	2785	2785	2785	2786	2786

Courses Increase Perceived Behavioral Responses to Estate Tax

Responses of the wealthiest individuals

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial	Save Less
Redistribution T	0.05* (0.03)	0.05 (0.04)	0.07* (0.04)	0.00 (0.04)	-0.01 (0.03)	0.11*** (0.04)	0.02 (0.04)
Efficiency T	0.04 (0.03)	0.27*** (0.04)	0.09** (0.04)	0.06* (0.04)	-0.06* (0.03)	0.24*** (0.04)	0.22*** (0.03)
Economist T	0.03 (0.02)	0.26*** (0.03)	0.12*** (0.03)	0.10*** (0.03)	-0.02 (0.03)	0.22*** (0.03)	0.20*** (0.03)
Control Group Mean	0.88	0.50	0.39	0.57	0.83	0.50	0.59
Observations	2357	2356	2357	2355	2356	2356	2356

Responses of individuals who are young and not yet rich

	Evade Taxes	Work Less	Stop Working	Have Spouse Stop Working	Move State	Be Less Entrepreneurial	Save Less
Redistribution T	-0.04 (0.03)	0.00 (0.04)	0.02 (0.04)	-0.01 (0.04)	-0.01 (0.04)	0.03 (0.04)	-0.03 (0.04)
Efficiency T	-0.00 (0.03)	0.04 (0.04)	0.04 (0.04)	0.03 (0.04)	-0.04 (0.03)	0.09** (0.04)	0.04 (0.04)
Economist T	-0.03 (0.03)	0.06* (0.03)	0.07** (0.03)	0.06* (0.03)	-0.03 (0.03)	0.07** (0.03)	0.05 (0.03)
Control Group Mean	0.78	0.53	0.37	0.46	0.73	0.52	0.61
Observations	2356	2356	2354	2356	2357	2356	2356

Courses Increase Perceived Distortion Effects of Taxes

Income Taxes

	Trickle down	Taxes high-inc. hurt economy	Laffer effect high-incomes	Laffer effect middle-class	Oppose taxes support low-inc.	Oppose taxes fund investment	Belief distortion index
Redistribution T	-0.06* (0.03)	0.02 (0.03)	0.01 (0.04)	-0.06 (0.04)	-0.03 (0.03)	-0.02 (0.04)	0.03 (0.04)
Efficiency T	0.05 (0.03)	0.17*** (0.03)	0.04 (0.04)	-0.01 (0.04)	0.03 (0.03)	-0.01 (0.04)	0.30*** (0.04)
Economist T	-0.02 (0.03)	0.09*** (0.03)	-0.02 (0.03)	-0.02 (0.03)	-0.04 (0.03)	-0.04 (0.03)	0.24*** (0.03)
Control Group Mean	0.32	0.31	0.48	0.65	0.43	0.45	-0.05
Observations	2785	2786	2784	2785	2786	2786	2777

Estate Tax

	Tax wealthy HH hurt economy	Laffer effect	Higher tax not good tool	Belief distortion index
Redistribution T	-0.01 (0.04)	-0.00 (0.04)	-0.14*** (0.04)	0.00 (0.04)
Efficiency T	0.05 (0.03)	0.05 (0.04)	-0.08** (0.04)	0.11*** (0.04)
Economist T	0.06** (0.03)	-0.01 (0.03)	-0.13*** (0.03)	0.11*** (0.04)
Control Group Mean	0.28	0.46	0.47	0.02
Observations	2358	2356	2357	2351

Who Benefits from Changes in Income Taxes

Who Wins from Income Tax Cuts for the richest households

	Lower Class	Working Class	Middle Class	Upper-middle Class	Upper Class
Redistribution T	0.01 (0.03)	-0.01 (0.03)	-0.04 (0.03)	-0.07** (0.03)	-0.04 (0.03)
Efficiency T	0.07** (0.03)	0.07** (0.03)	0.08** (0.03)	-0.05 (0.03)	-0.06** (0.03)
Economist T	0.02 (0.02)	0.03 (0.02)	0.04 (0.02)	-0.03 (0.03)	-0.04* (0.02)
Control Group Mean	0.32	0.32	0.33	0.69	0.82
Observations	2766	2760	2750	2747	2769

Who Loses from Raises in overall taxes

	Lower Class	Working Class	Middle Class	Upper-middle Class	Upper Class
Redistribution T	0.02 (0.03)	-0.06* (0.03)	0.02 (0.03)	0.02 (0.03)	0.01 (0.03)
Efficiency T	-0.00 (0.03)	-0.01 (0.03)	0.03 (0.03)	0.05 (0.03)	0.05* (0.03)
Economist T	-0.06** (0.03)	-0.06** (0.03)	-0.02 (0.03)	0.07*** (0.03)	0.09*** (0.03)
Control Group Mean	0.35	0.51	0.60	0.61	0.59
Observations	2778	2761	2763	2761	2766

In the case of the cuts for the richest households, the dummy is equal to 1 if respondent believes that the given group “Mostly Wins” from these cuts. In the case of the raises to overall taxes, dummy is equal to 1 if respondent believes the given group “Mostly Loses” from the raise.

Economist Course Increases Focus on Inequality and Support for Income Tax

	Support Red. Index	Income ineq. serious issue	High-inc. should pay high tax	Prog. Tax is a good tool
Redistribution T	0.05 (0.04)	0.09*** (0.04)	-0.02 (0.03)	0.12*** (0.03)
Efficiency T	-0.06 (0.04)	0.01 (0.03)	-0.03 (0.03)	0.02 (0.03)
Economist T	0.03 (0.03)	0.06* (0.03)	-0.02 (0.03)	0.08*** (0.03)
Control Group Mean	-0.00	0.48	0.70	0.67
Observations	2776	2785	2784	2785

Courses Reduce Perceived Fairness of Inheritances and Increase Support for Estate Tax

	Worked harder	Inherited a lot	Access better amenities	Inherit more	Support Wealth Transmission	Fairness Index
Redistribution T	0.00 (0.04)	-0.05 (0.04)	0.02 (0.04)	-0.09** (0.04)	-0.06* (0.04)	-0.08* (0.05)
Efficiency T	0.02 (0.04)	0.03 (0.04)	0.01 (0.04)	-0.03 (0.04)	0.02 (0.04)	0.03 (0.05)
Economist T	-0.03 (0.03)	-0.04 (0.03)	0.02 (0.03)	-0.05 (0.03)	-0.09*** (0.03)	-0.08** (0.04)
Control Group Mean	0.61	0.47	0.32	0.53	0.58	-0.01
Observations	2358	2358	2357	2357	2356	2356

“Higher tax not..” = 1 if respondents believes estate tax not good too to ↓ wealth ineq.

Courses Increase Support for Government Intervention

	Government should be responsible for								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Trust	Purposes	Involvement	Cents wasted	Satisfaction	Reducing income inequality	Reducing wealth transmission	Health care	Reducing opportunity diff.
Estate	0.04 (0.03)	0.01 (0.03)	-0.02 (0.03)	5.26*** (1.58)	-0.06** (0.03)	0.00 (0.03)	0.02 (0.03)	0.02 (0.03)	-0.01 (0.03)
Income × Redistribution T	0.07*** (0.03)	0.02 (0.03)	0.05 (0.03)	-1.34 (1.58)	0.01 (0.03)	0.09*** (0.03)	0.04 (0.03)	-0.04 (0.03)	-0.00 (0.03)
Income × Efficiency T	0.01 (0.03)	-0.02 (0.03)	0.01 (0.03)	2.19 (1.57)	-0.02 (0.03)	-0.00 (0.03)	0.00 (0.03)	-0.06** (0.03)	-0.05* (0.03)
Income × Economist T	0.01 (0.02)	0.06** (0.02)	0.07*** (0.02)	1.29 (1.29)	-0.04 (0.02)	0.07*** (0.02)	0.05* (0.02)	-0.02 (0.02)	0.01 (0.02)
Estate × Redistribution T	-0.02 (0.03)	0.04 (0.03)	0.04 (0.04)	-1.21 (1.86)	0.05 (0.04)	0.01 (0.04)	0.07* (0.04)	-0.04 (0.03)	0.04 (0.04)
Estate × Efficiency T	-0.00 (0.03)	-0.02 (0.03)	-0.01 (0.03)	-1.57 (1.83)	0.04 (0.04)	-0.08** (0.04)	0.05 (0.04)	-0.03 (0.03)	-0.01 (0.04)
Estate × Economist T	-0.02 (0.03)	0.01 (0.03)	0.00 (0.03)	0.21 (1.60)	0.08*** (0.03)	-0.04 (0.03)	0.07** (0.03)	-0.03 (0.03)	-0.01 (0.03)
Age 30-49	-0.03** (0.02)	0.03 (0.02)	0.02 (0.02)	2.75*** (0.98)	-0.12*** (0.02)	0.00 (0.02)	-0.04* (0.02)	0.01 (0.02)	-0.02 (0.02)
Age 50-69	-0.12*** (0.02)	0.05*** (0.02)	-0.04* (0.02)	3.33*** (1.07)	-0.19*** (0.02)	-0.08*** (0.02)	-0.12*** (0.02)	-0.01 (0.02)	-0.08*** (0.02)
Middle-Income	0.00 (0.02)	-0.03 (0.02)	-0.05*** (0.02)	-1.33 (0.92)	0.03 (0.02)	-0.02 (0.02)	-0.03 (0.02)	-0.03* (0.02)	0.01 (0.02)
High-Income	0.01 (0.01)	-0.06*** (0.02)	-0.05*** (0.02)	-2.89*** (0.88)	0.01 (0.02)	-0.06*** (0.02)	-0.05*** (0.02)	-0.08*** (0.02)	-0.03 (0.02)
College Degree	0.02* (0.01)	-0.02 (0.01)	0.00 (0.02)	-2.43*** (0.79)	-0.01 (0.02)	0.02 (0.02)	-0.02 (0.02)	-0.01 (0.01)	0.01 (0.02)
Economics related major	-0.06*** (0.02)	-0.01 (0.02)	-0.05** (0.02)	-3.25*** (1.19)	-0.02 (0.02)	-0.04 (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.07*** (0.02)
Policy knowledge	0.09*** (0.01)	-0.01 (0.01)	0.08*** (0.01)	-0.38 (0.78)	-0.03** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.02 (0.01)	0.06*** (0.02)
Clinton Moderates	0.05*** (0.02)	-0.20*** (0.02)	-0.18*** (0.02)	0.11 (1.05)	0.19*** (0.02)	-0.13*** (0.02)	-0.12*** (0.02)	-0.21*** (0.02)	-0.15*** (0.02)
Trump Moderates	0.15*** (0.02)	-0.44*** (0.02)	-0.31*** (0.02)	3.00*** (1.11)	0.37*** (0.02)	-0.27*** (0.02)	-0.19*** (0.02)	-0.37*** (0.02)	-0.30*** (0.02)
Trump Conservatives	0.06*** (0.02)	-0.59*** (0.02)	-0.48*** (0.02)	6.88*** (1.00)	0.36*** (0.02)	-0.44*** (0.02)	-0.42*** (0.02)	-0.52*** (0.02)	-0.47*** (0.02)
Control Group Mean	0.22	0.44	0.42	55.16	0.59	0.43	0.54	0.42	0.48
Observations	5144	5143	5139	5137	5142	5140	5138	5138	5138

To be continued..

Comments very welcome!

THANK YOU!

APPENDIX

Consent page

Academic Research Survey We are a non-partisan group of academic researchers from the Economics Department at Harvard University. Our goal is to learn about people's attitudes on several issues. Please read the information below before consenting to begin the research study.

- This survey is voluntary. You have the right to not answer any question, and to stop the survey at any time or for any reason (to exit the survey, simply close this window). We expect that it will take about 20 minutes. You will likely learn a lot!

- Your name will never be recorded by researchers. Results may include summary data, but you will never be identified. The data will be stored on Harvard servers and will be kept confidential. The collected anonymous data may be made available to other researchers for replication purposes.

- You will be compensated for this interview conditional upon (i) completing the survey and (ii) passing our survey quality checks, which use sophisticated statistical control methods to detect incoherent and rushed responses. **Responding without adequate effort may result in your responses being flagged for low quality and you may not receive your payment.**

Please note that it is very important for the success of our research that you **answer honestly** and **read the questions very carefully** before answering. If at any time you don't know an answer, please give your best guess **without consulting any external sources**. However, please be sure to spend enough time reading and understanding the questions.

You are encouraged to print or take a screenshot of this page for your records. If you have any questions about this study, you may contact us at studysocialsciences2018@gmail.com.

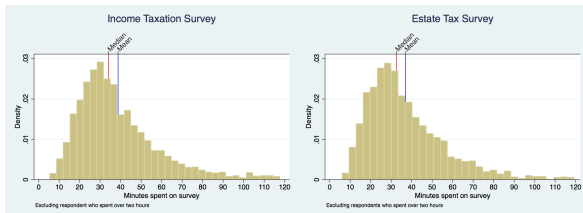
This research has been reviewed and approved by the Harvard University Area Institutional Review Board ("IRB"). You may talk to them at (617) 496-2847 or cuhs@harvard.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

Yes, I would like to take part in this study, and confirm that I LIVE IN THE U.S., and I am 18 or older

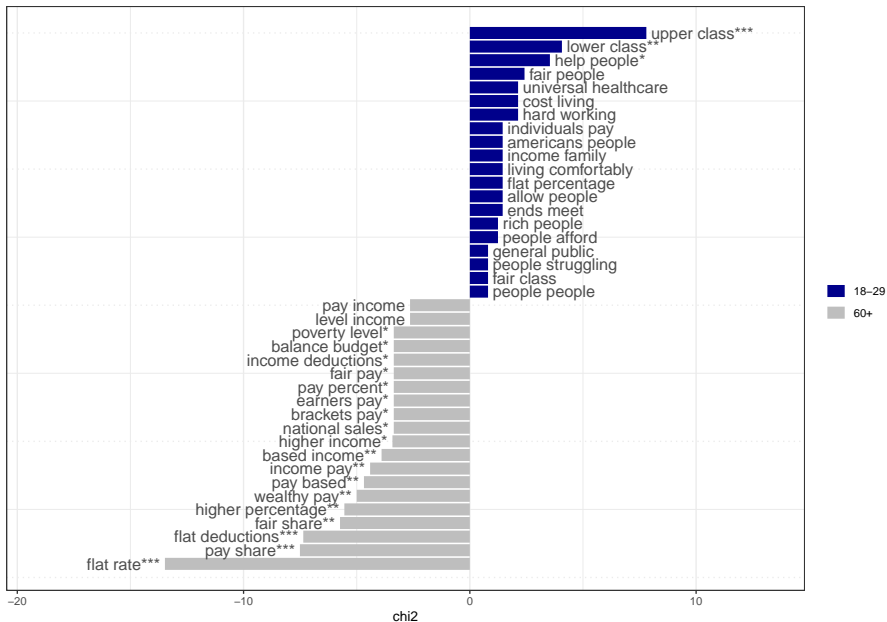
No, I would not like to participate

Distribution of Survey Times - Income Taxation

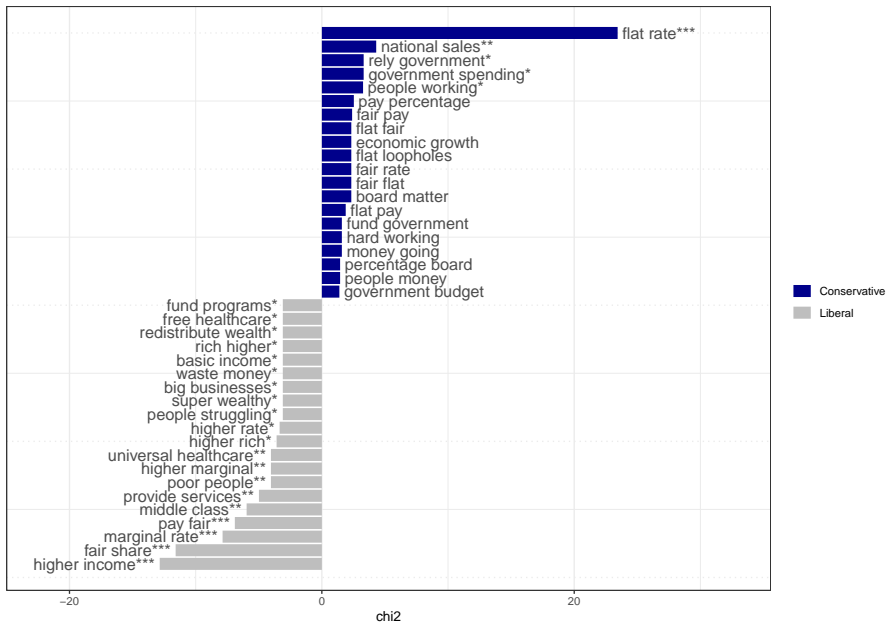


▶ Back

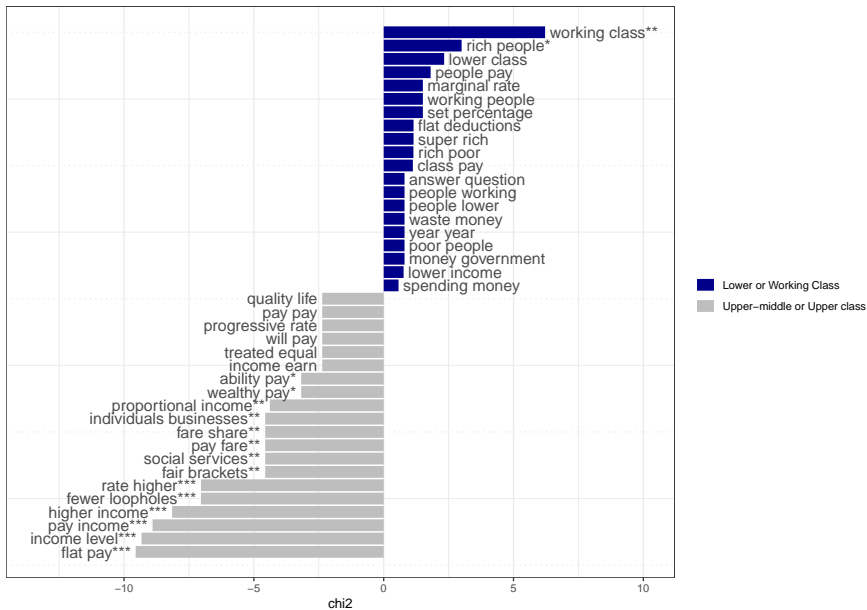
Keynes Graph - Goals of a Good Income Tax System by Age



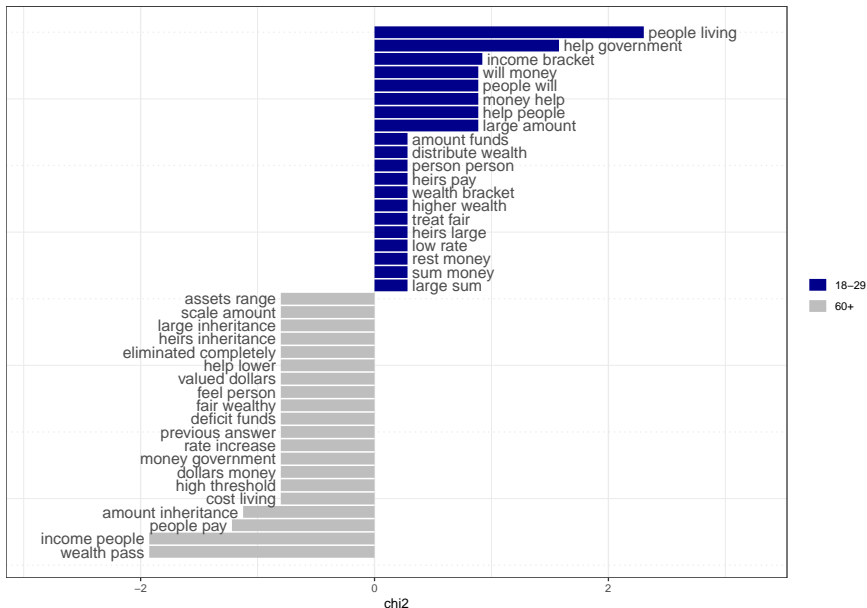
Keyness - Goals of a Good Income Tax System by Politics



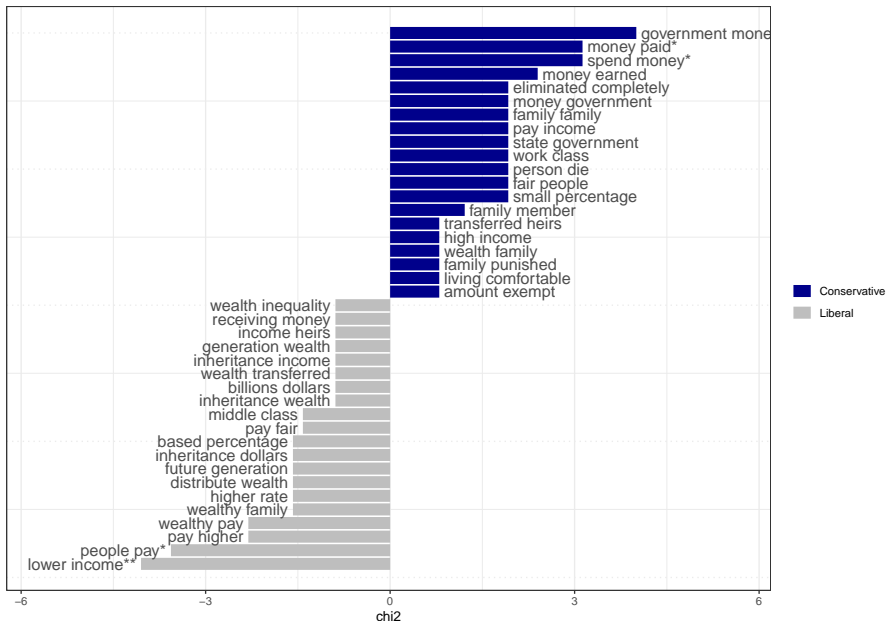
Keyness - Goals of a Good Income Tax System by Income



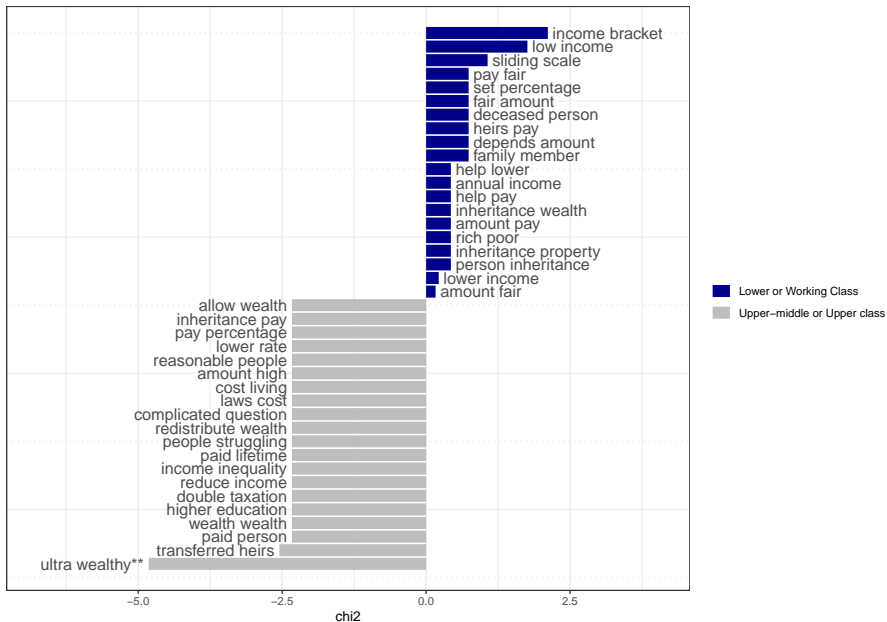
Keyness Graph - Goals of Federal Estate Tax System by Age



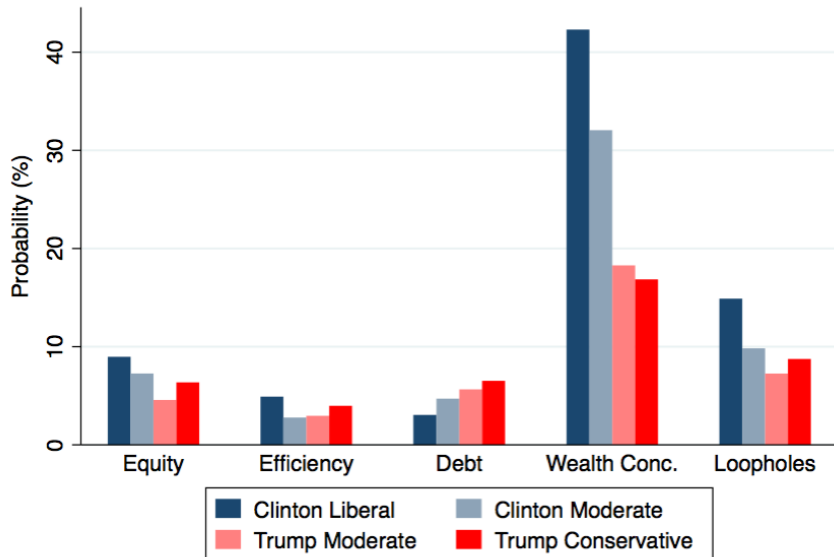
Keyness - Goals of Federal Estate Tax System by Politics



Keyness - Goals of a Good Federal Estate Tax System by Income

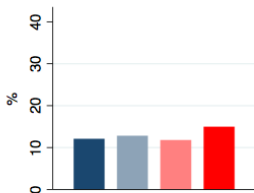


Prob. of Mentioning Topic by Political Views (Shortcomings)

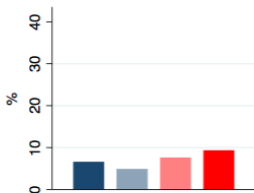


Within-political Views Frequency of Topics (Shortcomings)

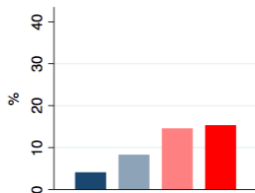
Equity



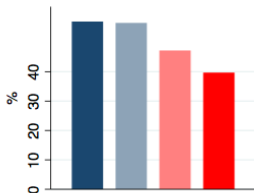
Efficiency



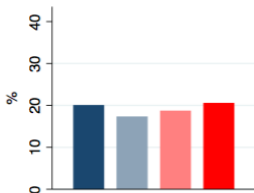
Debt



Wealth Concentration



Loopholes



Preprocessing Steps – Theory

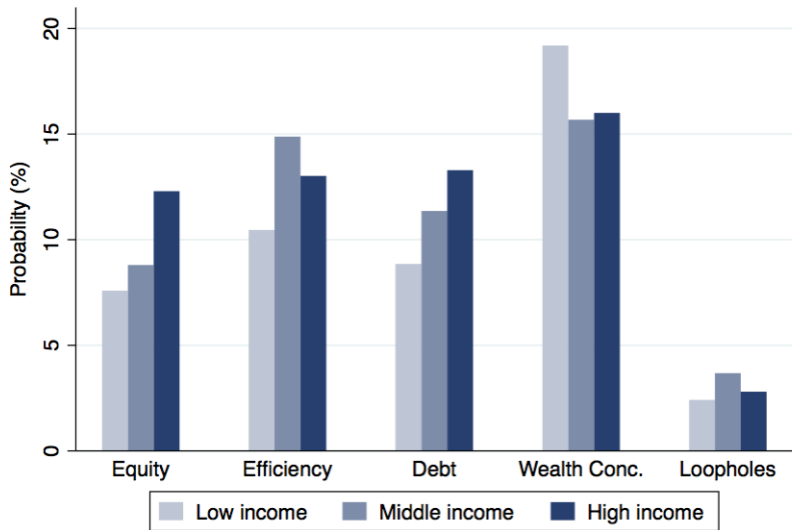
- Given an answer d_i :

- 1 Parse d_i : lower-case every word, remove punctuation, spaces in excess, numbers, misspelled words, very common words that carry no intrinsic meaning (“stopwords”) such as *and*, *the*, *each*, *then*
- 2 Reduce remaining words to common root (stemming)
 - ▶ Use Snowball stemming algorithm, by Porter (2001).
 - ▶ *policies* and *policy* become *polic* → reduces number of distinct textual elements

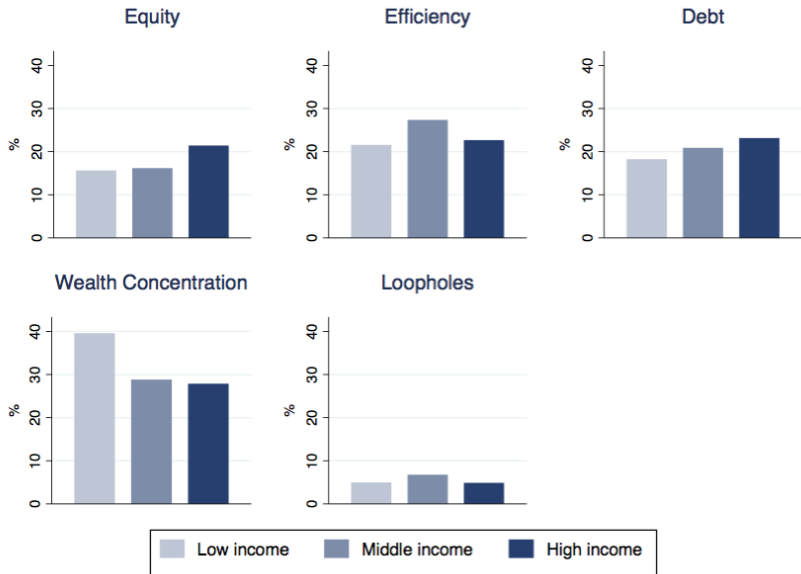
→ Output: (\hat{d}_i)

- 3 Transform \hat{d}_i into numerical vector \mathbf{c}_i in which each element is the count of a distinct textual token (either a word or an n -components expression, n -gram)
- F.e. take $d_1 =$ “*We should tax the wealthy more and the poor less.*”
 - ▶ After steps 1-2 becomes: $\hat{d}_1 =$ “*tax wealthi poor less*”
 - ▶ After step 3 becomes: [‘tax’ = 1, ‘wealthi’ = 1, ‘poor’ = 1, ‘less’ = 1, ‘tax wealthi’ = 1, ‘wealthi poor’ = 1, ‘poor less’ = 1, ‘house’ = 0, ...]

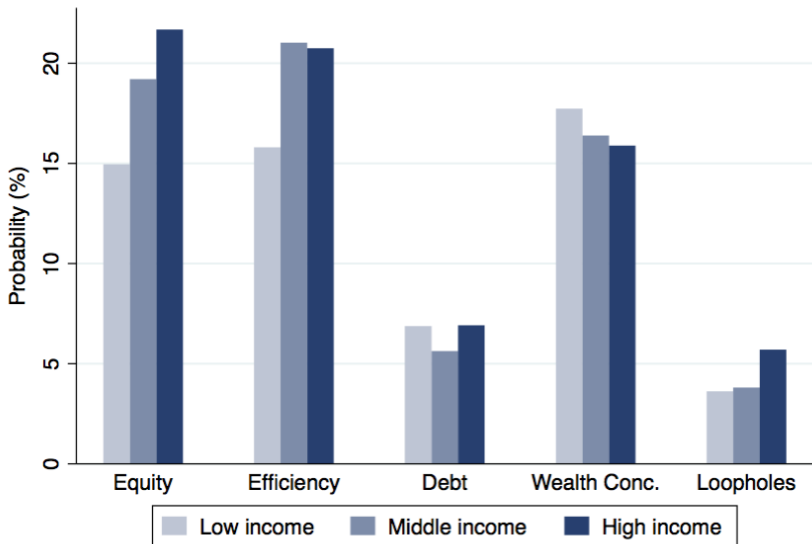
Considerations on the tax system- Probability of mentioning topic



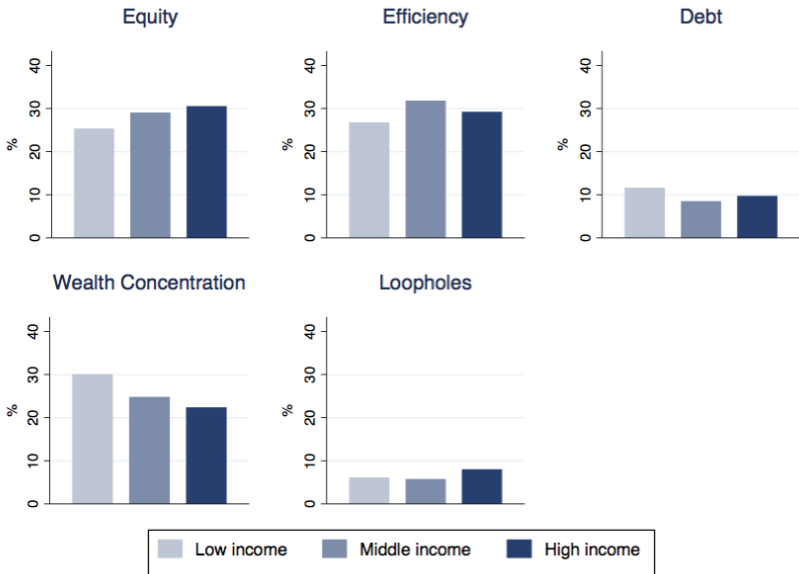
Considerations - Within-group relative freq of topic



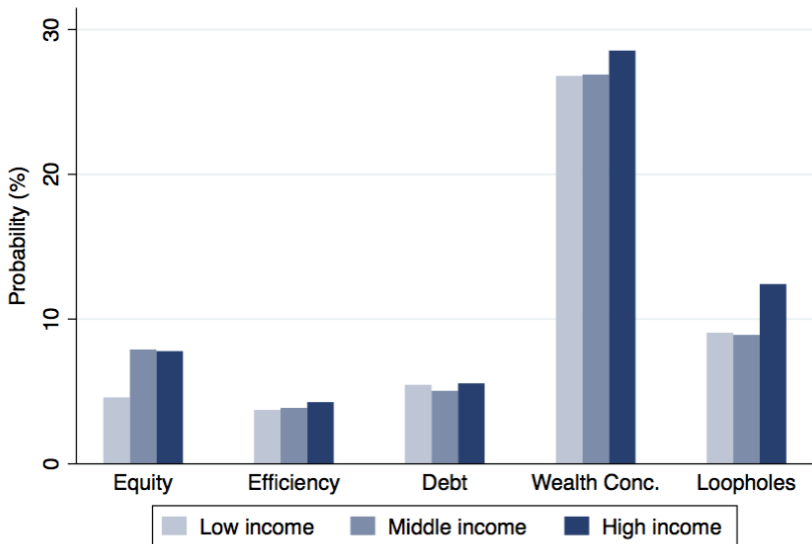
Goals of the tax system - Probability of mentioning topic



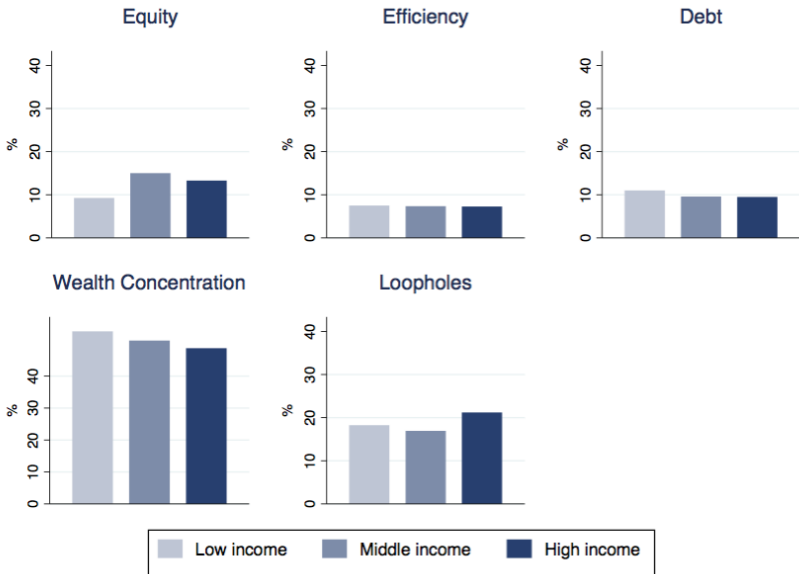
Goals of the tax system - Within-group relative freq. of topic



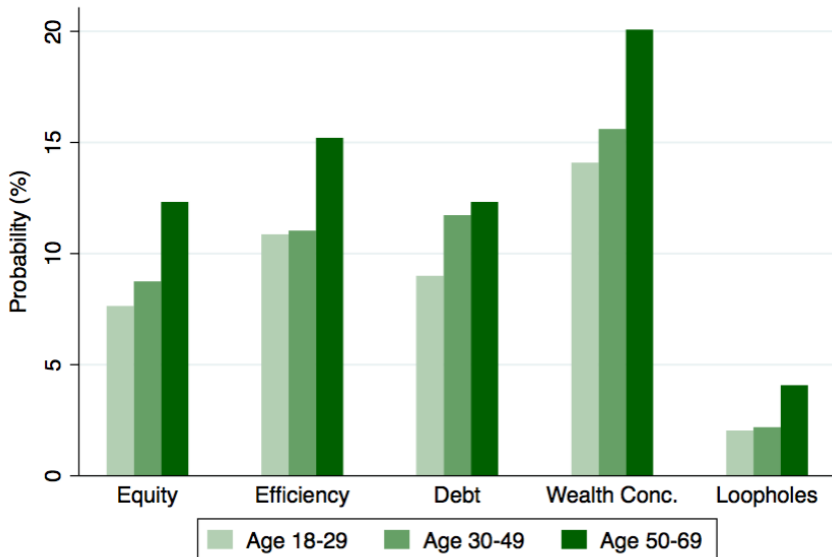
Shortcomings of the tax system - Prob. of mentioning topic



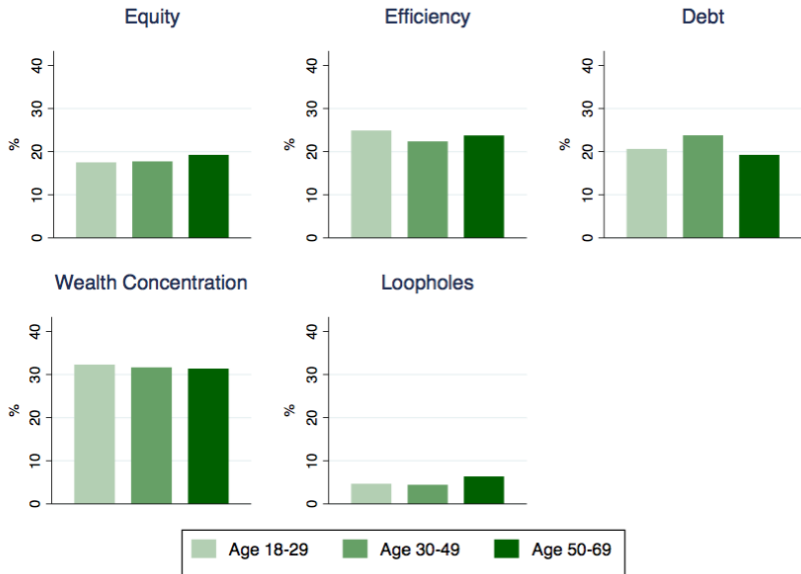
Shortcomings - Within-group relative freq. of topic



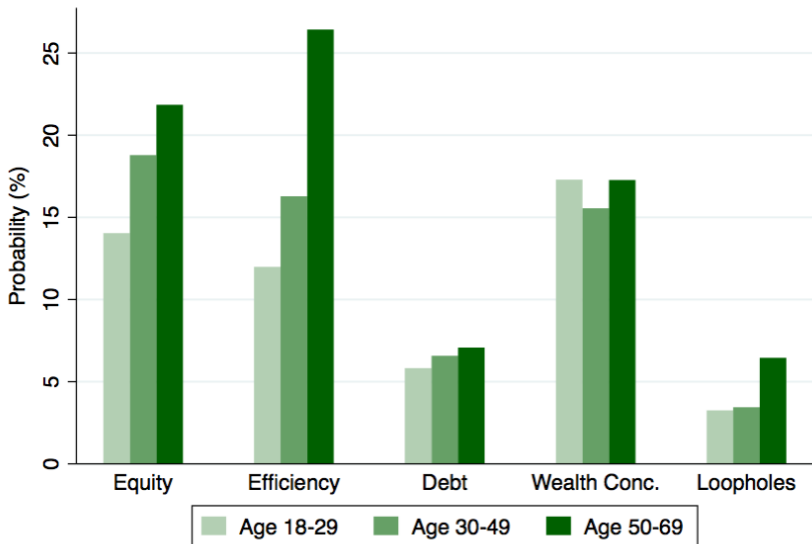
Considerations on tax system - Probability of mentioning topic



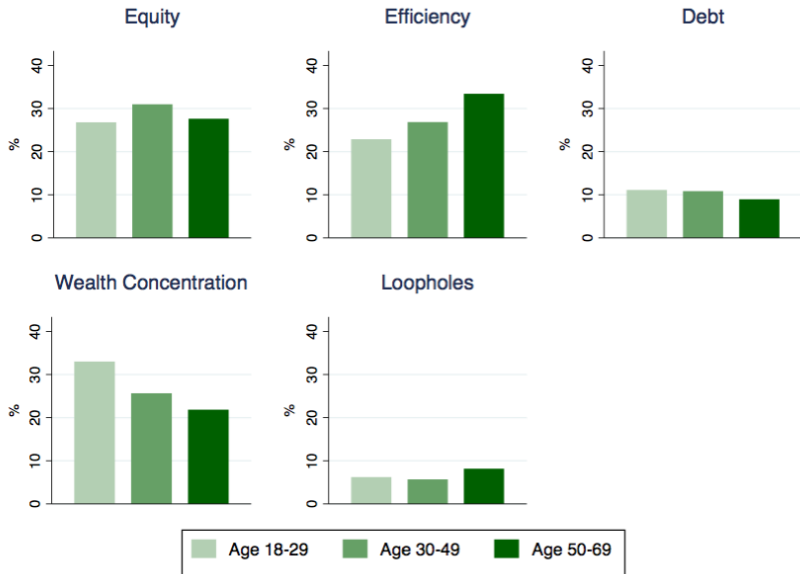
Considerations - Within-group relative freq. of each topic



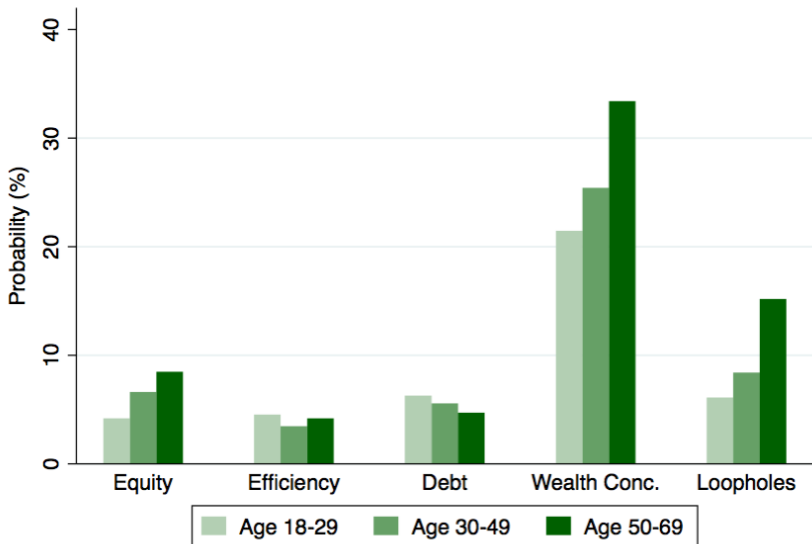
Goals of the tax system - Prob. of mentioning the topic



Goals - Within-group relative freq. of each topic

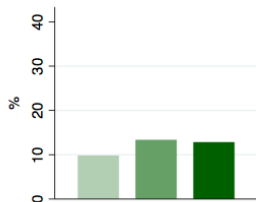


Shortcomings of the tax system - Prob. of mentioning topic

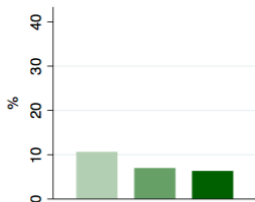


Shortcomings - Within-group relative freq. of each topic

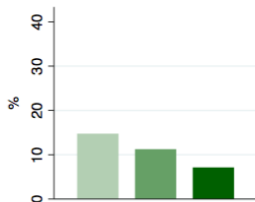
Equity



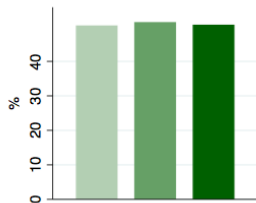
Efficiency



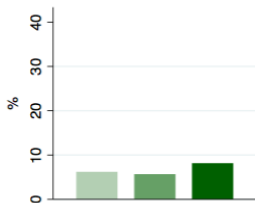
Debt



Wealth Concentration

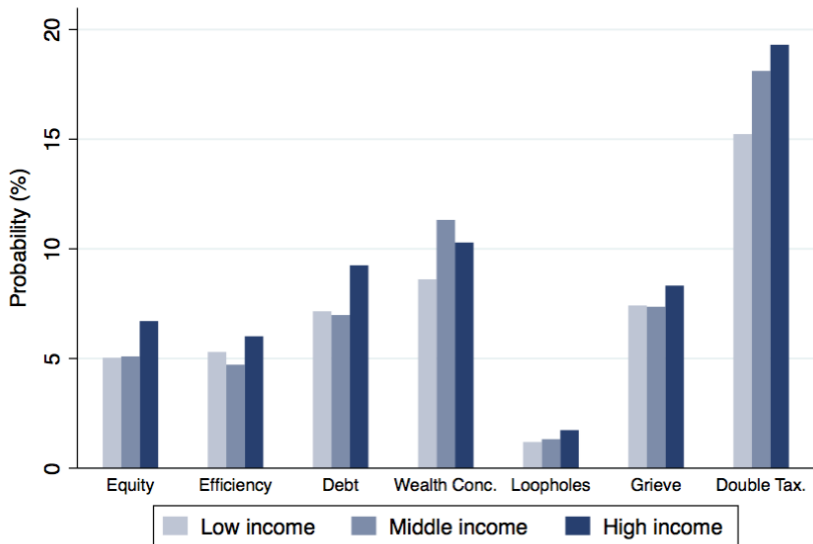


Loopholes

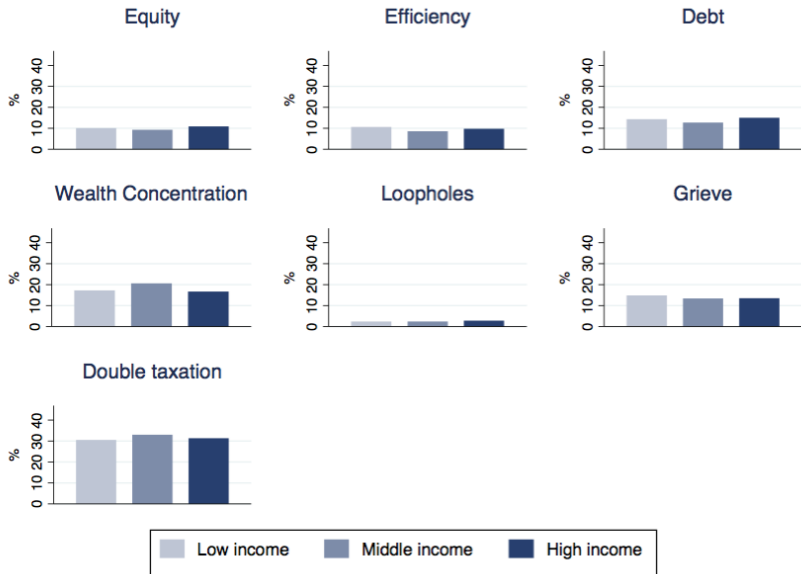


Age 18-29 Age 30-49 Age 50-69

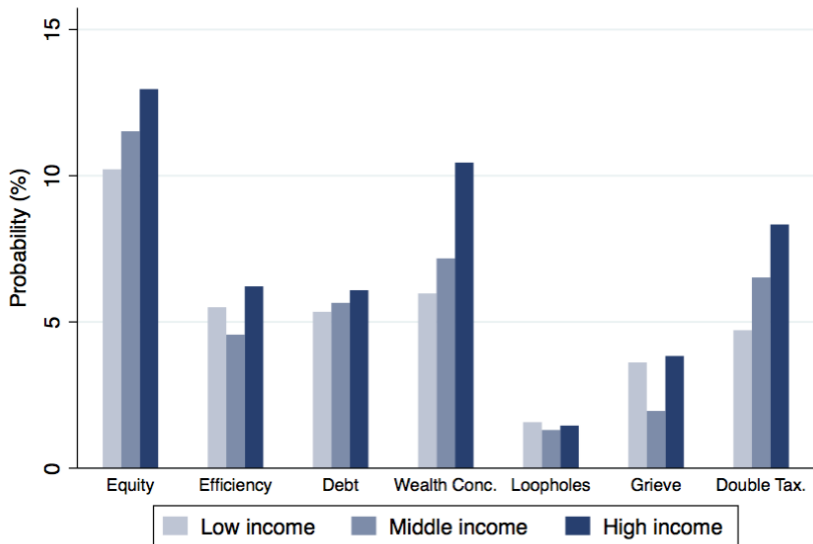
Considerations on the tax system - Prob. of mentioning topic



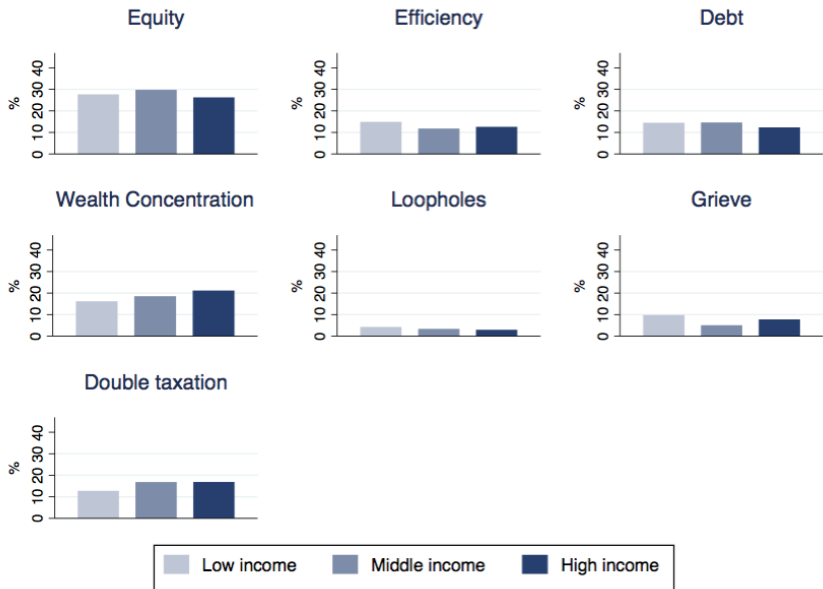
Considerations - Within-group relative frequency of each topic



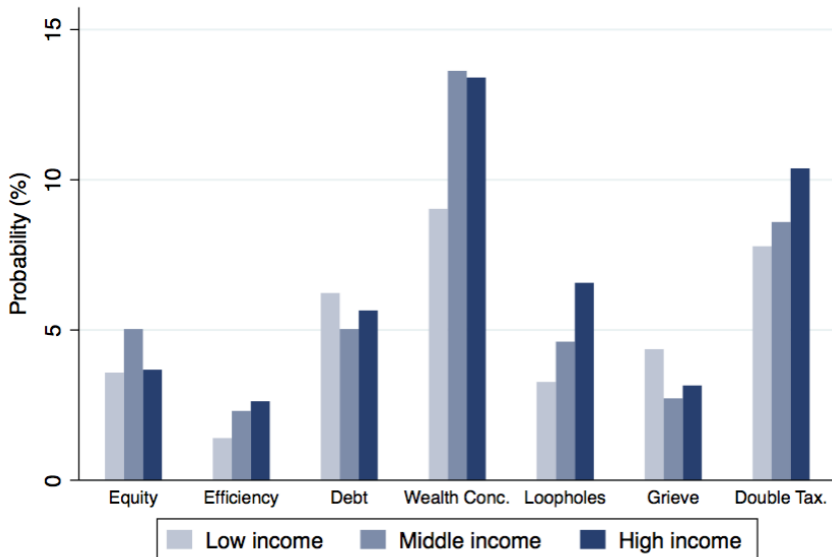
Goals of the tax system - Probability of mentioning topic



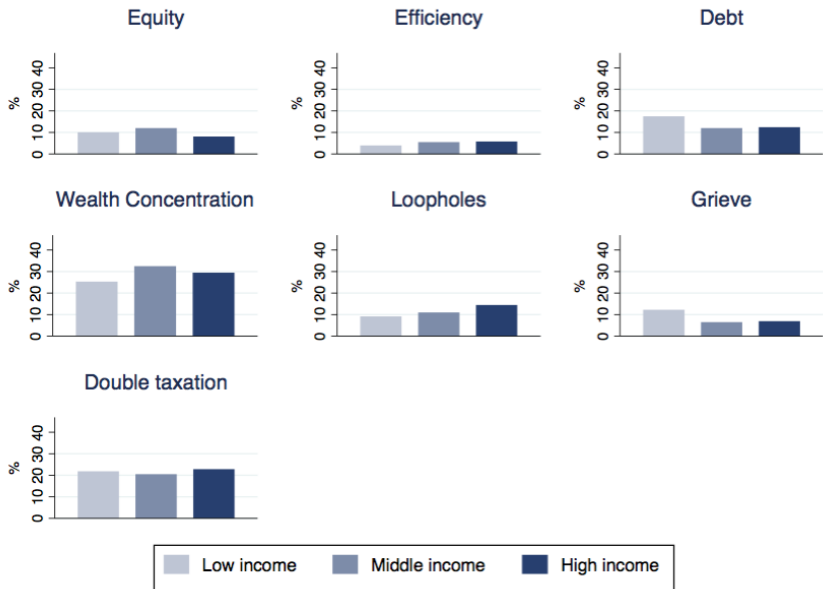
Goals - Within-group relative freq. of each topic



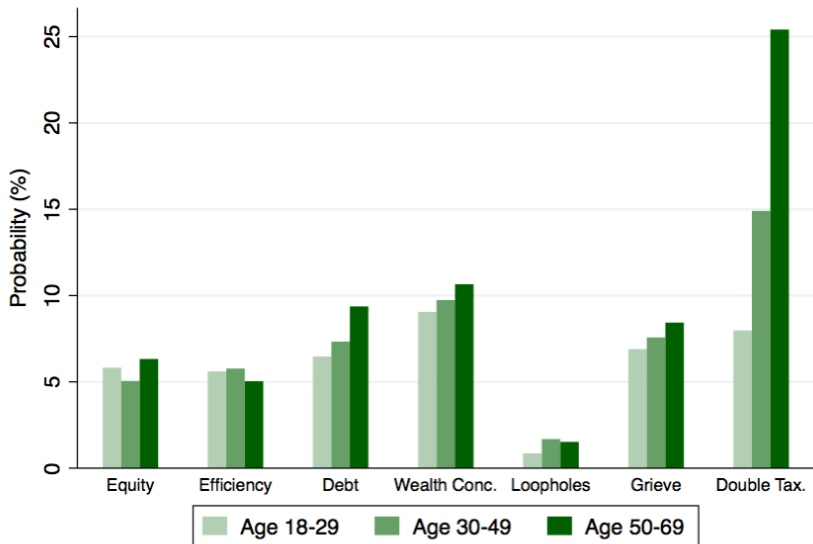
Shortcomings of tax system - Probability of mentioning topic



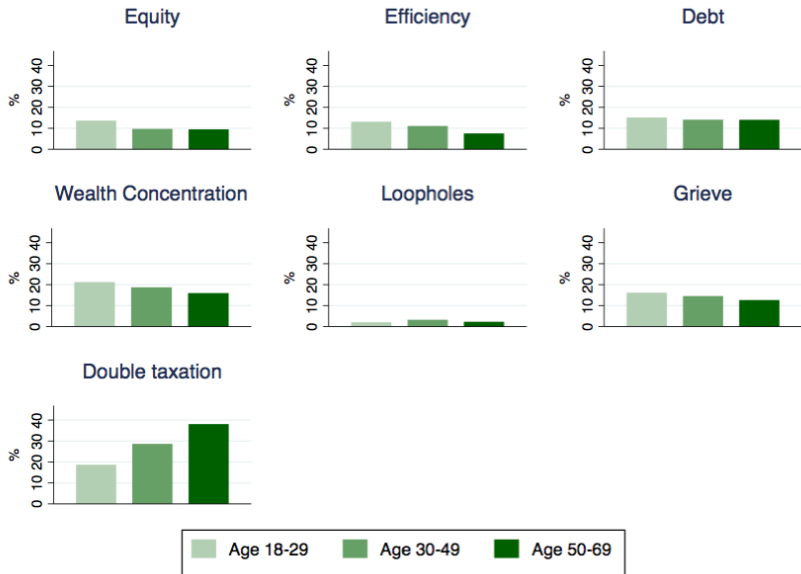
Shortcomings - Within-group relative freq. of each topic



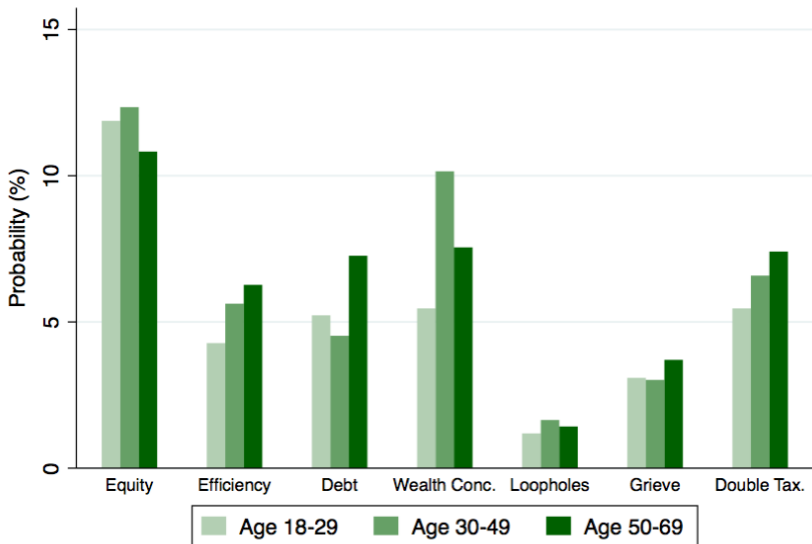
Considerations on the tax system - Prob. of mentioning topic



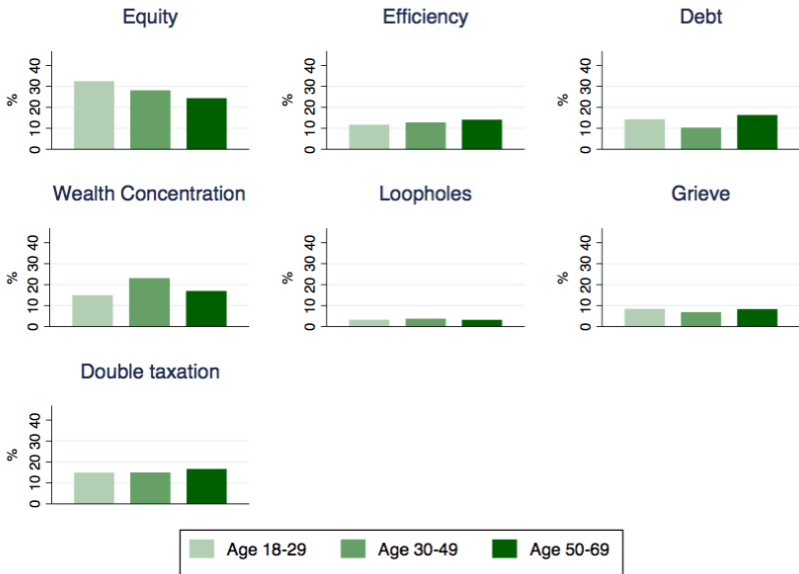
Considerations - Within-group relative frequency of each topic



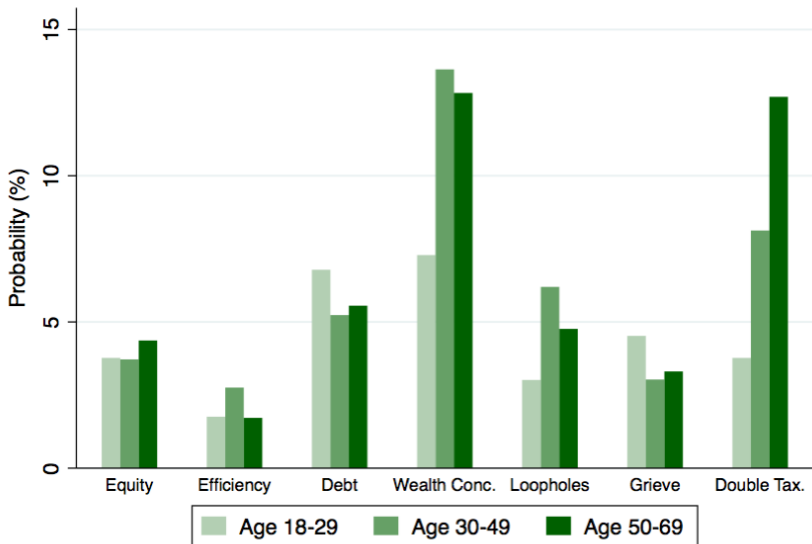
Goals of the tax system - Probability of mentioning topic



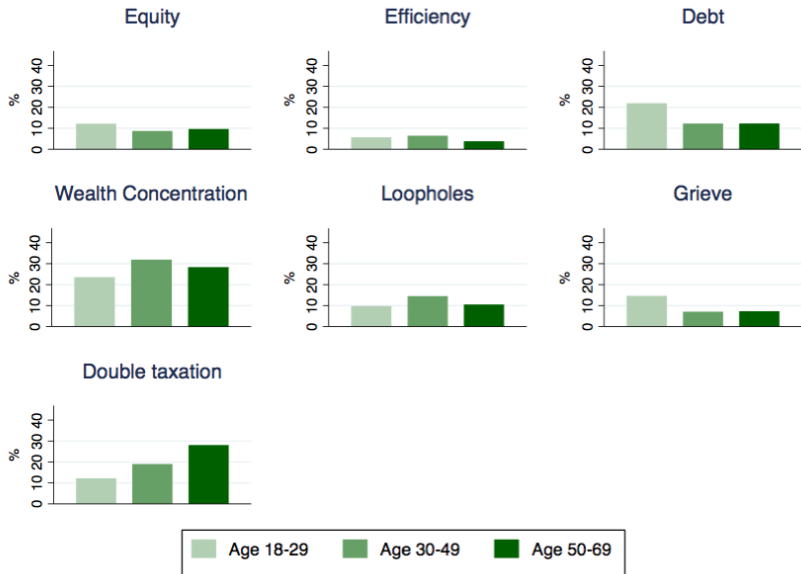
Goals - Within-group relative freq of each topic



Shortcomings of the tax system - Prob. of mentioning topic

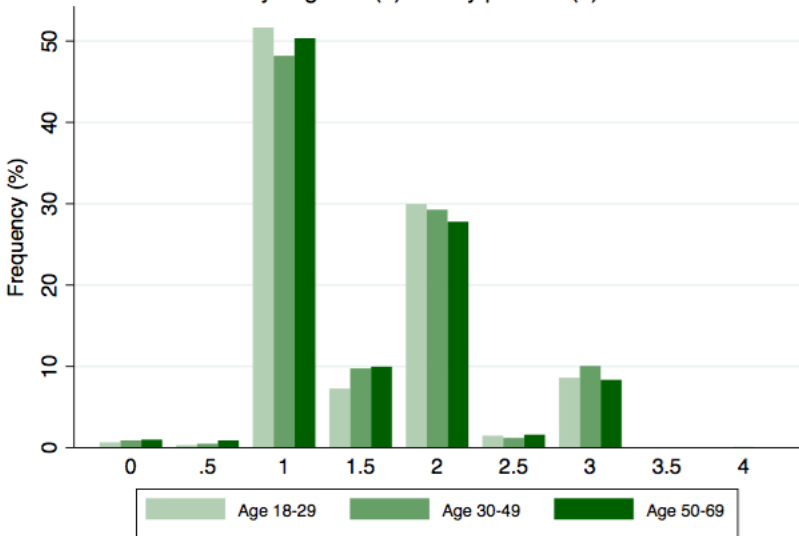


Shortcomings - Within-group relative frequency of each topic



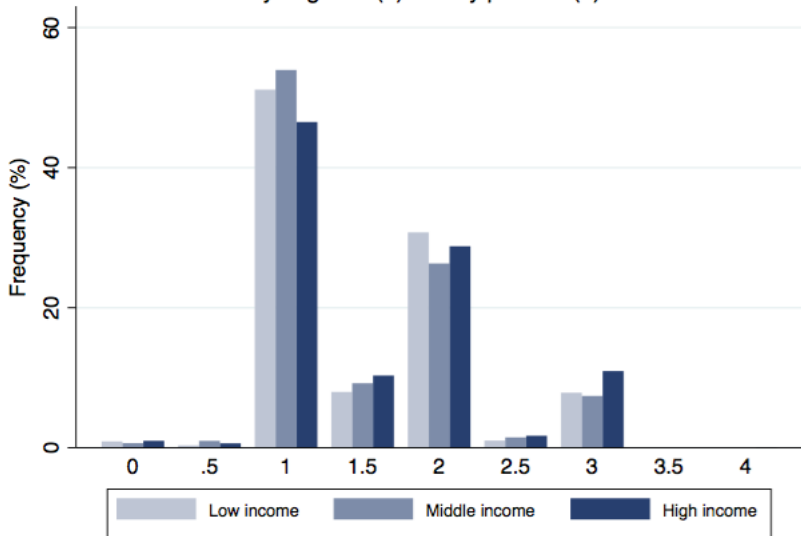
Sentiment About Income Tax System by Age

From very negative (0) to very positive (4) sentiment



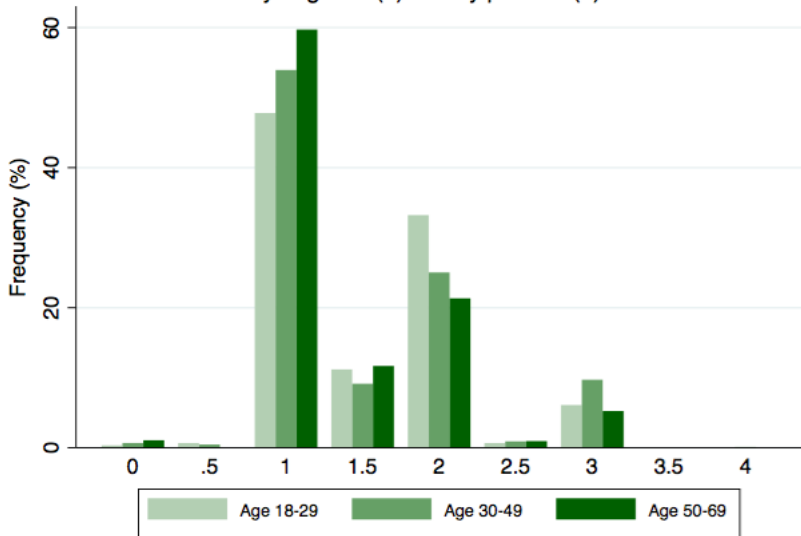
Sentiments About Income Tax System by Income

From very negative (0) to very positive (4) sentiment



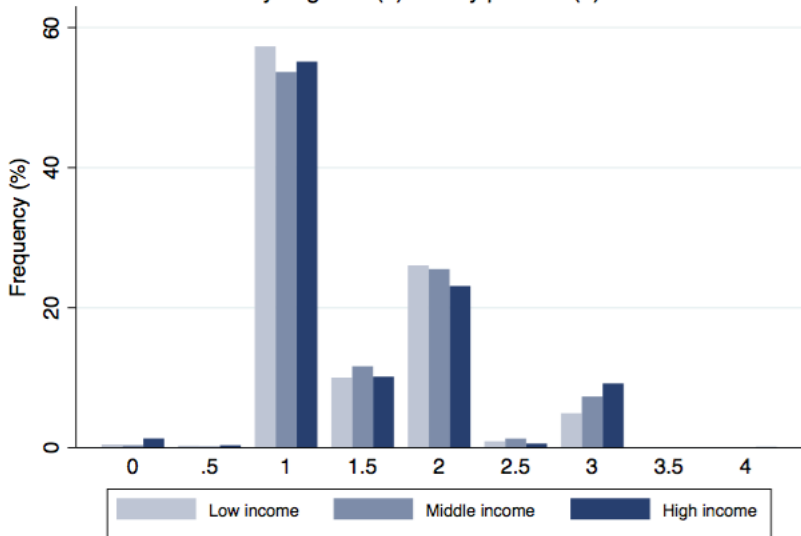
Sentiment About Estate Tax System by Age

From very negative (0) to very positive (4) sentiment



Sentiment About Estate Tax System by Income

From very negative (0) to very positive (4) sentiment



Who loses - Overall taxes are raised

	Lower Class	Working Class	Middle Class	Upper-middle Class	Upper Class
You	0.19*** (0.04)	0.05 (0.04)	-0.01 (0.04)	-0.01 (0.04)	0.00 (0.04)
You × 70k+	-0.02 (0.06)	-0.05 (0.06)	-0.11* (0.06)	-0.14** (0.06)	-0.14** (0.06)
Gender	-0.06** (0.03)	-0.05 (0.03)	-0.02 (0.03)	0.06* (0.03)	0.03 (0.03)
Women	-0.02 (0.02)	0.03 (0.02)	0.02 (0.02)	0.01 (0.02)	-0.02 (0.02)
College Degree	-0.03 (0.02)	-0.04* (0.02)	0.00 (0.02)	0.00 (0.02)	0.03 (0.02)
Economics related major	-0.09*** (0.03)	-0.02 (0.03)	0.03 (0.03)	0.05* (0.03)	0.07** (0.03)
Policy knowledge	0.01 (0.02)	-0.04** (0.02)	-0.06*** (0.02)	-0.03 (0.02)	-0.03 (0.02)
Clinton Moderates	0.06** (0.03)	0.09*** (0.03)	0.11*** (0.03)	0.04 (0.03)	-0.01 (0.03)
Trump Moderates	0.10*** (0.03)	0.16*** (0.03)	0.16*** (0.03)	0.01 (0.03)	-0.02 (0.03)
Trump Conservatives	0.04 (0.03)	0.18*** (0.03)	0.20*** (0.03)	0.10*** (0.03)	0.07** (0.03)
Others	0.07** (0.03)	0.14*** (0.03)	0.18*** (0.03)	0.08*** (0.03)	0.02 (0.03)
mean_controle					
N	2778	2761	2763	2761	2766