Topic 7 - Le Hoang Nhan

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Intergenerational Mobility and Preferences for Redistribution

Abstract

Using cross-country survey and experimental data, we deploy the data separated by genders to find intergenerational mobility affect preferences for distribution in France, Italy, Sweden, the UK, and the US. In general, female is more optimistic than male about moving to the top classes and more pessimistic than male about remaining in poor. Conditional on effort, it shows male somewhat trust in role of effort more than female. When considering views on governments and fairness, female's beliefs are somewhat similar to left-wing's beliefs, and the opposite is true for male. When we consider relations between perceptions and policy preferences by gender, we found that comparing the magnitude supporting redistribution policies between gender, female support more than male.

Introduction

Everyone has a strong deserve for improving the living standard by their hardworking and respective high pay-off expectations. If fair markets work well, we will see the income gap between the rich and the poor reduced, but in fact, it is increasing over time, telling that becoming wealthy is not easy and not a one-night dream. In reality, the poor still stuck in poverty and the rich remain their statuses. Due to the big gap, societies become unstable and susceptible to political movements as the poor, who is “the 99%”, turn out to vote in elections for parties promising them a better future even though these promises are unfeasible.

In 2018, the authors, Alesina, Alberto, Stefanie Stantcheva, and Edoardo Teso, publish the paper "Intergenerational Mobility and Preferences for Redistribution." on American Economic Review, showing beliefs about intergenerational mobility, the perceived probabilities of moving from the bottom to upper classes, have impacts on preferences for redistribution policies in France, Italy, Sweden, the United Kingdom, and the United States.

The author compared the differences between actual and perceived probabilities within countries and between US and EU. They also explore the perceived role of effort by analyzing the differences between the perception conditional on effort and unconditional on effort. By country and by political affiliation, they show perceptions of government and fairness and the relation between perceptions and policy preferences. They even go further to verify the causal effect of the perception and policy preferences by using the treatment that shows strong pessimistic information about mobility to a treated group.

Their work contributes a lot in interpreting the way people perceive intergenerational mobility and preferences for distribution policies. We summarize their results as follows:

First, they find a sharp polarization between the political affiliation that left-wing is more pessimistic than right-wing about mobility. There is a high correlation between left-wing preferences for redistribution and their mobility perceptions. In the treatment, they even show stronger preferences for redistribution. The right-wing respondents are different from their counterpart, showing no preferences for redistribution because they don't trust the government which is a problem itself, not a solution for improving the fairness.

Second, in a comparison between countries, Europeans are more pessimistic than the US, especially in the mobility of moving to the top from the bottom, called American Dream. However, looking at the data, it is a paradox: the US's actual mobility is lower than EU's.

Third, considering the belief conditional on effort, both EU and US agree that a much-efforted poor child can likely climb from the bottom to the middle class, not the top. However, the effort doesn't help them to reach the top, their American Dream.

Data description and Summary Statistic

Thanks to the availability of the authors' data, we can take the author's findings further by analyzing gender effects. The data has the perceived and actual intergenerational mobility probability across countries: United States, Sweden, Italy, France, and the United Kingdom.

Table 1: The gap between the mean perceived and actual transition probabilities across countries for each gender.

	US		**UK**		**France**		**Italy**		**Sweden**	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Q1 to Q5	4.0	3.8	-0.8	-2.1	-2.0	-2.1	0.2	-0.8	-1.9	-1.9
p-value:Difference	0.00	0.00	0.17	0.17	0.00	0.00	0.73	0.19	0.00	0.01
Q1 to Q4	-0.6	-0.8	-1.6	-3.0	-2.2	-2.3	-4.1	-4.5	-5.7	-6.7
p-value:Difference	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Q1 to Q3	4.3	2.9	0.4	-1.5	-0.9	-2.1	1.4	0.3	4.3	2.6
p-value:Difference	0.00	0.00	0.42	0.42	0.14	0.00	0.02	0.55	0.00	0.00
Q1 to Q2	-6.2	-5.6	-2.8	-2.9	-0.2	-0.2	-2.7	-2.6	-1.0	-0.3
p-value:Difference	0.00	0.00	0.00	0.00	0.71	0.64	0.00	0.00	0.07	0.62
Q1 to Q1	-1.6	-0.3	4.8	9.5	5.3	6.8	5.2	7.5	4.4	6.4
p-value:Difference	0.03	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Observations	1,130	1,040	654	636	662	635	627	615	491	390

Results

In the original paper's table 2, the authors show the comparison between the actual and perceived mobility probabilities across countries, pointing out that the US is more optimistic than the European countries even though the real probabilities in the US is actually lower. The American Dream still has a strong influence on US citizens' perceptions while European has a gloomy view about the chance that they can move to upper classes. We are interested in the questions whether genders have an impact on the mobility, so we create a more detail table 2 separated by gender.

Table 2 – Perceived transition probabilities across countries, separated by gender.

	US		UK		France		Italy		Sweden		US vs EU	
	Female (1)	Male (2)	Female (3)	Male (4)	Female (5)	Male (6)	Female (7)	Male (8)	Female (9)	Male (10)	Female - Male in US (11)	Female - Male in EU (12)
Q1 to Q5	11.8	11.6	10.6	9.3	9.2	9.1	10.6	9.7	9.3	9.2	0.2	0.6
p-value:Difference		0.74		0.11		0.74		0.24		0.93	0.74	0.12
Q1 to Q4	12.1	11.9	11.3	9.9	10.6	10.5	11.5	11.0	11.6	10.7	0.2	0.7
p-value:Difference		0.59		0.01		0.59		0.45		0.14	0.59	0.01
Q1 to Q3	23.0	21.6	20.3	18.4	22.1	20.9	22.4	21.3	25.3	23.6	1.4	1.6
p-value:Difference		0.03		0.01		0.03		0.19		0.15	0.03	0.00
Q1 to Q2	21.5	22.1	22.3	22.2	23.6	23.6	23.0	23.2	22.8	23.5	-0.6	-0.1
p-value:Difference		0.24		0.80		0.24		0.78		0.38	0.24	0.73
Q1 to Q1	31.6	32.8	35.4	40.2	34.5	36.0	32.5	34.7	31.1	33.1	-1.3	-2.8
p-value:Difference		0.22		0.00		0.22		0.09		0.23	0.22	0.00
Observations	1,130	1,040	654	636	662	635	627	615	491	390	2,170	4,710

We calculate the means of perceived mobility for each gender, then subtract female figure by male ones and finally, we compare whether there are significant differences between them.

In quantile Q1 to Q5, American Dream, there are no significant gender differences across countries, except UK where female is more optimistic than male. In quantile Q1 to Q4, there is only UK again shows that female figure is higher.

In quantile Q1 to Q3, the chance of becoming middle class, there are more countries show the significant differences, such as the US, UK, France and all Europeans.

In the quantile Q1 to Q2, moving to the next class, there are no significant differences across countries, meaning female and male share the same perceived probabilities.

In the bottom quantile Q1 to Q1, stuck in the poor, UK and Italy show that male figures are significantly higher than female's, strengthening the conclusion that female is somewhat more optimistic than male about mobility, especially stronger for UK female.

In the last column, we also combine all the data of European countries altogether, then test the gender perceived mobility differences in European. There are large gender differences in the perceived mobilities of the middle class and the bottom, for instance, 1.6 in Q1 to Q3 and -2,8 in Q1 to Q1. Besides, the US data also show the significant magnitude of 1,4 in Q1 to Q3. In conclusion, the gender differences are sharp at the mobility of the middle class in both the US and EU; and even more substantial at the bottom level in EU. It tells that, especially, female is more optimistic than male about moving to the middle class and more pessimistic than male about remaining in poor.

In the original paper's figure 5, the authors show the perceived role of effort. The vertical bars indicate the gap with 95% confidence intervals in which the perception conditional on effort minus the perception unconditional on the effort, showing how people perceive the chance of a child with an effort moving to upper classes compared to a child without an effort. The paper's figure 5 shows that both the US and European believe that the effort increases probabilities of moving to a middle class, but doesn't help much to reach the top. We again create the same figure but separated by genders to find out whether there are gender differences in the role of effort. (see Figure 5.1 The perceived role of effort for female (left) and male (right) in the appendix)

Figure 5. The p-values of t-tests between perceived mobilities with effort and without effort, separated by genders.

Different Opinions about Effort within Gender Group Across Countries

	Q1 to Q5		Q1 to Q4		Q1 to Q3		Q1 to Q2		Q1 to Q1	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
US	0.051	0.029	0.000	0.000	0.000	0.000	0.050	0.070	0.000	0.000
UK	0.002	0.001	0.000	0.000	0.000	0.000	0.289	0.074	0.000	0.000
France	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Italy	0.006	0.106	0.000	0.000	0.000	0.000	0.727	0.035	0.000	0.000
Sweden	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EU	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000

The values in our figure show p-values of t-tests conducting the differences in perceived mobilities between with effort and without effort for each gender. Almost these p-values confirm the role of effort in mobility, except for few cases.

In Q1 to Q5, both genders in the US seem to not trust effort very much compared to other countries, which are strongly difference with respect to effort, although the American Dream in the US is barely significant. In Italy, Italian male doesn't think the effort can help them to move to the very top as much as Italian female thinks.

In Q1 to Q2, the role of effort is not strong in the US and not significant in UK female and Italy female. If a p-value is not significant, it shows that the differences perceived probabilities between with and without effort are equal. In these particular cases, we think the suitable interpretation would be that in UK and Italy, female suppose that a child can move effortlessly to the next class from the bottom irrespective of effort.

In general, there are more p-values of male are significant than female's ones, meaning that male somewhat believes more in role of effort than female.

In the original figure 7, the authors represent respondents' views about the fairness and the government by country and by political affiliation. When asked about a system fair, the US respondents are more agreed than European and American also believes they have more chances of moving to the top than the counterparts. Among the European, there are some opposite views as French and Italian have extremely gloomy views on the fairness issues, except that Swedish has very high percent believe in the fair of the market. The US respondents again more likely think effort reasoning being poor or rich than EU countries, while Italian respondents less likely believe in the role of effort.

In the views of government, almost European don't trust governments, particularly high in France and Italy, except Swedish. All European also think governments have no tools or limited tools to make fairer economic systems. About government intervention, American deserves less intervention from the government than European, and all countries have same agreement that unequal opportunities are problems.

Among political affiliation, the polarization is high as left-wing is more skeptical about the fairness and role of effort and they support more government intervention to improve the current inequality while the right wing supports the status quote of the market and don't want government interventions.

To test the gender effect on the perceptions of government and fairness, we compute each value for each gender, then use t-tests to subtractions of female figures by male figures. We get two tables by country and by political affiliation as follow:

Table 7.1: t-tests of the gender differences (female – male) on the perceptions of government and fairness views across countries

	Economic System Fair	American Dream Alive	Effort Reason Poor	Effort Reason Rich	Never Trust Government	Government Has No Tools	Prefer Low Govt. Intervention	Lowering Taxes Better	Unequal Opp. No Problem	Negative View of Government
mean_US	-0.0854	-0.119	-0.09	-0.085	-0.0305	-0.073	-0.0686	-0.0813	-0.0711	-0.0323
p-value	0	0	0	0	0.058	0	0.003	0	0.003	0.073
mean_UK	-0.0187	-0.021	0.00201	-0.013	-0.0271	-0.0441	-0.0215	0.0275	-0.0276	-0.0767
p-value	0.606	0.552	0.954	0.699	0.27	0.111	0.473	0.379	0.448	0.003
mean_France	-0.049	-0.00651	-0.0445	-0.0475	-0.0306	-0.108	-0.154	-0.051	-0.119	-0.0692
p-value	0.278	0.888	0.313	0.3	0.198	0.004	0	0.235	0.012	0.012
mean_Italy	-0.0448	-0.0307	-0.0628	-0.0668	0.141	0.0899	-0.0108	0.00931	0.112	0.0329
p-value	0.04	0.135	0.013	0.016	0	0.006	0.665	0.8	0.001	0.063
mean_Sweden	-0.0526	-0.015	-0.0442	-0.0496	-0.0355	-0.109	-0.0456	0.036	-0.0143	-0.0509
p-value	0.063	0.575	0.149	0.136	0.296	0.002	0.139	0.32	0.581	0.025

In views of "the government has no tools" and "unequal opportunity is not a problem", across all countries, except Italy, have significant negative gender differences, showing in all countries there is a consensus that female sees these issues less seriously than male. In other words, male more likely thinks the government has no tools and female more likely thinks unequal opportunity is a problem; and therefore, it strengthens our conclusion that female's beliefs are somewhat similar to left-wing's beliefs, and the opposite is true for male.

Among all views on governments and fairness, the US has significant negative gender differences across all views, meaning female says "yes" less than male in the questions about these views, while European countries don't have much significant gender differences, except Italy with some gender differences. There are gender differences about views on governments and fairness in US, and therefore our conclusion, that female's beliefs are somewhat similar to left-wing's beliefs, and the opposite is true for male, is especially significant true in US for all views.

The gender differences of the first four and the last views, except Italy, have negative signs in all countries, as well as negative signs the fifth and sixth views, except significant Italy's values. Female are less likely to believe in the system fairness, American dream, the role of the effort than male and are more likely to trust governments and believe that Government has tools than male. It is consistent with our above conclusion again.

In conclusion, female believe more in the fairness of markets and trust more in governments than male. It is interesting that, according to the authors' statement on the left-wing and right-wing preferences on views about fairness and governments, we find that female's beliefs are somewhat similar to left-wing's beliefs, and the opposite is true for male.

We also test the gender differences on political affiliation to whether the gender's impacts still uphold on right-wing and left-wing. These impacts still uphold in views of the fairness market and American Dream, as there are significant negative gender differences. Also, the signs of gender differences still keep the same as mentioned above in all views, excluding insignificant views of "Never trust government" and "Lowering taxes better" in both two political wings.

Table 7.2: t-tests of the gender differences (female – male) on the perceptions of government and fairness views for two political wings

	Economic System Fair	American Dream Alive	Effort Reason Poor	Effort Reason Rich	Never Trust Government	Government Has No Tools	Prefer Low Govt. Intervention	Lowering Taxes Better	Unequal Opp. No Problem	Negative View of Government
mean_Left-wing	-0.0381	-0.0543	-0.0711	-0.0679	0.0177	-0.00244	-0.0294	0.0156	-0.0172	-0.0179
p-value	0.100	0.0150	0.00100	0.00100	0.360	0.910	0.111	0.461	0.514	0.155
mean_Right-wing	-0.0520	-0.0376	-0.0442	-0.0373	0.00709	-0.0643	-0.0577	0.0150	0.0127	-0.042
p-value	0.0510	0.156	0.0950	0.160	0.749	0.0120	0.0260	0.569	0.554	0.0460

The authors want to find out correlations between policy preferences and views on mobility by regressing policy preferences of respondents on the perceived probabilities with other controls for individuals and country fixed effects. The result is presented in author's paper table 3.

In panel A and C, there are correlations between mobility and supporting redistribution policies, especially in budget opportunity policy. This correlation is slightly stronger in mobility conditional on the effort than unconditional one. It says that when respondents see an efforted child remains in poor, they more likely support redistribution policies.

In panel B and D consisting of two political wings considered by conditional and unconditional on effort, left-wing show significant positive correlations across all policies in Q1 to Q1. It reinstates the left wing's behavior that they favor in government's interventions improving fairness markets and societies. In moving to the top, Q1 to Q5, left-wing show significant opposite sign correlations in the same policies, except insignificantly estate tax, scales of government intervention and budget safety net. In cases of right-wing, the correlation between Q1 to Q1 probability and the budget opportunity only exists in beliefs conditional on effort, showing right-wing respondents somewhat don't support redistribution unless they think a child with effort is still stuck in poor.

To find out the gender impact on the correlation between perception and policy preferences, we run the same regression but with each gender's data. We have table 3 (in Appendix) for each gender.

We call Q1 to Q1 perceived probability as pessimism and Q1 to Q5 one as optimism. In our female's table 3, there are positive correlations between pessimism unconditional on effort and policy preferences across policies, and the opposite is true for optimism. It reinstates that female's beliefs are somewhat similar to left-wing's beliefs. When considering the beliefs conditional on effort, the correlation is weaker in budget opportunity and stays the same for other policies, meaning female perceives that economic system is fair and don't want to support more budget opportunity policy even though a child with effort is stuck in poor. In other words, female thinks markets are already fair and correcting the markets is not needed.

In table 3 for male, there are positive correlations between pessimism unconditional on effort and budget opportunity, but no correlations with Government intervention and Budget Safety Net. When taking effort into account, male support more Budget opportunity and, now, start to support Budget Safety Net. The correlation between optimism and budget opportunities also becomes stronger in the case conditional on the effort. Therefore, we conclude that effort has considerable effects on male's policy preferences. From the author's finding, we know that right-wing respondents somewhat don't support redistribution unless they think a child with effort is still stuck in poor; and this evidence reinstates that male's beliefs are somewhat similar to right-wing's beliefs.

Comparing the magnitude supporting policies between gender, all female coefficients are higher than male's in unconditional beliefs. Female more likely support policies improving the

fairness of system and support government intervention while the male doesn't. Again, we find the same tendency that we find that female's beliefs are somewhat similar to left-wing's beliefs: think systems are not fair and trust government intervention while male's beliefs somewhat present right-wing's beliefs: oppose the government and trust the fairness of markets.

In panel B of our table unconditional beliefs for left and right wing, the coefficients of Q1 to Q1 left-wing for female don't change much compared to Q1 to Q1 in panel A, meaning that being leftwing doesn't affect female's policies preferences much. One plausible reason for that is female already presents left-wing's beliefs on policies preferences. Furthermore, in panel B male, there are no correlations between Q1 to Q1 right-wing for male and any policies; it can be interpreted that male already presents right-wing's beliefs on policies preferences. We mention again that in the authors' finding, right-wing respondents don't support much redistribution because they think markets are fair and don't trust governments, especially government interventions.

In panel B and D for both male and female, despite being separated by gender, being left-wing and being right-wing have the opposite policies preferences, showing it is still consistent with the authors' findings.

In the original paper, the authors find the correlation between perceptions and policy preferences in original table 3. To answer the question that whether this correlation can imply causal effect, the authors conduct an experiment with a treated group. In the experiment, the experimenters show two animations about the mobility to make people more pessimistic, then observe the shifts of their policies preferences. The first animation tells respondents that the chance of the poor kid staying in poor is extremely large and the second animation shows the same idea but in the different content that the rich kid is more likely to remain rich when they become adults. Then the author did two regressions: the treatment effects on perceptions, represented in table 4, and the treatment effects on policy preferences, represented in table 6.

In original table 4, the authors found out that the treatment has significant substantial effect on mobility perception while in table 6, there are no significant effects between the treatment and policies preferences. Therefore, the authors also use the treatment as an instrument for mobility perception by assuming that the treatment affects policies preferences only through pessimistic mobility perceptions. It is interesting that coefficients in Panel C for IV estimates in table 6 is higher than in Panel B in table 3, showing that supporting equality opportunity policies is mostly driven by the views on mobility.

When we generate our table 6 (in appendix) separated by genders, we found the same authors' findings. In panel A, there are no correlations between the treatment and policies preferences in each gender table. By using the treatment as an instrument for for mobility perception, we also find out that supporting redistribution policies are causally linked to the views on mobility.

Among political affiliation, in panel B, left-wings treated female respondents become more support budget opportunity and more likely perceive "Unequal opportunity is the problem" while in contrast, right-wing treated female respondents don't support any policies. For male, in panel B, left-wings treated male respondents support more estate tax and more likely perceive "Unequal opportunity is the problem" while in contrast, right-wing treated male respondents don't support any policies. The very similar pattern is seen in two genders and consistent with the authors' findings in the original table 6.

Conclusion

In this paper, we deploy the author's paper for by separating data by gender. Our results are consistent with the author results; however, we uncovered interesting results: First, female is more optimistic than male about mobilities. Second, male believes more about role of effort in improving mobilities than female. Third, comparing the magnitude supporting redistribution policies between gender, female support more than male. Finally, female's beliefs are somewhat similar to left-wing's beliefs, and the opposite is true for male.

The last finding, in other words, tells that female does not trust the fairness of markets and requests more government interventions, on the other hand, male trusts the fairness of markets and role of efforts, oppose interventions. It can be the answer for the gender wage gap as male focuses more on efforts in workplaces than female because male believes systems are fair and their efforts will be well paid off. Due to the limitations of our data, we can go further on analyzing this interesting finding. We hope that in future there will be research works on our suggestion with relevant data. Those works will help us understand the reasons behind increasingly enlarging gender wage gap.

Appendix

Figure 5.1 The perceived role of effort for female (left) and male (right)

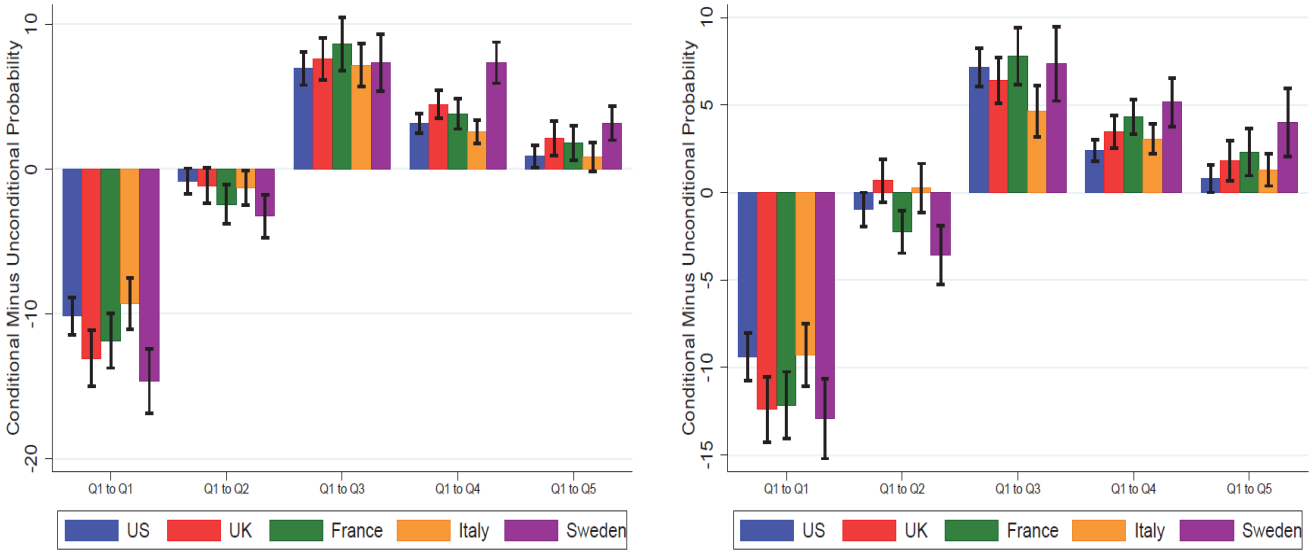

Figure 7.1. Perceptions of Government and Fairness for female

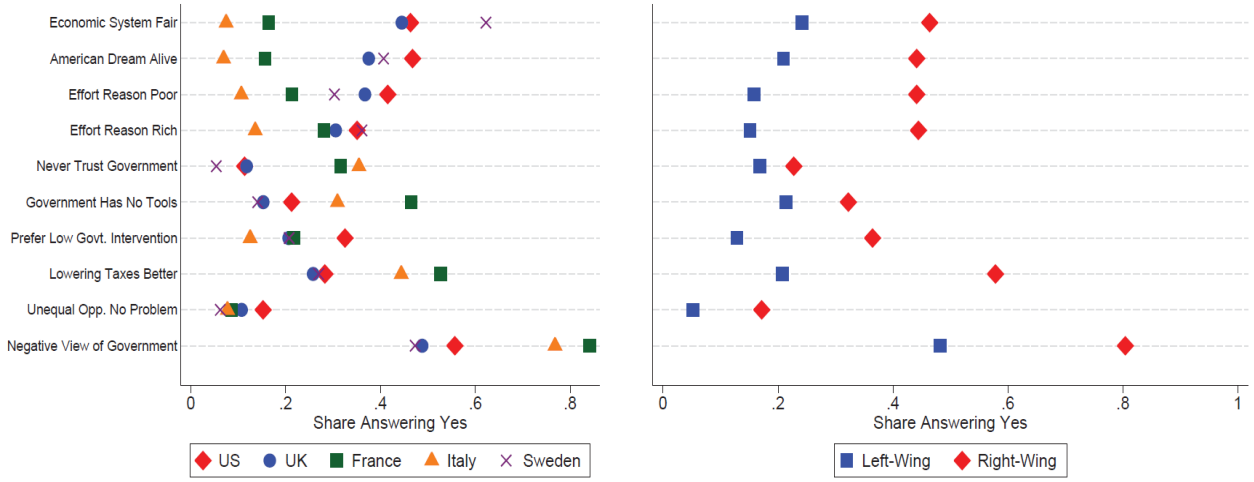

Figure 7.2. Perceptions of Government and Fairness for male

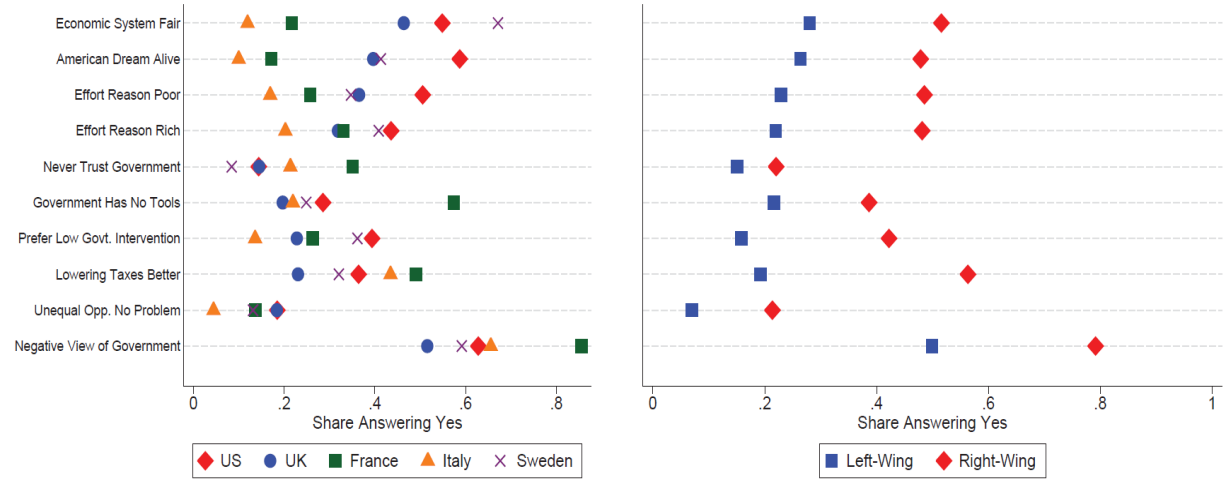

Table 3. 1 For female, cross-sectional relation between perceptions and policy preferences

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)
A. Unconditional Beliefs									
Q1 to Q1	0.041	0.001	0.004	0.004	0.001	0.020	0.085	-0.044	0.000
	(0.009)	(0.000)	(0.001)	(0.001)	(0.000)	(0.007)	(0.017)	(0.010)	(0.000)
Q1 to Q5	-0.056	0.000	-0.005	-0.000	0.000	-0.013	-0.103	0.093	-0.001
	(0.015)	(0.001)	(0.002)	(0.002)	(0.001)	(0.011)	(0.028)	(0.016)	(0.001)
B. Unconditional Beliefs for Left and Right Wing									
Q1 to Q1 × Left-Wing	0.041	0.001	0.004	0.003	0.002	0.016	0.094	-0.056	-0.000
	(0.015)	(0.001)	(0.002)	(0.002)	(0.001)	(0.011)	(0.028)	(0.017)	(0.001)
Q1 to Q1 × Right-Wing	0.052	0.000	0.004	0.006	0.001	0.004	0.082	-0.040	0.000
	(0.018)	(0.001)	(0.002)	(0.002)	(0.001)	(0.012)	(0.031)	(0.018)	(0.001)
Left-Wing	0.715	0.128	0.316	0.229	0.117	1.850	0.278	-0.290	0.068
	(0.918)	(0.040)	(0.090)	(0.123)	(0.037)	(0.639)	(1.683)	(0.996)	(0.038)
Right-Wing	-2.536	-0.048	-0.305	-0.715	-0.039	-0.204	-2.660	1.641	-0.040
	(0.915)	(0.040)	(0.090)	(0.123)	(0.037)	(0.637)	(1.675)	(0.992)	(0.038)
p-value diff.	0.649	0.287	0.923	0.247	0.469	0.450	0.778	0.516	0.694
Q1 to Q5 × Left-Wing	-0.085	-0.001	-0.007	0.001	-0.002	-0.007	-0.114	0.103	-0.000
	(0.028)	(0.001)	(0.003)	(0.004)	(0.001)	(0.019)	(0.050)	(0.029)	(0.001)
Q1 to Q5 × Right-Wing	-0.042	0.001	-0.004	-0.002	0.001	-0.011	-0.072	0.075	-0.001
	(0.028)	(0.001)	(0.003)	(0.004)	(0.001)	(0.019)	(0.048)	(0.028)	(0.001)
Left-Wing	1.506	0.147	0.345	0.248	0.167	1.144	0.886	-0.974	0.038
	(0.649)	(0.028)	(0.064)	(0.087)	(0.026)	(0.452)	(1.181)	(0.694)	(0.027)
Right-Wing	-1.931	-0.085	-0.322	-0.562	-0.047	-1.315	-3.033	1.795	-0.051
	(0.684)	(0.030)	(0.068)	(0.092)	(0.028)	(0.477)	(1.235)	(0.726)	(0.028)
p-value diff.	0.277	0.369	0.507	0.532	0.069	0.866	0.544	0.507	0.744
Observations	2184	2184	2184	2184	2184	2184	1736	1736	2184

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)
C. Beliefs Conditional On Effort									
Q1 to Q1	0.033	0.002	0.003	0.004	0.001	0.033	0.054	-0.002	-0.000
	(0.013)	(0.001)	(0.001)	(0.002)	(0.001)	(0.009)	(0.022)	(0.014)	(0.001)
Q1 to Q5	-0.041	-0.002	-0.007	-0.003	0.000	0.009	-0.114	0.108	-0.000
	(0.021)	(0.001)	(0.002)	(0.003)	(0.001)	(0.015)	(0.035)	(0.021)	(0.001)
D. Beliefs Conditional On Effort for Left and Right Wing									
Q1 to Q1 x Left-Wing	0.010	0.002	0.003	0.002	0.001	0.034	0.043	-0.010	-0.001
	(0.021)	(0.001)	(0.002)	(0.003)	(0.001)	(0.015)	(0.036)	(0.022)	(0.001)
Q1 to Q1 x Right-Wing	0.091	0.002	0.008	0.009	0.002	0.030	0.089	-0.034	-0.001
	(0.026)	(0.001)	(0.003)	(0.004)	(0.001)	(0.019)	(0.045)	(0.028)	(0.001)
Left-Wing	2.290	0.136	0.315	0.293	0.160	1.250	1.745	-0.255	0.104
	(0.992)	(0.045)	(0.100)	(0.137)	(0.041)	(0.719)	(1.698)	(1.044)	(0.042)
Right-Wing	-4.017	-0.051	-0.528	-0.854	-0.049	-1.173	-3.809	3.053	-0.018
	(0.981)	(0.044)	(0.099)	(0.136)	(0.040)	(0.711)	(1.705)	(1.048)	(0.041)
p-value diff.	0.015	0.842	0.148	0.115	0.297	0.864	0.430	0.514	0.847
Q1 to Q5 x Left-Wing	-0.041	-0.003	-0.010	-0.011	-0.002	0.010	-0.138	0.113	0.000
	(0.039)	(0.002)	(0.004)	(0.005)	(0.002)	(0.028)	(0.063)	(0.039)	(0.002)
Q1 to Q5 x Right-Wing	-0.050	-0.002	-0.008	-0.005	0.001	-0.048	-0.139	0.151	0.000
	(0.038)	(0.002)	(0.004)	(0.005)	(0.002)	(0.027)	(0.064)	(0.039)	(0.002)
Left-Wing	2.089	0.182	0.405	0.467	0.174	1.848	2.421	-1.480	0.041
	(0.869)	(0.039)	(0.087)	(0.120)	(0.036)	(0.628)	(1.493)	(0.909)	(0.037)
Right-Wing	-2.445	-0.038	-0.357	-0.590	-0.043	-0.182	-2.144	0.752	-0.066
	(0.917)	(0.041)	(0.092)	(0.126)	(0.038)	(0.663)	(1.574)	(0.959)	(0.039)
p-value diff.	0.873	0.437	0.698	0.426	0.159	0.137	0.987	0.489	0.938
Observations	1280	1280	1280	1280	1280	1280	1054	1054	1280

Table 3. 1 For male, cross-sectional relation between perceptions and policy preferences

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)
A. Unconditional Beliefs									
Q1 to Q1	0.019	-0.000	0.003	0.001	0.001	0.007	0.031	-0.026	-0.000
	(0.009)	(0.000)	(0.001)	(0.001)	(0.000)	(0.006)	(0.016)	(0.009)	(0.000)
Q1 to Q5	-0.032	0.000	-0.002	0.002	-0.000	-0.009	0.012	0.028	0.000
	(0.015)	(0.001)	(0.001)	(0.002)	(0.001)	(0.010)	(0.026)	(0.014)	(0.001)
B. Unconditional Beliefs for Left and Right Wing									
Q1 to Q1 × Left-Wing	0.014	0.001	0.007	0.006	0.003	0.024	0.040	-0.026	0.001
	(0.016)	(0.001)	(0.002)	(0.002)	(0.001)	(0.011)	(0.028)	(0.015)	(0.001)
Q1 to Q1 × Right-Wing	-0.007	-0.001	0.002	0.001	0.001	0.004	0.008	-0.027	-0.001
	(0.016)	(0.001)	(0.002)	(0.002)	(0.001)	(0.011)	(0.028)	(0.015)	(0.001)
Left-Wing	2.180	0.122	0.132	0.042	0.012	-0.220	4.102	-0.985	0.007
	(1.017)	(0.043)	(0.098)	(0.138)	(0.038)	(0.693)	(1.778)	(0.957)	(0.042)
Right-Wing	0.010	-0.067	-0.370	-0.739	-0.078	-1.529	-0.739	1.316	-0.066
	(0.973)	(0.041)	(0.094)	(0.132)	(0.037)	(0.664)	(1.733)	(0.933)	(0.041)
p-value diff.	0.360	0.082	0.040	0.131	0.012	0.205	0.409	0.962	0.033
Q1 to Q5 × Left-Wing	-0.073	-0.001	-0.005	-0.006	-0.003	-0.016	-0.012	0.028	-0.002
	(0.025)	(0.001)	(0.002)	(0.003)	(0.001)	(0.017)	(0.043)	(0.023)	(0.001)
Q1 to Q5 × Right-Wing	0.022	0.001	-0.001	0.006	0.001	0.004	0.059	0.004	0.001
	(0.027)	(0.001)	(0.003)	(0.004)	(0.001)	(0.018)	(0.047)	(0.026)	(0.001)
Left-Wing	1.326	0.168	0.414	0.561	0.170	0.963	4.106	-0.816	0.139
	(0.688)	(0.029)	(0.067)	(0.093)	(0.026)	(0.470)	(1.190)	(0.641)	(0.029)
Right-Wing	-2.519	-0.102	-0.308	-0.520	-0.036	-1.301	-2.633	1.758	-0.038
	(0.688)	(0.029)	(0.067)	(0.093)	(0.026)	(0.470)	(1.200)	(0.646)	(0.029)
p-value diff.	0.009	0.166	0.227	0.014	0.018	0.414	0.269	0.492	0.029
Observations	2106	2105	2106	2106	2106	2106	1706	1706	2106

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)
C. Beliefs Conditional On Effort									
Q1 to Q1	0.032	0.000	0.002	0.002	0.002	0.027	0.042	0.014	-0.001
	(0.015)	(0.001)	(0.001)	(0.002)	(0.001)	(0.010)	(0.024)	(0.014)	(0.001)
Q1 to Q5	-0.056	-0.000	-0.006	0.000	-0.001	-0.038	-0.016	0.040	0.000
	(0.021)	(0.001)	(0.002)	(0.003)	(0.001)	(0.014)	(0.034)	(0.020)	(0.001)
D. Beliefs Conditional On Effort for Left and Right Wing									
Q1 to Q1 × Left-Wing	0.000	0.000	0.005	0.005	0.004	0.032	0.050	0.009	0.000
	(0.024)	(0.001)	(0.002)	(0.003)	(0.001)	(0.016)	(0.039)	(0.022)	(0.001)
Q1 to Q1 × Right-Wing	-0.001	0.000	0.003	0.002	0.001	0.028	-0.001	0.043	-0.001
	(0.026)	(0.001)	(0.003)	(0.004)	(0.001)	(0.017)	(0.043)	(0.025)	(0.001)
Left-Wing	2.688	0.159	0.193	0.210	0.039	0.133	4.379	-0.720	0.066
	(1.186)	(0.050)	(0.116)	(0.163)	(0.044)	(0.781)	(1.905)	(1.093)	(0.049)
Right-Wing	-0.787	-0.113	-0.500	-0.812	-0.052	-1.728	0.339	0.583	-0.094
	(1.110)	(0.047)	(0.109)	(0.152)	(0.041)	(0.731)	(1.831)	(1.051)	(0.045)
p-value diff.	0.979	0.910	0.457	0.523	0.017	0.857	0.378	0.300	0.369
Q1 to Q5 × Left-Wing	-0.091	-0.002	-0.009	-0.008	-0.003	-0.028	-0.028	0.013	-0.002
	(0.038)	(0.002)	(0.004)	(0.005)	(0.001)	(0.025)	(0.062)	(0.036)	(0.002)
Q1 to Q5 × Right-Wing	-0.015	0.001	-0.009	0.002	-0.000	-0.025	0.077	0.005	0.001
	(0.038)	(0.002)	(0.004)	(0.005)	(0.001)	(0.025)	(0.063)	(0.036)	(0.002)
Left-Wing	0.593	0.189	0.476	0.575	0.176	0.208	3.384	0.542	0.136
	(0.948)	(0.040)	(0.093)	(0.130)	(0.035)	(0.622)	(1.526)	(0.873)	(0.039)
Right-Wing	-3.639	-0.123	-0.307	-0.646	-0.039	-1.941	-3.084	2.671	-0.090
	(0.933)	(0.039)	(0.091)	(0.128)	(0.034)	(0.613)	(1.519)	(0.870)	(0.038)
p-value diff.	0.162	0.138	0.891	0.186	0.111	0.941	0.238	0.875	0.114
Observations	1263	1262	1263	1263	1263	1263	1058	1058	1263

Table 6.1: Treatment effects on policy preferences for female

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)	Redistribution Index (10)
A. Treatment Effects										
Treated	0.423	-0.006	0.076	-0.003	0.072	0.176	0.934	-0.222	-0.017	0.036
	(0.311)	(0.013)	(0.030)	(0.041)	(0.018)	(0.220)	(0.555)	(0.317)	(0.018)	(0.012)
B. Treatment Effects for Left and Right Wing										
Treated X Left-Wing	1.246	0.011	0.175	0.144	0.143	-0.125	1.951	0.001	0.048	0.087
	(0.541)	(0.023)	(0.052)	(0.072)	(0.032)	(0.383)	(0.954)	(0.544)	(0.032)	(0.020)
Treated X Right-Wing	0.044	-0.011	0.060	0.020	0.021	0.315	1.611	-1.111	-0.101	0.026
	(0.569)	(0.024)	(0.055)	(0.075)	(0.032)	(0.402)	(1.001)	(0.572)	(0.032)	(0.022)
Left-Wing	1.219	0.141	0.338	0.252	0.105	1.283	1.123	-1.234	0.039	0.157
	(0.534)	(0.023)	(0.052)	(0.071)	(0.031)	(0.377)	(0.954)	(0.545)	(0.031)	(0.020)
Right-Wing	-1.864	-0.076	-0.310	-0.597	-0.060	-1.336	-2.700	1.508	-0.030	-0.176
	(0.550)	(0.023)	(0.053)	(0.073)	(0.032)	(0.389)	(0.981)	(0.560)	(0.031)	(0.021)
p-value diff.	0.126	0.513	0.128	0.237	0.007	0.428	0.805	0.159	0.001	0.040
C. IV Estimates										
Q1 to Q1	0.042	-0.001	0.008	-0.000	0.007	0.018	0.092	-0.022	-0.002	0.004
	(0.031)	(0.001)	(0.003)	(0.004)	(0.002)	(0.022)	(0.055)	(0.031)	(0.002)	(0.001)
D. IV Estimates for Left and Right Wing										
Q1 to Q1 X Left-Wing	0.129	0.001	0.018	0.015	0.016	-0.013	0.194	0.001	0.005	0.009
	(0.057)	(0.002)	(0.006)	(0.008)	(0.004)	(0.040)	(0.097)	(0.055)	(0.004)	(0.002)
Q1 to Q1 X Right-Wing	0.004	-0.001	0.006	0.002	0.002	0.030	0.154	-0.105	-0.010	0.002
	(0.054)	(0.002)	(0.005)	(0.007)	(0.004)	(0.038)	(0.096)	(0.055)	(0.003)	(0.002)
Left-Wing	-3.551	0.042	-0.322	-0.796	-0.360	2.873	-7.982	-0.206	-0.173	-0.175
	(3.080)	(0.131)	(0.303)	(0.415)	(0.202)	(2.163)	(5.436)	(3.107)	(0.186)	(0.119)
Right-Wing	-2.049	-0.100	-0.487	-1.159	0.011	-1.175	-9.761	5.976	0.279	-0.257
	(2.790)	(0.118)	(0.274)	(0.376)	(0.174)	(1.960)	(5.109)	(2.920)	(0.160)	(0.107)
p-value diff.	0.113	0.514	0.108	0.225	0.010	0.437	0.767	0.173	0.003	0.032
Observations	4369	4369	4369	4369	2189	4369	3462	3462	2189	4369

Table 6.2: Treatment effects on policy preferences for male

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)	Redistribution Index (10)
A. Treatment Effects										
Treated	-0.229	0.013	-0.059	-0.028	0.020	0.292	-0.164	0.535	-0.016	-0.008
	(0.331)	(0.014)	(0.032)	(0.044)	(0.018)	(0.234)	(0.572)	(0.323)	(0.020)	(0.012)
B. Treatment Effects for Left and Right Wing										
Treated X Left-Wing	0.299	0.059	-0.026	0.117	0.060	0.343	-0.821	0.513	-0.062	0.018
	(0.585)	(0.024)	(0.057)	(0.078)	(0.032)	(0.414)	(0.988)	(0.558)	(0.035)	(0.022)
Treated X Right-Wing	0.056	0.009	-0.095	-0.046	0.019	0.135	-0.042	0.231	-0.005	-0.009
	(0.555)	(0.023)	(0.054)	(0.074)	(0.030)	(0.393)	(0.954)	(0.539)	(0.033)	(0.021)
Left-Wing	0.924	0.149	0.356	0.403	0.110	0.928	3.735	-1.038	0.122	0.183
	(0.588)	(0.024)	(0.058)	(0.079)	(0.032)	(0.417)	(1.019)	(0.575)	(0.035)	(0.022)
Right-Wing	-1.966	-0.092	-0.328	-0.562	-0.055	-1.172	-2.260	1.276	-0.047	-0.170
	(0.575)	(0.024)	(0.056)	(0.077)	(0.031)	(0.407)	(1.006)	(0.568)	(0.035)	(0.021)
p-value diff.	0.764	0.135	0.380	0.130	0.348	0.717	0.570	0.716	0.232	0.359
C. IV Estimates										
Q1 to Q1	-0.025	0.001	-0.006	-0.003	0.002	0.031	-0.017	0.055	-0.002	-0.001
	(0.036)	(0.001)	(0.004)	(0.005)	(0.002)	(0.025)	(0.059)	(0.034)	(0.002)	(0.001)
D. IV Estimates for Left and Right Wing										
Q1 to Q1 X Left-Wing	0.030	0.006	-0.002	0.011	0.006	0.032	-0.075	0.047	-0.006	0.002
	(0.058)	(0.002)	(0.006)	(0.008)	(0.003)	(0.040)	(0.091)	(0.053)	(0.004)	(0.002)
Q1 to Q1 X Right-Wing	0.004	0.001	-0.008	-0.004	0.002	0.012	-0.003	0.020	-0.000	-0.001
	(0.050)	(0.002)	(0.005)	(0.007)	(0.002)	(0.034)	(0.082)	(0.048)	(0.003)	(0.002)
Left-Wing	-6.505	-0.238	0.133	-0.933	-0.203	2.192	8.807	2.323	0.459	-0.083
	(4.683)	(0.191)	(0.453)	(0.619)	(0.251)	(3.197)	(7.422)	(4.337)	(0.280)	(0.171)
Right-Wing	-8.403	-0.290	-0.370	-1.334	-0.198	0.911	0.109	5.715	0.073	-0.342
	(4.367)	(0.179)	(0.422)	(0.578)	(0.235)	(2.981)	(7.071)	(4.132)	(0.261)	(0.160)
p-value diff.	0.740	0.117	0.437	0.129	0.278	0.696	0.556	0.706	0.201	0.357
Observations	4216	4215	4216	4216	2092	4216	3389	3389	2092	4216

Model setting:

Table 3 Cross-sectional relation between perceptions and policy preferences.

Panel A

$$y = \alpha + \beta Q_1 + controls + \varepsilon$$

$$y = \alpha + \beta Q_5 + controls + \varepsilon$$

Where,

Dependent variables are in the varlist "budget_opp, support_estate_45, support_eq_opp_pol, government_intervention, unequal_opp_problem_d, budget_safetynet, income_tax_top1, income_tax_bot50, tools_d"

Q_1: the perceived mobility about remaining in Q1 (Q1 to Q1)

Q_5: the perceived mobility from Q1 to Q5

Controls: i.country_survey, left, right, male, young, children_dummy, rich, university_degree, immigrant, moved_up,

Panel B

$$y = \alpha + \beta_1 Q_{1_L} + \beta_2 Q_{1_R} + \beta_3 Q_{1_C} + controls + \varepsilon$$

$$y = \alpha + \beta_1 Q_{5_L} + \beta_2 Q_{5_R} + \beta_3 Q_{5_C} + controls + \varepsilon$$

Where,

Dependent variables are in the varlist "budget_opp, support_estate_45, support_eq_opp_pol, government_intervention, unequal_opp_problem_d, budget_safetynet, income_tax_top1, income_tax_bot50, tools_d"

Q_{1_L}: the perceived mobility about remaining in Q1 in left-wing

Q_{1_R}: the perceived mobility about remaining in Q1 in right-wing

Q_{1_C}: the perceived mobility about remaining in Q1 in center

Q_{5_L}: the perceived mobility from Q1 to Q5 in left-wing

Q_{5_R}: the perceived mobility from Q1 to Q5 in right-wing

Q_{5_C}: the perceived mobility from Q1 to Q5 in center

Controls: i.country_survey, left, right, male, young, children_dummy, rich, university_degree, immigrant, moved_up.

Panel C

$$y = \alpha + \beta Q_1^e + controls + \varepsilon$$

$$y = \alpha + \beta Q_5^e + controls + \varepsilon$$

Where,

Dependent variables are in the varlist “budget_opp, support_estate_45, support_eq_opp_pol, government_intervention, unequal_opp_problem_d, budget_safetynet, income_tax_top1, income_tax_bot50, tools_d”

Q_1^e: the perceived mobility about remaining in Q1 with respect to effort

Q_5^e: the perceived mobility from Q1 to Q5 with respect to effort

Controls: i.country_survey, left, right, male, young, children_dummy, rich, university_degree, immigrant, moved_up.

Panel D

$$y = \alpha + \beta_1 Q_{1L}^e + \beta_2 Q_{1R}^e + \beta_3 Q_{1C}^e + controls + \varepsilon$$

$$y = \alpha + \beta_1 Q_{5L}^e + \beta_2 Q_{5R}^e + \beta_3 Q_{5C}^e + controls + \varepsilon$$

Where,

Dependent variables are in the varlist : “budget_opp support_estate_45 support_eq_opp_pol government_intervention unequal_opp_problem_d budget_safetynet income_tax_top1 income_tax_bot50 tools_d”

Q_{1L}^e: the perceived mobility about remaining in Q1 in left-wing with respect to effort

Q_{1R}^e: the perceived mobility about remaining in Q1 in right-wing with respect to effort

Q_{1C}^e: the perceived mobility about remaining in Q1 in center with respect to effort

Q_{5L}^e: the perceived mobility from Q1 to Q5 in left-wing with respect to effort

Q_{5R}^e: the perceived mobility from Q1 to Q5 in right-wing with respect to effort

Q_{5C}^e: the perceived mobility from Q1 to Q5 in center with respect to effort

Controls: i.country_survey left right male young children_dummy rich university_degree immigrant moved_up

Table 6 Treatment effects on policy preferences

Panel A

$$y = \alpha + \beta T + controls + \varepsilon$$

Where,

Dependent variables:

(1) budget_opp support_estate_45 support_eq_opp_pol government_intervention budget_safetynet income_tax_top1 income_tax_bot50

(2) unequal_opp_problem_d tools_d (if channels_before_ladder==0)

T: as a dummy who have accepted the treatment that will have effect on the perceived value of social mobility.

Controls: i.country_survey left right male young children_dummy rich university_degree immigrant moved_up

Panel B

$$y = \alpha + \beta_1 T_L + \beta_2 T_R + \beta_3 T_C + controls + \varepsilon$$

Where,

Dependent variables:

budget_opp support_estate_45 support_eq_opp_pol government_intervention budget_safetynet income_tax_top1 income_tax_bot50

T_L: as a dummy who have accepted the treatment that will have effect on the perceived value of social mobility in right-wing

T_R: as a dummy who have accepted the treatment that will have effect on the perceived value of social mobility in left-wing

T_C: as a dummy who have accepted the treatment that will have effect on the perceived value of social mobility in center

Controls: i.country_survey left right male young children_dummy rich university_degree immigrant moved_up

Panel C (IV regression)

$$y = \alpha + \beta Q_1 + controls + \varepsilon$$

Use IV: q1_to_q1 = Treated

Where,

Dependent variables:

(1)budget_opp support_estate_45 support_eq_opp_pol government_intervention budget_safetynet income_tax_top1 income_tax_bot50 (if channels_before_ladder==0)

(2)unequal_opp_problem_d index_redistribution

Q_1: the perceived mobility about remaining in Q1

Controls: i.country_survey left right male young children_dummy rich university_degree immigrant moved_up

Panel D:

$$y = \alpha + \beta_1 Q_{1_L} + \beta_2 Q_{1_R} + \beta_3 Q_{1_C} + controls + \varepsilon$$

Use IV: q1_to_q1_left q1_to_q1_right q1_to_q1_center = Treated_left Treated_right Treated_center

Dependent variables:

(1)budget_opp support_estate_45 support_eq_opp_pol government_intervention budget_safetynet income_tax_top1 income_tax_bot50 (if channels_before_ladder==0)

(2)unequal_opp_problem_d index_redistribution

Q_{1_L}: the perceived mobility about remaining in Q1 in left-wing

Q_{1_R}: the perceived mobility about remaining in Q1 in right-wing

Q_{1_C}: the perceived mobility about remaining in Q1 in center

Controls: i.country_survey left right male young children_dummy rich university_degree immigrant moved_up