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Keywords: Redistribution; Fairness Preferences; Income Inequality; Tax
Saliency; Social Mobility; Government Duty; Beliefs

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The Libertarian that Demands Redistribution: An Online Experiment on Redistributive Preferences in Contemporary China *

(Very Preliminary: Please Do Not Circulate!)

(Latest Version [Here](#))

Nora Yuqian Chen[†] Yuchen Huang[‡] Fred Zhexun Mo[§]

March 3, 2022

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Abstract

What are the determinants of redistributive preferences where capitalism meets post-socialism? To examine the sources of conflicting preference combinations of tolerating the income gap and demanding redistributive policies in transitional economies as suggested in previous research, we conduct an online experiment with a nationally representative sample of 2,500 Chinese citizens. We find that Chinese citizens exhibit strong support for real-stake inequality-reducing policies and the government's duty to regulate income distribution. Surprisingly, priming the "unmeritocratic component" of the income-generating process in either becoming rich or staying poor makes them significantly less supportive of redistributive policies targeted explicitly at taxing the rich and government duties in regulating the income gap. This effect is mainly driven by those who self-reported to have relatively low economic pressure. We conjecture that such "libertarian" fairness views, and the strong demand for government intervention to "redistribute," could both originate from extreme poverty aversion and wealth aspiration. Wealth aspiration drives a desire for property ownership, making it more likely to justify any means in acquiring property; meanwhile, poverty aversion calls for strong government intervention in lifting the poor up. We argue that such a mechanism could be most saliently exemplified in a post-socialist economic regime with sustained high growth rates and high social mobility.

JEL Classification: D31, D63, D83, H23, H24, H53, I38, J62, P16

Keywords: Redistribution; Fairness Preferences; Income Inequality; Tax Salience; Social Mobility; Government Duty; Beliefs

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1 Introduction

"Who gets what and why" is a central theme of political economy and development. As such, there has been an immense literature on investigating the determinants of redistributive preferences across various disciplines of social sciences.

Past research has mostly focused on a paradigm of two equilibria of diverging redistributive preferences in the developed world. On the one hand, American citizens are documented to be excessively optimistic about the role that one's own effort plays in determining his/her income, and believe more in the deserving-ness of the rich and demand less redistribution. On the other hand, many European citizens are reported to be rather pessimistic about the importance of personal efforts in the income generating process, attribute more success to family and background factors with stronger preferences for redistribution (Alesina & Glaeser, 2004; Benabou & Tirole, 2006; Iversen & Soskice, 2006; Alesina, Stantcheva, & Teso, 2018).

However, redistributive demands in China do not seem to fit into this paradigm. China presents an interesting puzzle where its citizens appear to simultaneously have high demands for government responsibility to reduce inequality, and recognize the deserving-ness of the rich by rejecting effective redistribution. For example, in [Figure 1](#), data from the International Social Survey Program (2009) show that over 80% of Chinese people agree that it's the government's responsibility to reduce income inequalities, while over 60% find it fair that the rich can purchase better education for their children, a clear outlier in an otherwise negative correlation at the cross-country level. Another example comes from a cross-country experiment run by [Almås et al. \(2021\)](#), where they ask people's general opinions on the government's duty to redistribute, and also engage the respondents to redistribute between two workers depending on whether the initial pay gap is generated by luck or effort. Their results show that China has one of the highest percentage of citizens demanding that the government should reduce inequality, yet on the other hand, it also has the lowest amount of direct redistribution effectuated among all countries participating in the experiment.

This puzzle, that inequality must be reduced but not through direct redistributive transfer, is also observable from a nationally representative social survey.¹ As [Table 1](#) reports, while over 80% of Chinese people agree that the income gap is too large and the government is responsible to reduce such income differences, only 30% agree to regulate top income or regard it fair to distribute income equally among the population.

¹Namely, the China National Survey of Inequality and Distributive Justice, which is one of the most exhaustive datasets available in documenting the evolution of public opinions on inequality perceptions, redistribution & social justice. It has three waves in 2004,

Table 1: Summary Statistics from the China National Survey of Inequality and Distributive Justice

Survey Wave	2004	2009	2014
Panel A - Perceptions of Inequality and Government Responsibility			
Is the income gap too large?	0.716	0.742	0.812
Is the income gap threatening social stability?	0.522	0.476	0.541
Is the government responsible for reducing the income gap?	0.575	0.669	0.781
Panel B - Reducing Income Gap Without Redistribution?			
Should the government regulate the top income?	0.354	0.32	0.332
Is distributing income equally the most just method?	0.286	0.33	0.327

- Data source: China National Survey of Inequality and Distributive Justice (2004, 2009, 2014)
- The numbers indicate the fraction of respondents agree or strongly agree with the given statement.

to misfortune and bad luck. Our aim is to test that by providing people with information on how the rich are un-deserving, we may observe an increase in people’s willingness to impose more hefty taxation and effective redistributive schemes on the rich only, while by providing people with information on how the poor are deserving, we could observe an increase in willingness to redistribute solely along the other dimension, namely in the government’s duty to reduce income inequalities and increase public goods provision.

However, rather surprisingly, providing un-meritocratic examples which supposedly could have increased support of redistribution from the rich yields an **opposite** treatment effect compared to our hypothesis. When the "un-meritocratic" component of the income generating process (such as inheritance, real-estate arbitrage) is highlighted, Chinese people significantly **decrease** their support of redistributive policies specifically aimed at taxing the rich, and they also become **less** supportive of government duties in regulating the income gap, while do not change their support for policies related to helping the poor.

Interpretation of such results could be multifold. In particular, we think that Chinese people’s attitudes towards the deserving-ness of the rich might be more complex than previously acknowledged. The results seem to imply that Chinese citizens could possess a whole different set of fairness preferences than we normally conjectured. Specifically, they may even regard certain un-meritocratic components of income inequalities to be fair.⁴ We further observe that the aforementioned effects are mainly driven by a part of the population who self-report to have relatively low economic pressure, which is indicative of an existence of potential self-serving bias.

Furthermore, our experimental results also correspond to, or to a certain extent even reconfirm our initially hypothesized puzzle on redistributive propensity among the Chinese population. On top of the decreased propensity to redistribute after showcasing un-meritocratic ways of getting rich, descriptively

⁴In a companion paper, we are probing into what Chinese citizens exactly consider to be fair and unfair, and how that deviates from the western baseline meritocratic fairness preferences.

speaking, respondents in our online experiment also exhibit a very high level of support for hypothetical inequality-reducing government policies,⁵ and an overwhelming majority of them also acknowledge that it's the government's duty to regulate income distribution, which corresponds well to the results from national surveys as well.

Finally, our experimental findings rule out a few other competing hypotheses on the generation of such redistributive preference combination in China. We do not find evidence that the tones of redistributive narratives (a macro propagandist narrative versus a micro personal interest narrative) or the low tax salience in the Chinese fiscal regime significantly explains the rise of such preference falsification, nor does informing our respondents of their true relative income positions, even though we observe that the majority of Chinese people do severely underestimate both their own relative income positions, as well as inter-generational social mobility statistics in China.

Our main contributions to the literature are the following:

First of all, most of the past experimental studies on the determinants of redistributive preferences have been focusing on citizens' mis-perceived beliefs on inequality, social mobility, relative income positions, & the overall taxation or public spending structures,⁶ and how correcting these mis-perceived beliefs would significantly alter preferences for redistribution. We think that such beliefs are indeed crucial in shaping diverging redistributive preferences across different countries. Yet, another important missing puzzle piece in this strand of literature, is how citizens' fairness views shape subsequent redistributive preferences. Meritocratic fairness preferences might not always hold true ([Almås et al., 2021](#); [Cappelen et al., 2021](#)), and such diverging fairness preferences could have significant repercussions on redistributive preferences, which in the end may not align with either the given level of income inequalities, or beliefs on the origins of income inequalities in respective societies.

Secondly, our study contributes to the literature on how redistributive preferences are shaped in emerging economies. A nascent literature attempts to understand why the demand for redistribution is astonishingly low among relatively poor people in the developing world, as it defies the predictions of the stylized median-voter model ([Meltzer & Richard, 1981](#)). Previous studies also focus on mis-information: citizens in the developing world are either mis-informed of the overall inequality levels in their countries ([Pellicer et al., 2019](#); [Hoy et al., 2020](#)), or their own relative income positions across the entire income distribution. However, existing experimental evidence on the importance of mis-information is very mixed

⁵Such high support is even confirmed for radical-sounding policies. For example, policies as radical as unconditional income ceiling or "new sent-down movement" (sending educated urban youth to the countryside to help with rural development) have around 40 to 50% support rate, see more details below in the results section.

⁶On overall inequality: [Fehr et al. \(2019\)](#) ; on social mobility: [Alesina, Stantcheva, and Teso \(2018\)](#); on the salience of taxation, spending or other social issues: [Kuziemko et al. \(2015\)](#); [Alesina, Miano, and Stantcheva \(2018\)](#); [Roth et al. \(2021\)](#)

and inconclusive.⁷ Finally, another related strand of literature in political science further argues that the poor could perceive to be excluded from effective welfare or social policies (Holland, 2018), such that "de facto" redistribution in a lot of developing countries is rather "regressive". Our research contributes to better understanding this puzzle by suggesting that redistribution might be a multi-dimensional term in the developing world. The demand for redistribution could be high in terms of government provision of public goods, while it could be also be very low when viewed as direct transfers, given the potential prevalence of un-meritocratic fairness preferences⁹ in the developing world.

Finally, most of the existing studies on investigating redistributive preferences in China rely on micro survey datasets, where the authors mostly detected correlations, instead of causal identification (Smyth et al., 2010; Whyte, 2014; Xun, 2015; An & Ye, 2017; Huang, 2019). The only study that comes close to our design is Chen et al. (2017), where the authors tested the impact of historical salience on redistributive preferences in an experimental set-up in China. However, the authors focused only on one particularly historic event (the collectivization of capitalist means in the 1950s), while our study speaks more generally to the underlying causes generating the formation of redistributive attitudes we observe today.

2 Theoretical Motivations and Treatment Designs

Based on insights gleaned from the aforementioned summary statistics and qualitative interviews (See Appendix 7.2),¹⁰ we organize theoretical explanations for redistributive preferences in the context of a socialist market economy below, and develop hypotheses and treatment designs accordingly.

2.1 Taxing the Rich, Helping the Poor, and Tax Salience

Firstly, we conjecture that while people are reasoning about redistribution policies, the "redistribution from" (taxing the rich) dimension could be well separated from the "redistribution to" (helping the poor) dimension. This is related to the recent work from Cavallé and Trump (2015), where the authors detected a seeming disconnect between redistributive attitudes to taking away from the rich, and redistributive attitudes to helping the poor in advanced democracies.

⁷Some researchers find that "negative updating"⁸ would increase support for redistribution (Cruces et al., 2013), while others find almost a consistently null effect on redistributive preferences with the same intervention across developing countries (Hoy et al., 2019).

⁹where income inequalities both due to luck and effort are considered fair.

¹⁰These interviews were conducted by well-trained sociology concentrators from Tsinghua University in Spring 2021. We reached Chinese people living in different regions and of varying income brackets and social classes, to better understand their redistributive attitudes in depth. Each interview lasted about an hour and was centered on three main themes: perception of inequality, government responsibilities tax-transfer, and individual perceptions towards the three major social policies in China (education, housing, and healthcare). For a summary of the profiles of these twenty interviewees, please refer to profile summary in the appendix.

In addition to this first-order psychological disconnection, the specificities of the Chinese fiscal regime could further prime people into reasoning about government expenditures and tax revenues in a separate manner. As mentioned previously, personal income tax, the main redistribution instrument in advanced economies, is charged only at the top of the income distribution in China and makes up only 5% of fiscal revenues.¹¹ The bulk of government revenue comes from indirect taxes and non-tax revenue (such as revenues from state-owned enterprises, land sales, etc.), which gives an average citizen the wrong impression of having paid no tax and the illusion that the government can help the poor without raising additional revenue. This is confirmed with the insights obtained from in-depth qualitative interviews we conducted earlier.

We hypothesize that first of all, Chinese people, like people in developed countries, consider taxing the rich and helping the poor separately: they dislike the first but support the latter. Secondly, very low personal income tax rate and large indirect tax burden make the Chinese public not conscious of being *de facto* taxpayers, which could have made them more reluctant to level down the rich.

1. Hypothesis 1 - Disconnect between Taxing the Rich and Helping the Poor

- (a) Informing our respondents how representative profiles of rich people accumulate wealth in un-meritocratic and opportunistic manners may increase their support for policies targeted at taxing the rich, while support for government duty in inequality reduction will not be perturbed.
- (b) Informing our respondents how representative profiles of poor people are stuck in poverty due to misfortune and bad luck, may increase their support for government duty in inequality reduction, as well as policies specifically targeted at helping the poor, while support for policies targeted at taxing the rich will not be perturbed.

2. Hypothesis 2 - Tax Salience

- (a) Informing our respondents the effective tax burden that representative households have shouldered may increase their support for policies targeted at taxing the rich, while support for government duty in inequality reduction may not be significantly perturbed.

We test these two hypotheses using a two-stage design. In the first-stage treatment, we will prime each dimension of redistribution separately (taxing the rich, or helping the poor) and observe whether such

¹¹Aggregated government revenue by source and by use could be found on the official webpage of the [the State Council \(in Chinese\)](#).

an intervention only alters preferences along that single dimension, but does not perturb the attitudes along the other dimension, if such separation in the thought process does exist. We will provide cues and stories on the "luck/un-meritocratic component" of the income generating process in either becoming rich or staying poor. Specifically, in the "Rich by Luck" treatment arm, we will provide three representative stories/vignettes on how people become rich via "un-meritocratic" factors such as pure luck due to housing demolition, arbitrage of the real estate market, or pure family inheritance of wealth from previous generations; in the "Poor by Luck" treatment arm, we prime the opposite with three stories on why some poor people stay poor, such as illness, involuntary unemployment, divorce and discrimination.

In the second-stage treatment, we will try to help people establish the link between public spending and taxation to emphasize that "the wool comes from the sheep's back" and the effective tax burden of representative individuals at different positions of the income distribution in China. First, we provide information on the tax burden due to personal income tax alone, where the rich are relatively over-taxed compared to the poor, as the levy threshold of personal income tax is above the median income in China. Second, we provide additional information on the tax burden due to Value-Added Tax (VAT), which applies a flat rate across the entire income distribution. Given the fact that the poor consume a larger share of their total income, now they shoulder a similar effective tax rate compared to the rich, if we combine the burden of income tax and VAT together.

2.2 Micro-Macro Paradox of Redistributive Preferences

Secondly, possible preference falsification or mixed findings on redistributive preferences might be due to the different points of perspectives people are adopting when they are reporting their attitudes towards different dimensions of redistribution.

To address these concerns, we test if Chinese people are viewing things from different angles when they are asked macro-level questions on if the government should do something versus when they are asked micro-level questions on more specific redistribution policies. Analyzing data from the existing surveys, we find that when asked macro-level questions (for example, "*Should the government reduce inequality?*"), the respondents might put themselves in the shoes of state administrators or react as if they were being tested on political knowledge, and cite official slogans on socialist discourse of inequality reduction, or identify themselves with the Chinese state, which would generate positive and socially desirable answers. When asked micro-level questions (for example, "*Which school do your children go to? Do you think rich people should be allowed to send their children to better schools?*"), they might think about their real-life interests. Here, a fairness view similar to that observed in the U.S. prevails, featuring beliefs in meritoc-

racy and loss aversion, which could potentially lead to redistribution aversion.¹² We also observe this potential perspective switch in our qualitative interviews. When asked macro questions, people adopted more formal tones, were generally more pro-redistribution and more optimistic, yet with individual-level questions, they responded in a more personal and negative manner. As such, the Chinese public could be averse towards redistributive policies that pertain to personal interests. However, they have high support for policies framed as macro government-duty narrative for the country due to propaganda. Our corresponding hypothesis is expressed as the following.

3. Hypothesis 3 - Government Narratives

- (a) Adopting a macro narrative of a given redistributive policy will significantly alter support for general government duty, while support for specific policies on taxing the rich or helping the poor will not be perturbed.
- (b) Adopting a micro narrative of a given redistributive policy will significantly alter support for policies related to specific real-interest policies on taxing the rich or helping the poor, while support for general government duty will not be perturbed.

In the macro-narrative treatment, we provide a macro narrative of initiating a hypothetical redistributive policy: property taxation. We adopt a tone of information provision similar to that of official government propaganda, such as the choice of convoluted political wording as well as the emphasis on macro-economic repercussions of this hypothetical policy for the entire country.

In the micro-narrative treatment, we provide a micro narrative of initiating a hypothetical redistributive policy: property taxation. Specifically, we give hypothetical scenarios on how representative households owning varying numbers of properties would be taxed should the policy take effect. We provide very detailed additional tax figures to highlight the burden such a property tax would put upon average households in China.

2.3 Growth as a Precondition for Redistribution

Thirdly, given the unique growth trajectory of China over the past seven decades, Chinese people might hold rather peculiar beliefs on the relationship between economic growth and redistribution. From the 1950s till the late 1970s, the country experienced very low income inequality with next-to-zero growth.

¹²This is in a way related to a recent paper from Cappelen et al. (2021), where they tested the fairness views of Chinese people with an experiment involving redistribution with real stakes. They recruited adult and children volunteers and let two children play a game that would lead to one of them having all the payment and one with nothing, and then asked the adults to redistribute the income between the two children. They showed that the adults in Shanghai made much less transfer and produced a higher realized Gini coefficient than adults in Norway, and did not distinguish whether the cause of the initial inequality is merit or luck.

Sharing of income was equal but everybody was impoverished at the same time. The reform and opening-up policy at the end of the 1970s liberated self-incentives and the country ushered in a period of rapid growth with increasing inequality. However, on average, everybody (across the entire income distribution) became much wealthier than before. For instance, the bottom 50% also witnessed their average income grow more than five fold (Piketty, Yang, & Zucman, 2019). Experts on inequality on China argue that Chinese people generally view inequality as an inevitable consequence of development and growth (Whyte, 2014; Xie, 2016). By extension, we conjecture that people accustomed to a high-growth regime may be perceiving the following: Getting rich (for the whole country) is a pre-condition for redistribution. Hence, if we start with redistribution first and result in a more egalitarian distribution of income from the very beginning, there will be little growth or development afterwards.

All this above could potentially explain the dissonant attitudes we observed previously as people on the one hand are reluctant towards effective redistribution policies, which might dissuade self-incentives of individuals (hence the source of growth for the entire Chinese economy), while on the other hand the socialist discourse in China also dictates that “common prosperity” should be achieved in the coming future, when a higher level of development is effectively realized. Our hypothesis here is expressed as the following.

4. Hypothesis 4 - Growth and Redistribution

- (a) Reiterating the trade-off between growth and redistribution could decrease support for effective redistribution, especially for the part of the Chinese public that regard economic growth as a precondition for redistribution.

In this treatment arm, we further prime a China-specific narrative of "Common Prosperity",¹³ where we first show that prior to the reform and open-up policy, there was little inequality in China, yet everyone was impoverished at the same time. With the reform and open-up policy in 1978, China ushered in unprecedented economic growth, whereas at the same time, economic inequality soared as well. We further point out that despite the mounting inequality, even the poorest individuals in China saw their income grow rather exponentially during this period. Ultimately, we reiterate the answer to the trade-off between "equity and efficiency" from the government, which is to grow first and redistribute later when growth is achieved. In the end, we provide information on the initiation of the Common Prosperity Demonstration Zone in Zhejiang Province, which is one of the most economically advanced provinces in

¹³Specifically it was the discourse initiated by former Chinese leader Deng Xiaoping in the 1980s, where he claimed that "we should let some people get rich first, and then they will help the others lagging behind to get rich together as well. Only then can we achieve 'common prosperity' for all."

China.¹⁴

2.4 Mis-perception of Relative Income Position and Social Mobility

Fourthly, a standard query in the literature is whether people do not demand redistribution because they falsely perceive their relative income positions or expect further upward mobility. On the one hand, if the relatively poor in China consider themselves to be middle-class or relatively rich, they might fear that redistribution will be redistributing from them and hurt their interests. On the other hand, as per the seminal theoretical paper of [Benabou and Ok \(2001\)](#), if the poorer people have a relatively optimistic prospect of upward mobility (POUM) and think that their chances of becoming rich are large, then they might oppose redistribution to protect the interests of their future selves. To our knowledge, there has not yet been a survey experiment that elicits people's *ex ante* beliefs about their relative income positions and social mobility figures in China.¹⁵

We conjecture that it is possible for Chinese people to hold the following overly optimistic beliefs about their relative income positions and social mobility figures: People in China, especially those at the lower end of the income distribution, systematically overestimate their relative income position, thus projecting themselves as the middle-class to be taxed for redistribution, and thus become opposed to redistributing from the rich. People in China might overestimate the overall level of social mobility, especially following a period of rapid growth and unprecedented social change. Belief in "the Chinese Dream" is strong, and since they have high hopes of moving up the social ladder, they consider the rich to be more deserving. Our final hypothesis is stated as follows.

5. Hypothesis 5 - Mis-perceived Relative Income Positions & Social Mobility

- (a) If Chinese people are over-estimating their relative income positions and social mobility figures, informing them of their true income positions and mobility figures could increase their support for policies targeted at taxing the rich, while support for general government duty may not be perturbed.

In our treatment, for the first step we let our respondents guess their relative income positions across the entire income position: What is the percentage of the population that are poorer than you? Then we

¹⁴See the very recent news report on why the Chinese government chose the particular province of Zhejiang as a common prosperity demonstration area: [Zhejiang Common Prosperity Report](#).

¹⁵Although similar studies have been carried out in other countries: for example, [Alesina, Stantcheva, and Teso \(2018\)](#) has shown that people systematically overestimate upward social mobility in the U.S.; [Karadja et al. \(2017\)](#) has shown that people in Sweden severely under-estimate their relative income positions, and [Hoy et al. \(2019\)](#) & [Cruces et al. \(2013\)](#) show very mixed results of similar income position updating interventions in developing-country contexts.

will reveal the true information of representative individuals with their actual annual incomes at different deciles of the distribution. Afterwards, we will ask if the respondents either over- or under-estimated their relative income positions, and input the specifically figures manually.¹⁶ In the second step, we will make our respondents elicit their perceived social mobility figures, such as what the probability is for a son with a senior white-collar (or farming, unskilled-labor) father to continue staying in the same profession category, and then we will reveal to them the true social mobility figures.

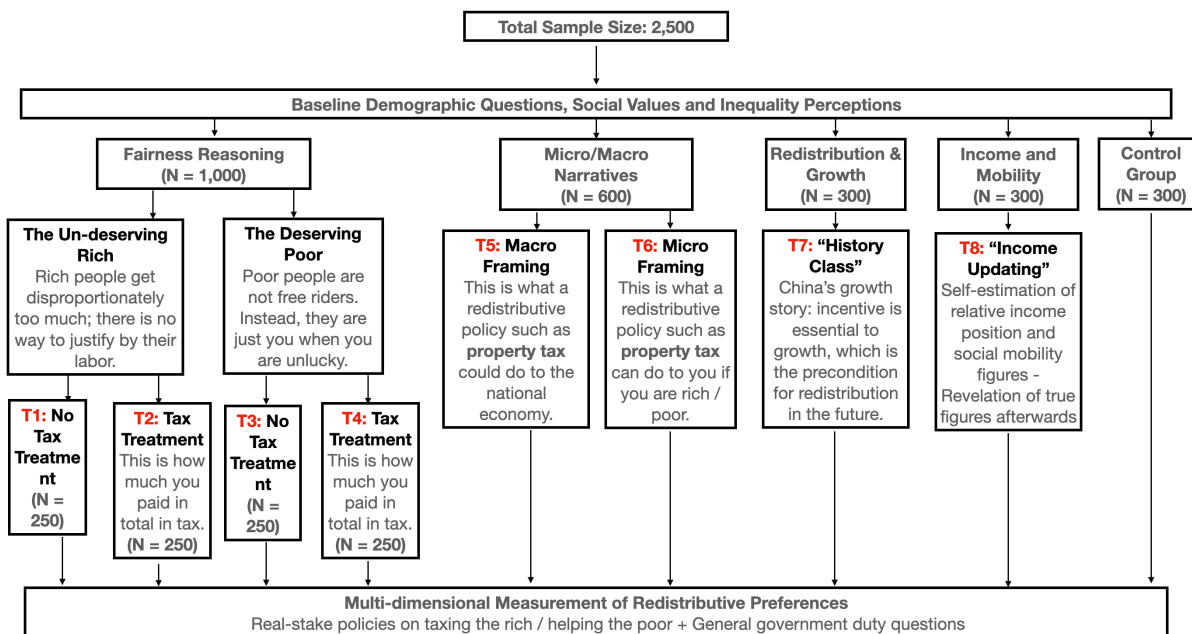


Figure 2: Experiment Design

A summary of all treatment arm designs is provided in Figure 2. In terms of outcomes of interest, following the convention in this strand of literature, we adopt the redistribution index as our main outcome. It's constructed as an unweighted average (arithmetic mean) of the Z-scores of a host of policy outcomes.¹⁷ For instance, the redistribution index of policies related to taxing the rich is constructed as an unweighted mean of the Z-scores of the five hypothetical policies specifically targeted at taxing the rich. In addition to the index outcomes, we also adopt policy outcomes constructed as dummies, which indicate the general extent of support for a given redistributive policy.¹⁸

¹⁶This could be cross-checked with the personal income data we gathered earlier at baseline, which could give us another computation of their relative income position bias, based on their answers they gave to the perceived income position question initially.

¹⁷This Z-score is further calculated by subtracting the control group mean from the policy outcome figure of a given individual, and then dividing this de-measured value by the control group standard deviation, in accordance with the original variable construction method from Kling et al. (2007).

¹⁸In our online experiment set-up, the support for such redistributive policies are measured on a scale from 1 to 5, with 4 and 5 indicating "agree" and "strongly agree".

3 Summary Statistics and Results

3.1 Summary Statistics

Due to the demographic quotas imposed (described in detail in the [Appendix](#)), major baseline characteristics of our sample are comparable to those of the national averages. As could be seen from [Table 2](#), the sample we obtained is very much representative of the national population in terms of income, age, gender, education, urban/rural residence, and a host of other main socio-economic and demographic variables of interest.

Table 2: Baseline Characteristics - Compared with the Latest National Figures

Characteristics	(1) Our Sample	(2) National Figures
Gender (male)	0.50	0.5124
Median Age	38	38.4
Fraction of College Graduates	0.20	0.154
Median Pre-Tax Income Per Adult	¥ 45,000	¥ 46,749 (2019 - WID)
Fraction of Migrant	0.30	0.345
Mean Household Size	3	2.62
Fraction of Urban Dwellers	0.64	0.6389
Mean Years of Schooling	10.5	9.91
Fraction of CCP Members	0.0544	0.067
Fraction in Public Sector	0.1692	?

Notes: Data source for national figures except from income: The Seventh National Population Census, 2020. Data source for income: World Inequality Database.

The first set of results center on the general level of support for redistributive policies among the Chinese population. As noted previously, our policy outcomes of interest are divided into three main categories: politically feasible policies pertaining to taxing the rich, helping the poor, as well as policies emphasising on the dimension of government responsibility.

We could observe from [Table 3](#) that on the whole, the Chinese public exhibit rather high support for redistributive policies. On average, more than 70% of our survey participants endorse (who answered "agree" or "strongly agree" to a given policy) hypothetical real-stake policies which aim at either taxing the rich or helping the poor. This average level of support is high compared to the elicited preferences for redistribution in similarly controlled experimental settings in this strand of literature ([Kuziemko et al., 2015](#); [Cruces et al., 2013](#); [Pellicer et al., 2019](#)).

The figures are quite similar whether we focus on the control sample alone, or look at the overall averages for the entire online sample. Two of the most radical policies - "Unconditional Income Ceiling" ¹⁹ and "New Sent-down Movement" - receive the least support. However, we would like to stress that even

¹⁹This corresponds to the data in Table 1 from China National Survey of Inequality and Distributive Justice

Table 3: General Support for Redistributive Policies

Groups	(1) Control Group (N=300)	(2) Whole Sample (N=2,500)
Taxing the Rich (mean)	0.734	0.719
Capital Tax (Ultra-rich Tax)	0.840	0.817
Property Tax	0.690	0.708
Auditing Top Earners	0.813	0.786
Control for Overseas Capital Transfer	0.853	0.830
Unconditional Income Ceiling	0.473	0.452
Helping the Poor (mean)	0.743	0.754
Free Healthcare for the Poor		
with Serious Illnesses and Chronic Diseases	0.920	0.912
Quota for Poor Students in College	0.657	0.672
Raise Minimum Wage	0.823	0.799
Raise Income Tax Threshold	0.793	0.784
Expand Social Housing	0.810	0.846
New Sent-down Movement	0.473	0.514
Raise Minimum Social Protection	0.727	0.751
Government Duty (mean)	0.823	0.794
Reduce the Income Gap	0.900	0.881
Guaranteed Job Provision	0.807	0.78
Govt. Involvement in Redistribution is Just	0.770	0.727
Equal Admissions in Higher Educ.	0.823	0.789

Notes: The figures indicate the total fraction of individuals who answered "agree" or "strongly agree" to a given statement in the respective samples.

these radical policies receive over 40%, close to 50% support.

3.2 Average Treatment Effects on Redistributive Indices

Table 4 reports the OLS estimates of the Average Treatment Effects (ATE) of being assigned to each one of our eight treatment arms, relative to being assigned to the control group. The dependent variable is an index of all policies, which is calculated as the average of the Z-score of each policy.

Given the large total number of potential baseline demographic, socio-economic and social value controls (110 variables in total) relative to our total sample size (2,500), we adopt the Double Lasso Cross-Fit Partialling-Out control variable selection technique to include the relevant set of control variables in each one of our estimation equation.²⁰ Furthermore, the estimates for the main coefficients of interest stay almost constant if we include the entire set of controls and fixed effects in a simple OLS regression, or without any controls included at all.

First of all, we observed that only our first treatment arm, where cues and stories on the "luck/un-meritocratic component" of the income generating process were provided, produces a significant decrease

²⁰All of our main tables hereafter report estimates based on this Double Lasso Control Variable selection technique. On average, cross-fit partialling-out selects around 30 controls out of the whole battery of potential controls.

Table 4: Treatment Effects on Redistribution Indices (Cross-Fit Partialling-Out Control Selection)

VARIABLES	(1)	(2)	(3)	(4)
	All-Policies Index	Gov. Duty Index	Tax Rich Index	Help Poor Index
Rich by Luck	-0.0872** (0.0401)	-0.1588*** (0.0550)	-0.1116** (0.0520)	-0.0288 (0.0445)
Rich by Luck & Tax Saliency	-0.0303 (0.0406)	-0.0569 (0.0566)	-0.0399 (0.0528)	-0.0099 (0.0434)
Poor by Luck	-0.0095 (0.0388)	-0.1252** (0.0528)	-0.0386 (0.0511)	0.0659 (0.0441)
Poor by Luck & Tax Saliency	-0.0066 (0.0400)	-0.0475 (0.0539)	-0.0842 (0.0524)	0.0802* (0.0438)
Macro Narrative	0.0233 (0.0369)	-0.0413 (0.0500)	0.0324 (0.0480)	0.0582 (0.0418)
Micro Narrative	0.0423 (0.0365)	0.0127 (0.0490)	0.0101 (0.0468)	0.0876** (0.0417)
Growth & Redistribution	0.0178 (0.0368)	0.0188 (0.0492)	-0.0247 (0.0472)	0.0472 (0.0435)
Income & Mobility Updating	-0.0316 (0.0387)	-0.0781 (0.0510)	-0.0884* (0.0510)	0.0459 (0.0439)
Observations	2,500	2,500	2,500	2,500
CF Partialling-Out Controls	YES	YES	YES	YES
No. of Controls Selected	27	29	26	26

*** p<0.01, ** p<0.05, * p<0.1.

in support for redistribution compared to the control group in all policies. Overall, the magnitude of the effect stands at around a 0.1 standard deviation decrease, which is quite large compared to the average impacts detected in the strand of experiment literature on redistributive preferences. To put it succinctly, reminding our respondents of the relatively less meritocratic, more opportunistic and luck-oriented dimensions of how rich people became rich in China has made them even less willing to redistribute.

We could observe that the main effect identified in column 1 is driven by the effects on government-duty policies as well as taxing-the-rich policies, while helping-the-poor policies do not seem to be impacted by this treatment. The government-duty effect is particularly strong with a 0.16 s.d. decrease. It indicates that when reminded of the non-meritocratic component of how rich people became rich, Chinese people are on average less supportive of the government's role in the society and less willing to tax the rich. The treatment of "Poor by Luck" also resulted in a significant decrease in support for government-duty policies. This could be that our respondents in fact do not regard strike it rich via luck or being stuck in poverty due to bad luck as unfair, instead they think the rich and the poor are fully deserving of their outcomes. We will come back to the interpretation in the next [section](#).

The "Income & Mobility Updating" treatment also produces a marginally significant decrease in support for taxing-the-rich index. In the first part of the treatment where we elicit the *ex-ante* beliefs about their relative income positions and social mobility, we observe that the Chinese public significantly under-

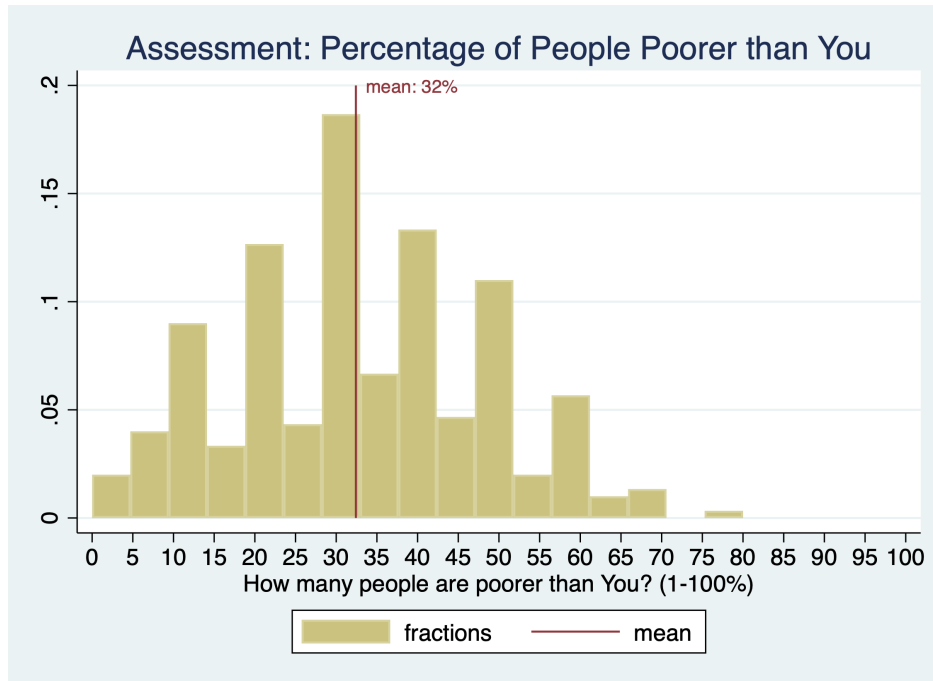


Figure 3: Under-estimation of Relative Income Position

estimate their relative income positions as well as the social mobility figures. As shown by [Figure 4](#), the average Chinese people underestimate their relative income positions by 18 percentage points. [Figure 5](#) further shows that people think a child of parents with a high-level white collar job has 60% chance to stay as a high-level white collar worker, while the actual probability is 28%. This is the opposite of our priors that the Chinese people project themselves to be in the middle of the income distribution like other developing countries or be overly optimistic about social mobility indicators. In fact, the degree to which Chinese people underestimate their relative income positions is very comparable to that of the Swedish people, as documented by [Karadja et al. \(2017\)](#).

The decrease in support for the taxing-the-rich index is then consistent with the under-estimation of relative income position and social mobility: the majority of respondents underwent a positive update in their relative income positions,²¹ and subsequently decreased their support for policies related to taxing the rich due to self-serving biases.

In addition, the treatment arm that provides the micro narrative of the property tax policy results in a significant increase in support for helping-the-poor index. Additional analyses on the specific policy outcomes reveal that this is mainly driven by the increase in support for [social housing](#). We conjecture that informing our respondents of the actual burdens that average citizens have to shoulder with the introduction of the property tax made perceived economic anxieties related to housing more acute. This

²¹being told that they are richer than they thought

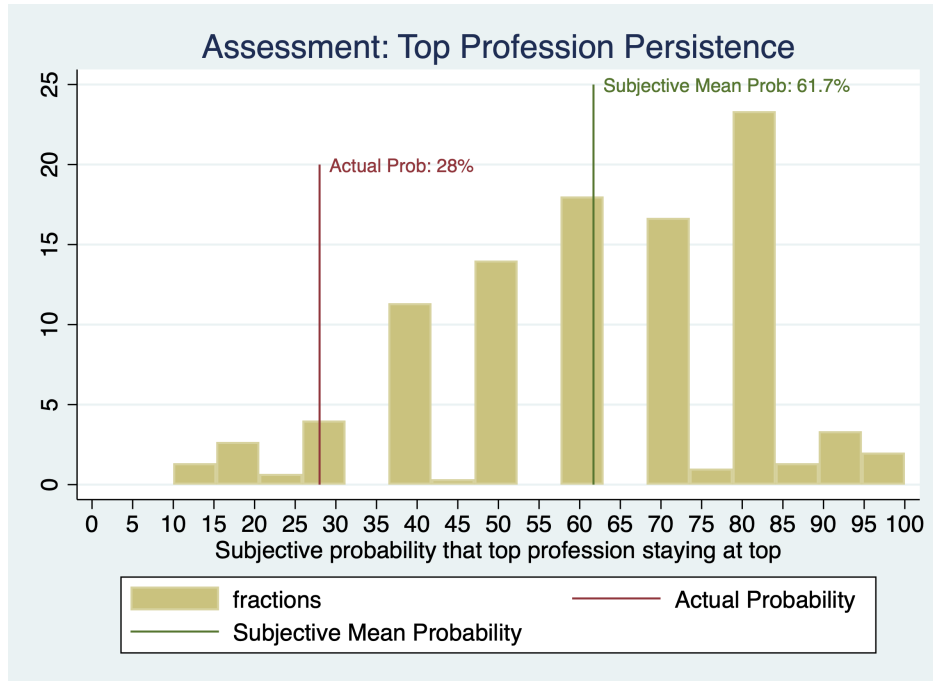


Figure 4: Over-estimation of Inter-generational Top Income Profession Persistence

also implies people’s potential reservations about China’s widening property tax trials just announced in October 2021.²²

Concerning the other treatment interventions, the "Tax Salience" treatment seems to have resulted in a mitigating effect of the significant decrease in redistribution support stemming from the "Rich/Poor by Luck" treatment, although there’s no statistically discernible significant differences among these treatment arms. This is expected as the tax treatment is oriented towards informing the citizens of the "invisible" tax burden shouldered by the poor in China.

Across specifications, the "Growth & Redistribution" treatment resulted in a null effect across all types of outcomes of interest. We surmise that this could be due to the fact that the "Common Prosperity" rhetoric has already been deeply imprinted in the Chinese mentality. Priming a familiar concept then may not produce enough perturbations in preferences towards redistribution.

Finally, the micro and macro narratives did not result in contrasting treatment effects either. Further investigations on the exact policy outcomes reveal that these two treatment arms are the only ones that produced an increase in support for initiating the property tax, and for increasing social housing. This could be the result of the increased salience of housing issues in both treatment arms, which trumped the contrasting tones (micro versus macro) adopted separately in each intervention.

²²<https://www.bloomberg.com/news/articles/2021-10-23/china-widens-property-tax-trials-with-levy-on-residential-owners>.

3.3 Heterogeneous Treatment Effects

A natural question to ask next is which part of the population is driving the observed results in [Table 4](#). If we believe that our stories on the income generating process of the rich lead them to see the rich to be even more deserving, the effect could be more pronounced among those who are less anxious economically. Interestingly, heterogeneous treatment effect do not split along the line of self-reported income brackets, but rather a subjective measure of economic anxiety.

At baseline, we surveyed our respondents their subjective perceptions of current economic pressure on a scale from 1 (zero economic pressure) to 10 (utmost economic pressure). In [Figure 4](#) it could be seen that on average, the Chinese public shoulder rather high economic pressure, with the median standing around 7 and almost no respondent reported to have a level of economic pressure of either 1 or 2.

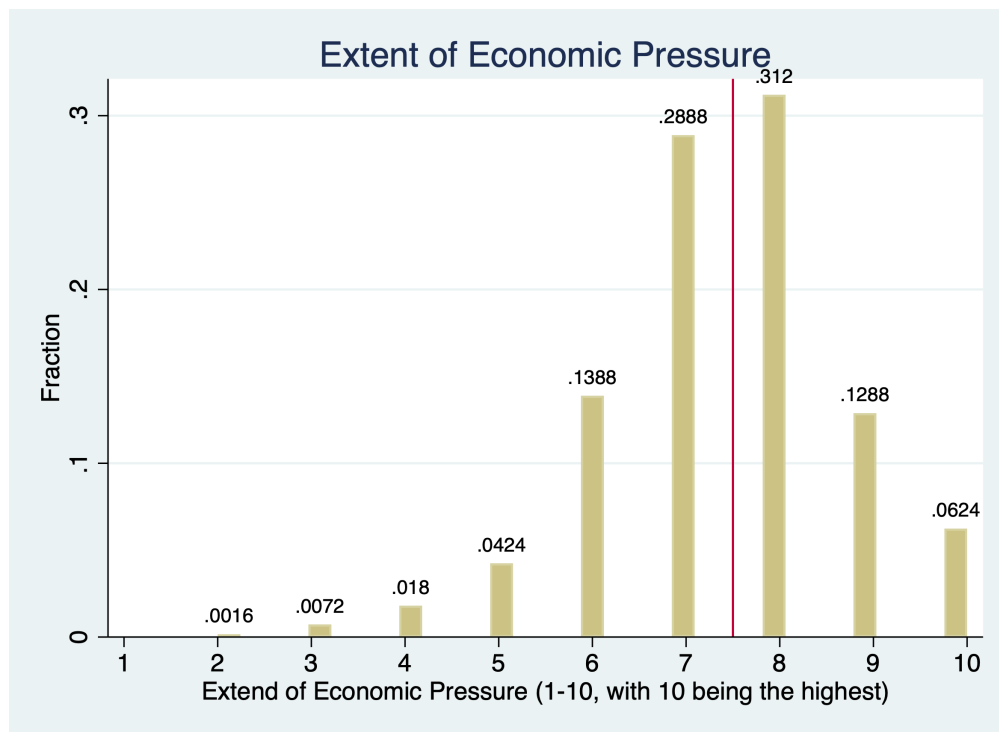


Figure 5: Extent of Economic Pressure (whole sample, N=2,500)

We construct a dummy variable of economic pressure which takes on value one if the self-reported level of economic pressure is greater or equal to eight, and zero otherwise.

Results of the estimates on heterogeneous treatment effects are reported in [Table 5](#), where the interaction terms indicate the product of the dummy variable of economic pressure and the respective treatment arm dummies. Overall, it could be observed that the negative effects observed previously in [Table 4](#) are mostly driven by the sub-population with relatively low economic pressure. The overall average treat-

ment effect on the all-policies index almost doubled for these individuals in the "Rich by Luck" treatment arm, where the treatment intervention resulted in an almost 0.2 standard deviation decrease in support for overall redistribution among this group of people. On the other hand, the treatment effect for the sub-population with relatively high economic pressure is close to zero. Such heterogeneous effects are more evidently manifested in column 2 and 3, where we look specifically at government-duty as well as taxing-the-rich policies.

More interestingly, column 4 reveals that the individuals with low versus high economic pressure reacted significantly differently when faced with choosing whether to help the poor more. People with low economic pressure are also less willing to help the poor (on the same front as taxing-the-rich or government-duty policies). However, unlike the two other policy outcomes, people with high economic pressure are significantly more willing to endorse helping-the-poor policies on the whole.

Table 5: Heterogeneous Treatment Effects Analyses - Redistributive Indices

VARIABLES	(1) All-Policies Index	(2) Gov. Duty	(3) Tax Rich Index	(4) Help Poor Index
Rich by Luck	-0.1640*** (0.0541)	-0.2059*** (0.0792)	-0.1536** (0.0690)	-0.1483** (0.0603)
Rich by Luck × Econ Pressure	0.1350* (0.0735)	0.0857 (0.1012)	0.0597 (0.0949)	0.2188*** (0.0828)
Rich by Luck & Tax Saliency	-0.0922* (0.0555)	-0.1481* (0.0803)	-0.0995 (0.0714)	-0.0548 (0.0572)
(Rich by Luck & Tax Saliency) × Econ Pressure	0.1238* (0.0752)	0.1777* (0.1048)	0.1164 (0.0990)	0.0868 (0.0807)
Poor by Luck	-0.0311 (0.0512)	-0.1114 (0.0701)	-0.0331 (0.0646)	0.0194 (0.0577)
Poor by Luck × Econ Pressure	0.0330 (0.0712)	-0.0259 (0.0964)	-0.0138 (0.0930)	0.0896 (0.0816)
Poor by Luck & Tax Saliency	-0.0025 (0.0504)	-0.0382 (0.0697)	-0.0707 (0.0648)	0.0726 (0.0566)
(Poor by Luck & Tax Saliency) × Econ Pressure	0.0046 (0.0750)	0.0062 (0.0989)	-0.0171 (0.0984)	0.0147 (0.0840)
Income & Mobility Updating	-0.0736 (0.0487)	-0.0985 (0.0709)	-0.1260* (0.0645)	0.0015 (0.0561)
Income & Mobility Updating × Econ Pressure	0.0866 (0.0696)	0.0484 (0.0919)	0.0794 (0.0917)	0.0913 (0.0813)
Economic Pressure	0.0474 (0.0424)	0.1319** (0.0578)	0.0812 (0.0566)	-0.0182 (0.0499)
CF Partialling-Out Controls	YES	YES	YES	YES
Observations	2,500	2,500	2,500	2,500

Here the coefficient estimates for the treatment arms of "micro narrative", "macro narrative" and "growth & redistribution" are omitted.

*** p<0.01, ** p<0.05, * p<0.1.

Are people with high and low economic pressure intrinsically different from one another? We compare the baseline demographic as well as subjective-evaluation variables for these two sub-groups. Overall, in [Table 6](#), it appears that people living in smaller cities (or rural areas) with relatively higher personal and

family income, and adequate access to welfare have less economic pressure. In terms of its association with other more subjective-evaluation variables, people with low economic pressure are also more likely to have higher self-reported social statuses, be more satisfied with their lives, and feel more secured if any misfortune strikes. All this points to a potentially magnified self-serving bias among this sub-group of individuals, which will be detailed more below in interpretation of our results.

Table 6: Determinants of Economic Pressure

	(1)		(2)		(3)	
	Low Econ Pressure Mean	S.D.	High Econ Pressure Mean	S.D.	Mean Difference Coefficient	T-stat
Baseline Demographics						
Personal Income	6.437	2.325	6.030	2.587	0.407***	(4.136)
Family Income	8.836	1.946	8.404	2.204	0.432***	(5.192)
Working = 1	0.926	0.262	0.880	0.325	0.046***	(3.889)
No Health Insurance = 1	0.014	0.116	0.035	0.184	-0.021***	(-3.456)
No Pension = 1	0.020	0.140	0.037	0.188	-0.016*	(-2.476)
CCP Member = 1	0.049	0.216	0.060	0.237	-0.011	(-1.158)
Public Sector = 1	0.167	0.373	0.172	0.377	-0.005	(-0.336)
Female = 1	0.502	0.500	0.498	0.500	0.003	(0.160)
Age	39.176	11.549	38.980	11.299	0.195	(0.428)
Education	3.589	1.185	3.591	1.183	-0.002	(-0.043)
Household Size	3.346	0.712	3.382	0.779	-0.036	(-1.210)
Home Ownership	2.107	0.334	2.094	0.323	0.013	(1.011)
Father's Education	3.141	1.341	3.170	1.426	-0.028	(-0.509)
Residence/Region						
City Level (1-4)	2.743	1.075	2.356	1.022	0.387***	(9.229)
Rural/Urban Residence (1-4)	3.313	1.634	2.998	1.727	0.315***	(4.680)
Migrant = 1	0.282	0.450	0.318	0.466	-0.036*	(-1.973)
Self-reported Status						
Self-reported Income Category (1-10)	5.011	1.745	4.665	2.080	0.346***	(4.501)
Self-reported Social Class (1-4)	1.870	0.736	1.748	0.782	0.122***	(4.000)
Self-reported Status (1-10)	5.220	1.701	4.840	2.089	0.380***	(4.978)
Self-reported Anxiety/Emotional Status						
Confident to be treated while sick (1-5)	3.140	1.011	2.992	1.133	0.148***	(3.446)
Satisfied with life (1-10)	5.994	1.582	5.621	1.930	0.373***	(5.278)
Feel secured (1-10)	6.193	1.501	3.839	1.590	2.354***	(38.047)
N	1242		1258		2500	

4 Interpretation of Results

4.1 High Support for Redistributive Policies

Our first main result is a very strong level of support for almost all the real-stake redistributive policies that we listed. Apart from the two most radical policies and property taxation, the other 9 policies all harbour around 80% of support rate. To contextualize it in using an analogy: If there were a hypothetical two-party system in China, the location of meaningful policy debates would be on the very radical left end

of the left-right spectrum, centering on policies such as unconditional income ceiling and a new sent-down movement.

We suspect that such strong support is derived from Chinese people's high expectation of government duty. Chinese people have high expectation of government responsibility: In this survey, about 80% of respondents think the government should provide jobs for each individual. We also observe from other nationally representative surveys that the majority of Chinese citizens think it is the government's duty to provide healthcare, primary & secondary education, and elderly care.²³ In this study, about 90% of Chinese people consider it the government's duty to reduce the income gap. Thus, they might interpret the policies we ask as means to reduce the income gap and parts of a larger redistributive program where the government shoulders the bulk of the responsibility.

4.2 Decreased Support for Redistribution

Our most intriguing result is that people decreased their support for redistribution after seeing examples that emphasize the "non-meritocratic" component of the income generating process.

Our main interpretation is that, Chinese people might not consider the non-meritocratic ways of getting rich ("luck"), at least those in our treatment, unfair. There has been some empirical evidence showing that Chinese people do not make the meritocratic distinction in the same way as those in the west do, where income earned by merit is fair and income earned by luck is unfair. In a cross-country experiment study from [Almås et al. \(2021\)](#), Chinese citizens are the ones least willing to redistribute if income differences are only due to luck among all the 60 countries in the study. In fact, China and India are the only two countries where the amount of redistribution does not differ significantly when income is due to luck instead of merit. Their result, that merit and luck are equally legitimate in the views of the Chinese population, could help us explain our treatment effects. If our respondents indeed consider the examples we gave, where people gained wealth by luck to be fair, they would regard the rich to be more deserving and demand less redistribution from them, as well as demanding less from the government's duty in reducing income inequalities.

Why does a non-meritocratic fairness preference exist in China? We do not have a definitive answer for now, and it could just be a cultural trait. However, our results on heterogeneous treatment effects seem to suggest a self-serving belief formation. Our treatment effect is driven by those who self-reported to have less economic pressure. These people have higher income and family income, better access to welfare and less subjective anxiety, but they are not simply equivalent to being rich. In a non-reported regression, we

²³Source: China Inequality and Distributive Justice Survey

discovered that when controlled for family income, personal income is no longer a predictor of economic pressure. Interestingly, people who are engaged in market-based professions such as private entrepreneur, individual contractors (as opposed to a public sector job), are less likely to have economic pressure despite the larger risks involved. Our hypothesis is that the people with less economic pressure are those who have benefited more from economic growth in China, or the "lucky" people who was graced with an opportunity by the unprecedented growth in China in the last 40 years. The examples in the treatment are all examples of getting rich with this kind of opportunities against the big context of open-up and reforms in China; those who have benefited from them thus have stronger incentives to believe that benefiting from opportunities is just, even if the opportunities are not precisely meritocratic. And we think such belief formation runs deeper than pure self-serving bias and is indeed at the preference level, for the effect of the rich-by-luck treatment is much larger and more significant than a simple updating of relative income positions (Treatment 8).

In fact, we observe sometimes even opposite effects for the people who reported to have higher economic pressure, i.e. who are more likely to be the "unlucky" in the last 40 years of development and did not benefit from growth opportunities. In [Table 5](#), we notice that the heterogeneous treatment effect is positive for those who self-reported to have high economic pressure. They actually increased their support for redistributive policies after the treatment, but not by as much as those who decreased their support, and sometimes not significantly. Our hypothesis is that they do not have as a strong incentive for having a non-meritocratic belief, and might actually consider the examples as unfair and undeserving.

There are other potential explanations for the treatment effect we observed. One of which, along the lines of [Alesina, Stantcheva, and Teso \(2018\)](#), is that Chinese people might perceive the government in a way similar to Republican Americans, where the government itself is the problem. Thus, when seeing people getting rich or poor by luck and government failing to assist them, they demand less government duty. This could explain the treatment effect for the "poor by luck" treatment. However, we think this is unlikely because of the high baseline support for redistributive policies and high demand for government reliefs. Another explanation could be that Chinese people consider seizing the opportunities and making use of good luck another kind of effort. In the context of our experiment, this explanation is indistinguishable from thinking that such events of getting rich are due to pure luck, but luck is fair. In our next steps, we plan to delve deeper into Chinese people's formation of fairness preferences, division of luck and effort in their fairness reasoning, as well as the theoretical underpinnings of un-meritocratic fairness preferences in the developing world in general.

5 Conclusion & Future Steps

With this experiment, we examine redistributive preferences in China where high-growth state capitalism co-exists with an over-arching and persistent socialist narrative. We document a global high support for government provision and a decrease in support for redistribution when we prime the "luck/unmeritocratic component" of the income generating process. We interpret this treatment effect as an increased identification with the deserving-ness of the rich: Chinese people think the rich are more deserving after observing these typical Chinese enrichment stories due to luck, suggesting the presence of very strong libertarian fairness preferences, especially among those who self-report to have low economic pressure.

Two directions of research present themselves in the future. Firstly, we are interested in better understanding the coexistence of high demand of government provision and low willingness to redistribute from the rich. We hypothesize that the willingness to support redistribution depends strongly on the framing of the issue at hand: support would be strong if redistribution is understood as government provision of public goods and support would be low if it's perceived as a direct transfer. Secondly, we will continue delving into the mechanisms of our observed treatment effects, especially those identified with our "Rich by Luck / Poor by Luck" vignettes. In particular, we'd like to know what the division of luck and effort is in terms of the sources of income inequalities in the Chinese mentality, what they consider to be fair in the generation of income gaps and how that deviates from the western baseline meritocratic fairness preferences. These are both meaningful questions in deciphering the determinants of redistributive preference not only in China, but also potentially in developing countries at large.

References

- Alesina, A., & Glaeser, E. L. (2004). *Fighting poverty in the us and europe: A world of difference*. Oxford University Press.
- Alesina, A., Miano, A., & Stantcheva, S. (2018). *Immigration and redistribution* (Tech. Rep.). National Bureau of Economic Research.
- Alesina, A., Stantcheva, S., & Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2), 521–54.
- Almås, I., Cappelen, A., Sørensen, E., & Tungodden, B. (2021). Fairness across the world: Preferences and beliefs. *Working paper*.
- An, W., & Ye, M. (2017). Mind the gap: Disparity in redistributive preference between political elites and the public in china. *European Journal of Political Economy*, 50, 75–91.
- Benabou, R., & Ok, E. A. (2001). Social mobility and the demand for redistribution: the poum hypothesis. *The Quarterly Journal of Economics*, 116(2), 447–487.
- Benabou, R., & Tirole, J. (2006). Belief in a just world and redistributive politics. *The Quarterly journal of economics*, 121(2), 699–746.
- Cappelen, A., Falch, R., Huang, Z., & Tungodden, B. (2021). How do adults handle inequality between children? large-scale experimental evidence from china and norway. *NHH Norwegian School of Economics Working paper*.
- Cavaillé, C., & Trump, K.-S. (2015). The two facets of social policy preferences. *The Journal of Politics*, 77(1), 146–160.
- Chen, Y., Wang, H., & Yang, D. (2017). Salience of history and the preference for redistribution. *Available at SSRN 2717651*.
- Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, 98, 100–112.
- Fehr, D., Mollerstrom, J., & Perez-Truglia, R. (2019). Your place in the world: The demand for national

- and global redistribution. *NBER working paper*(w26555).
- Holland, A. C. (2018). Diminished expectations: redistributive preferences in truncated welfare states. *World Politics*, 70(4), 555–594.
- Hoy, C., Cognome, N., & Merdikawati, N. (2020). *How does information about inequality shape voting intentions and preferences for redistribution? evidence from a randomized survey experiment in indonesia* (Tech. Rep.).
- Hoy, C., Mager, F., et al. (2019). *Why are relatively poor people not more supportive of redistribution? evidence from a survey experiment across 10 countries* (Tech. Rep.).
- Huang, X. (2019). Social cleavages and preferences for government redistribution in contemporary china. *Studies in Comparative International Development*, 54(3), 415–450.
- Iversen, T., & Soskice, D. (2006). Electoral institutions and the politics of coalitions: Why some democracies redistribute more than others. *American political science review*, 165–181.
- Karadja, M., Mollerstrom, J., & Seim, D. (2017). Richer (and holier) than thou? the effect of relative income improvements on demand for redistribution. *Review of Economics and Statistics*, 99(2), 201–212.
- Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica*, 75(1), 83–119.
- Kuziemko, I., Norton, M. I., Saez, E., & Stantcheva, S. (2015). How elastic are preferences for redistribution? evidence from randomized survey experiments. *American Economic Review*, 105(4), 1478–1508.
- Meltzer, A. H., & Richard, S. F. (1981). A rational theory of the size of government. *Journal of political Economy*, 89(5), 914–927.
- Pellicer, M., Piraino, P., & Wegner, E. (2019). Perceptions of inevitability and demand for redistribution: Evidence from a survey experiment. *Journal of Economic Behavior & Organization*, 159, 274–288.
- Piketty, T., Yang, L., & Zucman, G. (2019). Capital accumulation, private property, and rising inequality in china, 1978–2015. *American Economic Review*, 109(7), 2469–96.
- Roth, C., Settele, S., & Wohlfart, J. (2021). Beliefs about public debt and the demand for government spending. *Journal of Econometrics*.

Smyth, R., Mishra, V., & Qian, X. (2010). Knowing one's lot in life versus climbing the social ladder: The formation of redistributive preferences in urban china. *Social Indicators Research*, 96(2), 275–293.

Whyte, M. (2014). *Myth of the social volcano*. Stanford University Press.

Xie, Y. (2016). Understanding inequality in china. *Chinese Journal of Sociology*, 2(3), 327–347.

Xun, Z. (2015). Preference for redistribution and inequality perception in china: Evidence from the cgss 2006.

6 Appendices

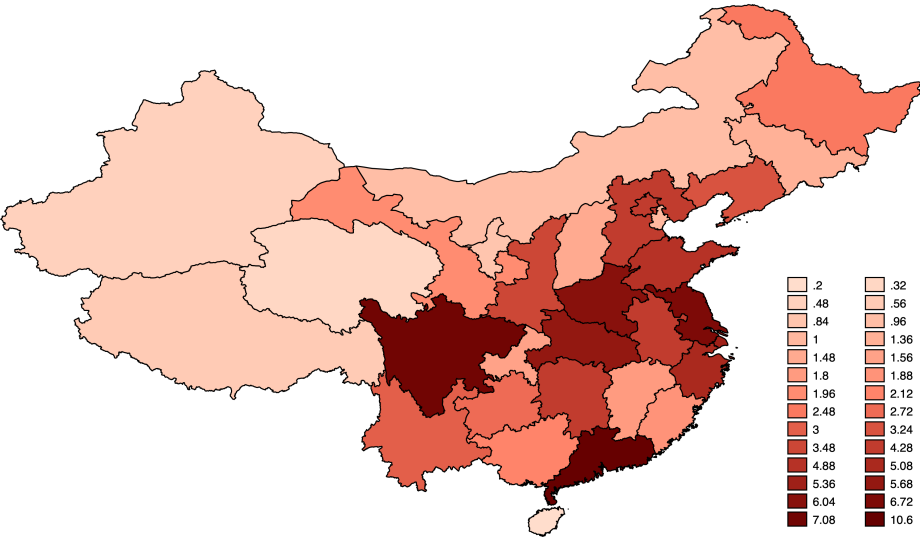
6.1 Experiment Preparation

Profile Summary of Qualitative Interviewees

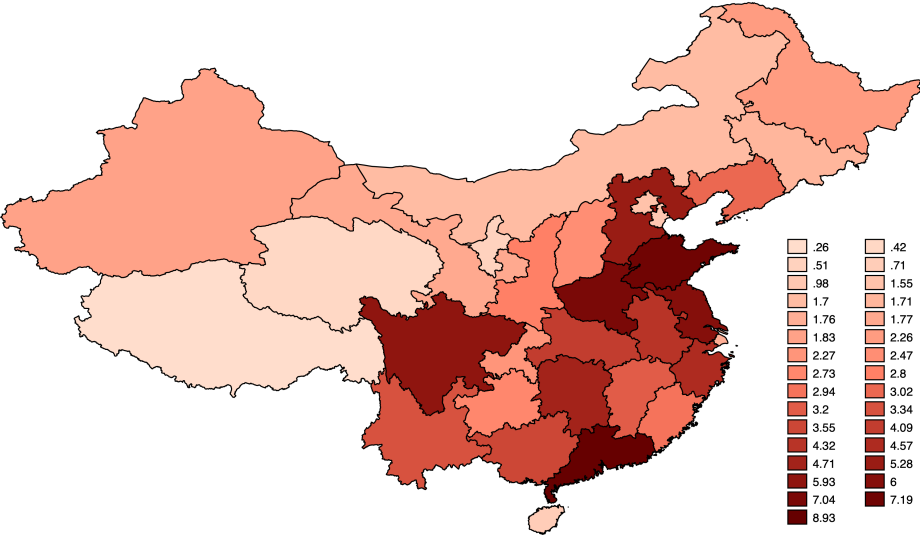
Gender	Age	Hukou	Occupation	Income(yuan/month)	Social Class
Male	51	Beijing, Metropolis	IT research	Unclear but "competitive"	Middle Class
Female	49	Beijing, Metropolis	Publisher, Middle Management	Unclear but "ok"	Middle Class
Female	61	Shandong, City	Retired	2.5 k	Lower Middle Class
Female	32	Shandong, Rural	Middle School Teacher	5k	Lower Middle Class
Female	70	Shandong, Non-agricultural	Farmer		Lower Class
Male	60	Henan, Agricultural	Staff on Uni Campus		Middle Class
Female	37	Hebei, City	Masseuse	5k-6k	Lower Middle Class
Male	21	Henan, Rural	Hairdresser	10k	Lower Middle Class
Male	45	Beijing Metropolis	Taxi Driver	8k	Lower Middle Class
Female	39	Hebei, Rural	Cook	5k	Lower Class
Female	45	Hebei, Rural	Campus Security		Lower Class
Male	30	Guangzhou, Metropolis	Civil Servant	20k	Middle Class
Male	32	Zhejiang, City	Civil Servant		Middle Class
Male	47	Shenzhen, Metropolis	Entrepreneur	83-250k	Upper Middle Class
Female	58	Guangdong, City	Retired	(Family) 6-7k	Lower Middle Class
Male	22	Henan, Rural	Car Repair	5k	Lower Class
Male	25	Jiangxi, City	Bank Teller	5k	Lower Middle Class
Male	60	Shandong, Rural	Hired Farmer	4k	Lower Class
Male	33	Hubei, Rural	Hairdresser	6-7k	Lower Middle Class
Male	23	Jiangxi, City	Engineer in SOE	6-7 k	Lower Middle Class

6.2 Geographical Outreach of Online Experiment

Population Share at the Province Level (Sample Figure - Percent)



Population Share at the Province Level (National Figure - Percent)



6.3 Randomization Protocol

The pilot data are collected online through a Chinese survey firm between the 3rd and 15th of September, 2021. The total sample size is 2,500 and is collected through a quota system that aims to be as nationally representative as possible.

Since we require each treatment group to retain roughly the same population structure as the whole sample, the survey firm adopted the below-mentioned method to ensure sub-sample representative-ness.

- Multiply the demographic quota with the sub-sample size and retrieve the number of questionnaires required in each "slot". For example, for the first treatment group of 300 people, 150 men and 150 women are required, then a "slot" of 150 men and 150 women are created.
- Distribute the questionnaire to a first wave of potential respondents, of which about 5-10% could become valid samples.
- If an individual slot is filled, then the system will stop accepting answers from people that fit in this slot. They will be shown the message "Thanks for your participation, but you do not satisfy the condition of survey."
- If after the first round of questionnaires, there are still slots that are unfilled, the survey firm will distribute the questionnaire for a second round.
- Repeat the process until all quotas are filled.

6.4 Quotas Imposed

1. Gender

- 50% male
- 50% female

2. Age

- Between 18 and 35 years old (including 35 years old): 40%
- Between 35 and 50 years old (including 50 years old): 40%
- Over 50 years old: 20%

3. Geographical Origin

- North China: 12%
- Northeast China: 7%
- East China: 30%
- Central China: 16%
- South China: 13%
- Southwest China: 15%
- Northwest China: 7%

4. Migrant

- Migrant Status: 30%
- Non-Migrant Status: 70%

5. Usual Residence

- Urban/Peri-urban residence: 64%
- Rural residence: 36%

6. Income

- Gross personal income up to ¥50,000 per year (including those with no income, also including ¥50,000): 50%

- Gross personal income of ¥50,000 to ¥100,000 per year (including ¥100,000): 30%
- Gross personal income of ¥100,000 or more per year: 20%

7. Education

- Junior high school degree and below: 60%
- High school education and below, junior high school education and above: 20%
- University degree and above: 20%

6.5 Representative Vignettes in Treatment Arm One and Two

- **Treatment Arm One: Getting Rich by Luck**

Since the reform and opening up, China has accumulated more and more national wealth. Some people have become rich through various means. For example, please read the following three stories.

1. Wang is the owner of a medium-sized enterprise in a city in Zhejiang. Since 2000, he joined a local real estate hunting group to buy real estate around the country for investment. The practice of purchasing in a group makes it easier to bargain with developers, and Wang has turned his 1.1 million investment into 10 million in just a few years.
2. Li's family lives in a city in Jiangsu Province, his parents founded a family business and they have become famously rich in their hometown after years of operation. Li did not have good grades as a child and was sent to study abroad by his parents. After graduating from college and returning to China, he joined the family business and worked as vice CEO. Liu, who is the same age as Xiao Li, graduated from a key university and joined the business as a sales manager; his annual salary is 120,000 yuan. Both Li and Liu work very hard, but Li's salary is 30 times higher than Liu's.
3. Zhang's family bought a small property right in Shenzhen's urban village in 2000, with an approximate area of 120 square meters, and the total price at that time was some 100,000 yuan. In 2019 demolition finally arrived, and the compensation standard for demolition was 100,000 yuan per square meter. With 12 million yuan in hand, the Zhang family became millionaires at once.

- **Treatment Arm Two: Stuck in Poverty due to Bad Luck**

Since the reform and opening up, China has accumulated more and more national wealth. Some of them are still poor people for various reasons, however. For example, please read the following three stories.

1. Wang, who lives in a city in Hebei, used to be a worker in a factory and lost his job three years ago because of the factory's poor performance. Because of his age and poor health, he has now found a temporary job. Wang's wife is a sanitation worker who wakes up at 4 a.m. every day to go to work. Wang and his wife need to support their parents and kid who is still in school, so the family lives in great difficulty and can hardly save much money.

2. Li lives in a village in Jiangxi. He and his wife's main source of income is farming and part-time jobs. After a lifetime of hard work, they finally sent their only son to college in Nanchang. After graduating from college, their son stayed in Nanchang to work. As life gets better, however, Li's wife unfortunately got uremia. Their son who just started working doesn't have much savings. To give his wife treatment, the family spent all their savings and returned to poverty because of illness, so to speak.
3. Zhang lost her job after giving birth to her second child because her firm closed down and she has been a housewife ever since. But when she was 39 years old, her husband divorced her because he had a new love. She barely got any property from the divorce and her ex-husband pays little support and is often in arrears. She now works several jobs to support her two children. She works as a janitor at a firm during the day and part-time at a nearby restaurant at night, but she can barely make ends meet and has to find places to borrow money for her children's tuition fees.

6.6 Details of Outcomes of Interest

- **Policies pertaining to taxing the rich**

1. Asset tax (tax on the very rich): For whatever reason, the rich should pay an annual asset tax if their total assets exceed a certain limit.
2. The top 0.1% of the ultra-high income group (1.4 million people) would be subject to annual state audits and disclosure of their income sources.
3. Real estate taxes should be imposed on people who own two or more real estate properties
4. Unconditional maximum income limit: No one can have an annual income above a ceiling for any reason.
5. We should strictly restrict the rich people from transferring assets overseas.

- **Policies pertaining to helping the poor**

1. Students from poor families or underdeveloped areas should have reserved quota in key universities and key high schools.
2. Low-income families would be reimbursed for most treatment costs for serious chronic and major illnesses.
3. Set a uniform national minimum wage and the amount of the minimum wage will be further increased.
4. Urban affordable housing will be further expanded, mainly for young working people and those whose parents do not own urban housing.
5. Expanding the minimum living assistance program to more than twice its current coverage and increasing the amount of benefits.
6. The starting point of personal income tax should be further increased (currently the starting point is \$5,000).
7. Urban residents in developed areas will be obliged to go to poor areas for a year of compulsory rural work and poverty alleviation before the age of 30.

- **Statements pertaining to government responsibility**

1. Our government should take strong action to reduce the gap between the rich and the poor.

2. The government should use uniform test questions and admissions standards to allow everyone to compete fairly for higher education admissions.
3. Our government has a responsibility to provide appropriate jobs for everyone who wants to work.
4. It is just to let the government regulate the distribution of wealth and income.

6.7 Additional Analyses

Table 7: Treatment Effects on Detailed Policy Outcomes (1)

VARIABLES	(1) Wealth Tax	(2) Property Tax	(3) Auditing	(4) Capital Control
Rich by Luck	-0.0722** (0.0338)	-0.0135 (0.0383)	-0.0373 (0.0337)	-0.0768** (0.0325)
Rich by Luck & Tax Salience	-0.0547* (0.0329)	0.0128 (0.0379)	-0.1010*** (0.0355)	-0.0406 (0.0308)
Poor by Luck	-0.0359 (0.0326)	0.0214 (0.0378)	-0.0133 (0.0321)	-0.0156 (0.0305)
Poor by Luck & Tax Salience	-0.0354 (0.0328)	-0.0005 (0.0389)	-0.0089 (0.0322)	-0.0437 (0.0314)
Macro Narrative	0.0164 (0.0294)	0.0810** (0.0349)	-0.0064 (0.0306)	0.0071 (0.0283)
Micro Narrative	0.0204 (0.0287)	0.0638* (0.0353)	0.0057 (0.0309)	-0.0154 (0.0289)
Growth & Redistribution	-0.0213 (0.0301)	-0.0017 (0.0365)	-0.0191 (0.0309)	-0.0009 (0.0283)
Income & Mobility Updating	-0.0279 (0.0306)	-0.0124 (0.0368)	-0.0647** (0.0328)	-0.0315 (0.0296)
Observations	2,500	2,500	2,500	2,500
CF Partialling-Out Controls	YES	YES	YES	YES
Control Mean	0.840	0.690	0.813	0.853
No. of Controls Selected	17	24	29	19

*** p<0.01, ** p<0.05, * p<0.1.

Table 8: Treatment Effects on Detailed Policy Outcomes (2)

VARIABLES	(1) Income Ceiling	(2) Poor Student Quota	(3) Free Healthcare Poor	(4) Raise Min. Wage
Rich by Luck	-0.0234 (0.0411)	-0.0506 (0.0395)	-0.0268 (0.0242)	-0.0343 (0.0338)
Rich by Luck + Tax	-0.0275 (0.0413)	-0.0370 (0.0395)	-0.0334 (0.0244)	-0.0560* (0.0336)
Poor by Luck	-0.0145 (0.0411)	0.0559 (0.0384)	0.0101 (0.0219)	-0.0525 (0.0341)
Poor by Luck + Tax	-0.0688* (0.0409)	0.0362 (0.0383)	0.0007 (0.0224)	0.0114 (0.0318)
Macro Narrative	0.0276 (0.0392)	0.0250 (0.0376)	-0.0079 (0.0217)	-0.0138 (0.0319)
Micro Narrative	-0.0325 (0.0390)	0.0564 (0.0361)	0.0039 (0.0216)	0.0234 (0.0305)
Growth & Redistribution	0.0267 (0.0397)	0.0291 (0.0375)	0.0016 (0.0217)	-0.0117 (0.0321)
Income & Mobility Updating	-0.0482 (0.0388)	0.0211 (0.0369)	-0.0116 (0.0220)	-0.0444 (0.0325)
Observations	2,500	2,500	2,500	2,500
CF Partialling-Out Controls	YES	YES	YES	YES
Control Mean	0.473	0.657	0.920	0.823
No. of Controls Selected	22	21	23	22

*** p<0.01, ** p<0.05, * p<0.1.

Table 9: Treatment Effects on Detailed Policy Outcomes (3)

VARIABLES	(1) Social Housing	(2) Double Dibao	(3) Raise Income Tax Threshold	(4) New Sent-down
Rich by Luck	0.0621** (0.0306)	-0.0242 (0.0368)	-0.0361 (0.0350)	0.0326 (0.0403)
Rich by Luck + Tax	0.0137 (0.0324)	-0.0047 (0.0359)	-0.0241 (0.0347)	0.0817** (0.0405)
Poor by Luck	0.0235 (0.0323)	0.0267 (0.0357)	0.0061 (0.0338)	0.0422 (0.0404)
Poor by Luck + Tax	0.0551* (0.0311)	0.0534 (0.0347)	0.0032 (0.0335)	0.0286 (0.0415)
Macro Narrative	0.0564* (0.0295)	0.0268 (0.0340)	0.0262 (0.0312)	0.0502 (0.0382)
Micro Narrative	0.0590** (0.0294)	0.0764** (0.0334)	-0.0246 (0.0329)	0.0403 (0.0388)
Growth & Redistribution	0.0344 (0.0311)	0.0302 (0.0338)	-0.0228 (0.0327)	0.0603 (0.0389)
Income & Mobility Updating	0.0573* (0.0293)	0.0309 (0.0345)	-0.0193 (0.0328)	0.0530 (0.0389)
Observations	2,500	2,500	2,500	2,500
CF Partialling-Out Controls	YES	YES	YES	YES
Control Mean	0.810	0.727	0.793	0.473
No. of Controls Selected	21	24	19	27

*** p<0.01, ** p<0.05, * p<0.1.

Table 10: Treatment Effects on Detailed Policy Outcomes (4)

VARIABLES	(1) Reduce Income Gap	(2) Job Provision	(3) Redist. Just	(4) Edu. Admission Standardize
Rich by Luck	-0.0366 (0.0267)	-0.0933*** (0.0353)	-0.0914** (0.0362)	-0.0442 (0.0345)
Rich by Luck + Tax	-0.0241 (0.0258)	-0.0486 (0.0345)	-0.0512 (0.0359)	-0.0480 (0.0343)
Poor by Luck	-0.0019 (0.0250)	-0.0517 (0.0344)	-0.1003*** (0.0369)	-0.0589* (0.0352)
Poor by Luck + Tax	-0.0236 (0.0262)	-0.0095 (0.0321)	-0.0991*** (0.0361)	-0.0377 (0.0348)
Macro Narrative	-0.0574** (0.0262)	0.0068 (0.0309)	-0.0430 (0.0340)	0.0163 (0.0319)
Micro Narrative	0.0002 (0.0237)	-0.0174 (0.0315)	-0.0003 (0.0331)	0.0032 (0.0317)
Growth & Redistribution	-0.0037 (0.0239)	0.0102 (0.0308)	-0.0178 (0.0337)	-0.0038 (0.0320)
Income & Mobility Updating	-0.0198 (0.0247)	-0.0219 (0.0315)	-0.0497 (0.0342)	-0.0093 (0.0321)
Observations	2,500	2,500	2,500	2,500
CF Partialling-Out Controls	YES	YES	YES	YES
Control Mean	0.900	0.807	0.770	0.813
No. of Controls Selected	30	22	27	21

*** p<0.01, ** p<0.05, * p<0.1.

Table 11: Causes of Wealth & Poverty

Panel A: Causes of Wealth			
Survey Wave	2004	2009	2014
Ability	0.693	0.728	0.706
Efforts	0.615	0.680	0.679
Connections	0.599	0.514	0.589
Education	0.601	0.564	0.468
Opportunity	0.452	0.403	0.523
Luck	0.391	0.342	0.397
Dishonesty	0.174	0.179	0.205
System	0.259	0.202	0.284
Family		0.426	0.473
Parental education		0.304	0.331
Ambition		0.472	0.488
Panel B: Causes of Poverty (a lack thereof)			
Survey Wave	2004	2009	2014
Ability	0.612	0.651	0.634
Efforts	0.538	0.649	0.613
Discrimination	0.212	0.199	0.250
Education	0.541	0.532	0.423
Opportunity	0.273	0.257	0.361
Luck	0.269	0.279	0.291
Character	0.311	0.320	0.337
System	0.210	0.154	0.233
Family		0.311	0.344
Parental education		0.232	0.251
Ambition		0.412	0.423

Numbers indicate the fraction of individuals answered "agree" or "strongly agree" that a given factor is important in either a person becomes rich or stays poor.

Source: China Inequality and Distributive Justice Survey