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

Keywords: Redistribution; Fairness Preferences; Income Inequality; Tax

Salience; Social Mobility; Government Duty; Beliefs



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

China *

(Very Preliminary: Please Do Not Circulate!)

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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 incomegenerating 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

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 the origins of diverging redistributive preferences in rich democracies, with the U.S. being more optimistic (albeit wrongfully so) about social mobility and displaying weaker preferences for redistribution, and many parts of Europe, on the other hand, being relatively more pessimistic about mobility outlooks with stronger preferences for redistribution (Alesina & Glaeser, 2004; Benabou & Tirole, 2006; Alesina, Stantcheva, & Teso, 2018; Iversen & Soskice, 2006).

Causal evidence on how redistributive preferences are shaped in emerging economies is, however, still quite incomplete.¹ This lacuna only starts to be filled in quite recently, with a nascent literature attempting to understand an empirical puzzle, which is 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).

Some claim that such a puzzle is due to the fact that citizens in the developing world are severely misinformed. They 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, experimental evidence on the effects of "relative income position updating" is quite mixed. Some researchers find that "negative updating" 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). 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" and consequently it further damps their support for redistribution.

We contend that the demand for redistribution in transitioning economies³ could be unpacked into two distinct yet associated dimensions: along one dimension, citizens could be seemingly displaying a rather high demand for redistribution, which is in effect a high demand for government services and public goods provision; on the other hand, given the rather recent introduction of market economy in

¹Most of the existing studies focus on quasi-experimental settings which induced a potentially exogenous increase in wealth or property ownership, etc, hence altering redistributive preferences accordingly (Di Tella, Galiant, & Schargrodsky, 2007; Andersen et al., 2020)

²informing the respondents that they are poorer than they think they were

³Here we take the broad definition of transitioning economies as those which are currently transitioning from centrally-planned economies towards market-based economies.

these countries, citizens may manifest strong desires for wealth accumulation and "keep what you earn", as a result they could be opposed to redistribution when their own economic interests are at stake.

This is echoed by some recent cross-country evidence (Almås et al., 2021) which reveals that across the world, individuals seem to uniformly display a high demand for government intervention in reducing income inequalities, which is especially true among middle-income and low income countries as well. However, while asked about questions more pertaining to individual-level interests, citizens worldwide, especially those residing in the developing world, are quite reluctant to equalize income among two hypothetical individuals via direct redistribution. This dimension on the reluctance to redistribute has been associated with the notion of fairness preferences. In particular, citizens in the developing world appear to hold more "libertarian" fairness preferences than citizens from the developed world(Almås et al., 2021). That is to say, in developing countries, income inequalities generated by both luck and effort are regarded to be fair or legitimate; or alternatively, people do not make a distinction between income differences generated by luck or effort. This is opposed to the standard western meritocratic fairness views, which only regard income differences generated by effort and talent as legitimate.

As such, the combination of high demand for government duty in reducing income gaps and such libertarian fairness preferences itself presents an interesting puzzle: why would citizens, especially in the developing world, be seemingly pro-redistribution in terms of government duty, while against effective redistribution in terms of fairness views? This project aims to understand the role of fairness preferences on redistribution propensity, as well as the interplay between fairness views and the perception of government duty to redistribute, via the case of contemporary China.

Ever since the reform and opening-up policies instituted in the late 1970s, China has seen unprecedented economic growth and capital accumulation. Such sustained growth in the past four decades originated from economic liberalization, which set people free to reap the fruits of their initiatives. Furthermore, compared with the extremely impoverished landscape prior to economic reforms, Chinese citizens' desire for property ownership and wealth accumulation might be even more pronounced. All these factors combined together, it's not far-fetched to hypothesize that Chinese citizens could regard all potential sources of income (either via luck or effort) to be justified. In other words, the Chinese public could hold extremely libertarian fairness preferences with regard to varying sources of income inequalities, against the backdrop of a liberalizing economic regime exalting "keep what you earn".

However, on the other hand, unlike other post-communist states, the Chinese government still officially holds the doctrine of socialism and actively uses socialist discourse in its social policies, for example the

poverty eradication campaign.⁴ As such, Chinese citizens could still intuitively exhibit high demand for government intervention in all kinds of social policies, even in the domain of reducing income inequalities.

Accordingly, we'd like to answer the following research questions in this project:

- 1. How do Chinese citizens' fairness views affect their preferences for redistribution?
- 2. How could they be seemingly against levelling down the rich on the one hand, while demanding government provision on the other?

We conducted a pilot online randomized experiment in order to gain some first-order insights into these inquiries.⁵ We found that descriptively speaking, Chinese citizens exhibit a very high level of support for inequality-reducing policies, as well as the government's duty to regulate income distribution across the board, which concurs with our prior that people do have high expectations of government responsibilities, even in the domain of inequality-reducing social policies.

However, rather surprisingly, highlighting the "unmeritocratic" component of the income generating process in either becoming rich or staying poor makes them significantly less supportive of redistributive policies specifically targeted at taxing the rich, and also less supportive of government duties in regulating the income gap. This seems to reconfirm our hypothesis that Chinese people might be holding extremely libertarian fairness preferences, and making such preferences more salient puts a damp on their propensity to redistribute from the rich to the poor. We further observe that the effect is mainly driven by a part of the population who self-report to have relatively low economic pressure.

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' misperceived beliefs on inequality, social mobility relative income positions, the overall taxation or public spending structures, etc., 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 countries, yet another important piece of puzzle missing in this strand of literature, is citizens' fairness views into the right-hand-side of the equation.

Secondly, attempting to comprehend how varying attitudes towards redistribution arise in China will help advance our understanding of redistributive preferences in the developing world at large. As men-

⁴See the recent report in The Economist: extreme poverty was declared to be eradicated in China by the end of 2020. https://www.economist.com/china/2021/01/02/extreme-poverty-is-history-in-china-officials-say

⁵We do not claim that our pilot helps us answer these questions completely, but rather it assists us in navigating forward for our better-rounded experiment in the future.

⁶On overall inequality: Fehr et al. (2019); Pellicer et al. (2019); Hoy et al. (2020); 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)

tioned previously, demanding government services coupled with libertarian fairness preferences is not unique to China.⁷ Consequently, understanding the causal mechanisms behind the emergence of such redistributive preference combinations in China might shed light on how redistributive preferences are formed in a lot of other similarly burgeoning transitioning economies as well, especially providing an alternative explanation as to the puzzle of "low demand for redistribution" in the developing world.

Furthermore, 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.

On a measurement note, our study also aims at testing out a new way of measuring redistributive preferences: tangible policies of real personal stakes. In representative surveys and previous experiments, redistributive preference is often measured by representative and all-encompassing questions, such as "Should the government redistribute more?" or "Is it the government's responsibility to reduce income inequality in the country?", which do not show the potential independence and asymmetry between preferences for "taxing the rich" and "helping the poor." We plan to tackle these issues by asking participants to choose politically feasible policies about "taxing the rich" and "helping the poor" separately, and then they would be faced with a shrinking choice set of the policies they have agreed to, which will be further boiled down to the revelation of their favorite policy to be implemented in real life.

2 Motivating Statistics & Research Questions

National and international survey data appear to reconfirm our aforementioned priors that Chinese people indeed regard the rich to be very deserving, while at the same time, they also perceive the government to be responsible in reducing the income gaps.

In summary statistics reported with ISSP-2009 data⁸ in Figure 1, where we plot the fraction of individuals agreeing that the government should intervene to reduce income inequalities against the fraction of

⁷However, such conflicting preferences are potentially manifested in its most extreme form in the Chinese context, as such for the pilot we decide to focus on China where it might be most likely for us to detect an effect. If conditions permit, we would like to develop it into a comparative project in the longer term.

⁸International Social Survey Program - 2009

individuals finding it just that the rich could buy better education for their children, we observe that at the cross-country level, there is a rather robust negative correlation between these two measures. What's more, consistent with the observations from Almås et al. (2021), the cross-country average support for government responsibility in reducing income gap is quite high (with the mean standing at around 0.7). This is in direct contrast to the much lower cross-country average support for the "deserving-ness" of the rich in affording better-quality education at the intergenerational level, where on average only 20% of the individuals regard the statement to be fair. However, China (circled in red) seems to stand out as an anomaly in this cross-country comparison. On the one hand, similar to many other countries in the sample, the Chinese public do display a quite high level of support for government duty in fighting against inequalities. On the other hand, more than 60% of Chinese people find it fair that the rich could purchase better-quality education for their children. The same pattern is observed if we replace the purchase of education with that of healthcare (Figure 2). Education is particularly intriguing as the conventional wisdom holds that East Asian societies value meritocracy.

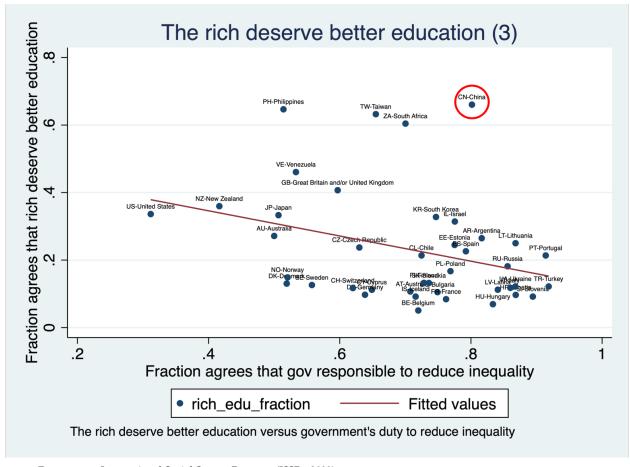


Figure 1: Deserving-ness of the rich versus perception of inequality

- Data source: International Social Survey Program (ISSP 2009)
- The values in the figure indicate the fraction of individuals in a given country agree or strongly agree with the statement labelled along the y- or x-axis.

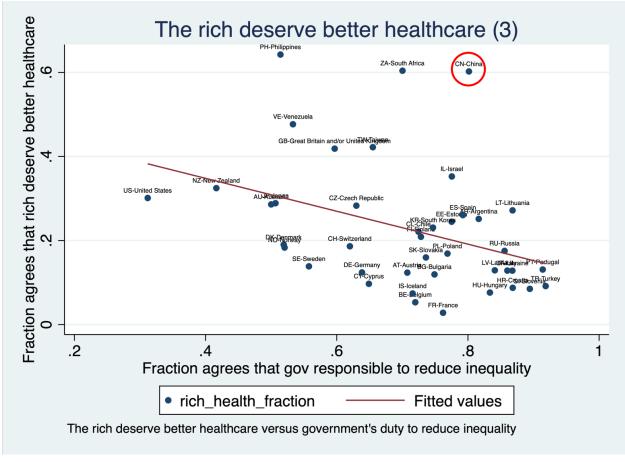


Figure 2: Deserving-ness of the rich versus perception of inequality

- Data source: International Social Survey Program (ISSP 2009)
- The values in the figure indicate the fraction of individuals in a given country agree or strongly agree with the statement labelled along the y- or x-axis.
- Additionally, in this figure, China completely overlaps with South Africa.

Such quasi-libertarian fairness views are more vividly represented in another nationally representative social survey. Summary statistics on some of the key questions from this survey dataset are reported in Table 1. Overall, the general patterns on inequality perception and attitudes towards the rich which we observed previously are re-confirmed. On the one hand, an overwhelming majority of the Chinese people do realize that the income gap is getting larger. Such an income gap is a major problem even to the extent of threatening social stability and it is the government's responsibility to reduce such inequality (Panel-A of Table 1). On the other hand, however, in order to address such inequality, direct redistribution from the rich to the poor is frowned upon. Only a minority of the Chinese people agree that distributing income equally among people is the most just method and that the government should regulate the highest level of income an individual could achieve (Panel-B of Table 1).

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

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.

Insights gleaned from such aggregate summary statistics based on two independently conducted representative surveys are complemented with in-depth qualitative interviews we conducted earlier this year in China, with twenty representative individuals from all walks of life. ¹⁰

A few major insights gleaned from these qualitative interviews are the following:

1. Most of our respondents are ignorant about China's tax system, and as a result, do not have a clear consciousness of being taxpayers. Due to the fact that the minimum income tax threshold in China is in reality higher than the median income, ¹¹ the majority of our interviewees thus "correctly" reported having paid "zero tax", and didn't know how much rich people have paid. Those who did give an

⁹Namely 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 and perceptions on inequality, redistribution, etc with three waves in 2004, 2009 and 2014.

¹⁰These interviews were conducted by well-trained sociology concentrators from Tsinghua University. 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.

¹¹The lowest taxable income bracket starts at 60,000 yuan per year, which is twice the median income. Information about China's personal income tax could be found on the website of China State Tax Administration (In Chinese); Median income data from the National Bureau of Statistics.

answer vastly underestimated the top income tax rate: answers ranged between 2% and 20% while the actual top marginal income tax rate is 45%. Such low tax salience might explain why Chinese citizens could be endorsing two contrasting dimensions of redistributive preferences at the same time, which we will detail more below in the section on hypotheses formation.

- 2. Despite theoretically speaking high welfare coverage, expenditures on education, healthcare and oldage support are still heavy burdens for most of our interviewees. Rural residents or informal workers pay their own commercial pension scheme and it is a massive component of regular spending (can be up to 30% of annual income). We conjecture that it's exactly due to potentially low effective coverage of social welfare, that people are demanding more government provision across the board.
- 3. Overall, our interviewees widely acknowledge inter-generational wealth transmission as justified. People generally think that parents passing down wealth to their children is legitimate because they think the older generations have worked hard to accumulate their wealth in the past. This might to a certain extent explain the high support for the deserving-ness of the rich, as the Chinese public might think of family structures in a more dynastic way.

3 Theoretical Motivations and Expectations

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

3.1 The Undeserving Rich, the Deserving 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 in a way related to the recent work from Cavaillé and Trump (2015), where the authors have also detected a seeming disconnect between redistributive attitudes with regard to taking away from the rich, and redistributive attitudes related to helping the poor in advanced democracies.

In addition to this first-order psychological disconnection, the specificities of the fiscal regime in China 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 developed western democracies, is charged only at the top of the income distribution in China and makes up only 5% of fiscal revenues. 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.

Thus, we hypothesize that Chinese people - like people in developed countries - consider "taxing the rich" and "helping the poor" separately: they dislike the first but support the latter. This set of preferences was enabled by the fiscal regime in China, which gives people an impression of having paid no tax, but having received benefits at the same time.

As such, in terms of our experimental designs, we will first try to test whether the Chinese public are indeed separating "redistribution-to" and "redistribution-from" policies in their mentality. Specifically, we will prime each dimension of redistribution separately (taxing the rich, or helping the poor) and observe whether such 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 is real and existent.

After this first-stage treatment, we will additionally try to help people establish the link between

¹²Aggregated government revenue by source and by use could be found on the official webpage of the the State Council (in Chinese).

public spending and taxation to emphasize that "the wool comes from the sheep's back" and what they have effectively paid and received from the government. We plan to do this by informing our subjects in an experiment setting about the total amount of tax that they have paid (both in terms of direct and indirect taxation), and some stylized facts about the current schemes of transfers.

3.2 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 questions on "government action in poverty reduction" versus when they are asked questions on more specific "redistribution policies".

Further 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 meritocracy and loss aversion, which could potentially lead to redistribution aversion.¹³

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.

¹³This 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.

3.3 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. 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:

- 1. Getting rich (for the whole country) is a pre-condition for redistribution.
- 2. 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.

This is echoed with the official discourse of "common prosperity" from the Chinese government,¹⁴ and the recent official announcement that the government intends to establish a "common prosperity" demonstration area in one of the most economically advanced provinces in China,¹⁵ which ties back to the notion that growth may indeed be regarded as a precondition for redistribution within official dialogues as well.

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.

¹⁴Specifically 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."

¹⁵See 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.

3.4 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 further 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.¹⁶

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:

- 1. 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.
- 2. 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.

3.5 Hypotheses and Treatment Designs

1. Hypothesis 1: The Undeserving Rich versus the Deserving Poor

- The fairness reasoning of "taxing the rich" and "helping the poor" could well be separate from one other.
- Treatment: In this treatment, we aim to separately provide cues and stories on the "luck/unmeritocratic 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

¹⁶Although 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.

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.

2. Hypothesis 2: Tax Salience

- 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.
- Treatment: In this treatment, we provide information of the effective tax burden of representative individuals at different positions of the income distribution in China. Firstly we provide information on the tax burden due to personal income tax alone, where the rich is relatively over-taxed compared to the poor, as the levy threshold of personal income tax is above the median income in China. Secondly, 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.

3. Hypothesis 3: Government Narratives

- 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.
- Treatment Macro Narrative: 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.
- Treatment Micro Narrative: 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.

4. Hypothesis 4: Growth and Redistribution

- The Chinese public could regard economic growth as a precondition of redistribution.
- Treatment: In this treatment, we further prime a China-specific narrative of "Common Prosperity", 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 China.

5. Hypothesis 5: Mis-Perceived Relative Income Positions & Social Mobility

- People may be averse towards redistribution if they perceive themselves to be much richer than they thought, or that the society is very mobile and it's easy for the poor to become rich (hence self-serving bias).
- Treatment: In this 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 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.¹⁷ 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.

3.6 Online Experiment Design

¹⁷This 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.

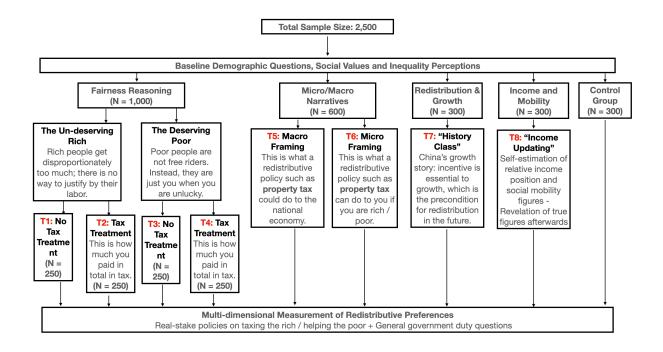


Figure 3: Experiment Design

3.7 Econometric Specifications

Following the convention in this strand of literature, we adopt the redistribution index as our main outcome of interest. It's constructed as an unweighted average (arithmetic mean) of the Z-scores of a host of policy outcomes. 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.

$$Redist_Index_Rich = \frac{1}{N} \sum_{i}^{N} \frac{X_i - \bar{X}_c}{\sigma_{X_c}}$$
 (1)

where $X_i = WealthTax_i$, $PropertyTax_i$, $IncomeCeiling_i$, $IncomeAuditing_i$ & $CapitalControl_i$

In addition to the index outcomes, we also adopt policy outcomes constructed as dummies, which

¹⁸This 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-meaned value by the control group standard deviation, in accordance with the original variable construction method from Kling et al. (2007).

indicate the general extent of support for a given redistributive policy.¹⁹

$$Agree_X_i = \begin{cases} 1, & \text{if } X_i = 4 \text{ or } X_i = 5\\ 0, & \text{otherwise} \end{cases}$$
 (2)

4 Summary Statistics

Due to the demographics 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

	(1)	(2)
Characteristics	Our Sample	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.

¹⁹In 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".

Table 3: General Support for Redistributive Policies

	(1)	(2)
Groups	Control Group (N=300)	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.

The first set of results center around the general level of support for redistributive policies among the Chinese population. As noted previously, our policy outcomes of interest divide 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, consistently across the categories we are interested in as well. 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 specific policies which garnered relatively lower support are "Unconditional Income Ceiling" and "New Sent-down Movement". The lack of enthusiasm for the first hypothetical policy is equally observed in another nationally representative survey in the past.²⁰ In terms

²⁰China Inequality and Distributive Justice Survey.

of the low level of support for "New Sent-down Movement", meaning sending educated young people to the countryside to help with rural development in a manner like military conscription, we conjecture that it could be due to the traumatic memories of the original sent-down movement back in the days of Cultural Revolution. Furthermore, the average support for policies specifically related to "government duty" is even higher, standing at a mean of around 80%.

5 Preliminary Results

5.1 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. Given the large total number of potential baseline demographic, socio-economic and value controls (110 variables in total) relative to our total sample size (2,500), as well as the fear that the complete inclusion of all these controls might absorb potentially important and interesting co-variation between our treatment dummies and the outcomes of interest, 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.²¹ 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.

²¹All 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)

	(1)	(2)	(3)	(4)
VARIABLES	All-Policies Index	Gov. Duty Index	Tax Rich Index	Help Poor Index
Rich by Luck	-0.0872**	-0.1588***	-0.1116**	-0.0288
	(0.0401)	(0.0550)	(0.0520)	(0.0445)
Rich by Luck & Tax Salience	-0.0303	-0.0569	-0.0399	-0.0099
•	(0.0406)	(0.0566)	(0.0528)	(0.0434)
Poor by Luck	-0.0095	-0.1252**	-0.0386	0.0659
•	(0.0388)	(0.0528)	(0.0511)	(0.0441)
Poor by Luck & Tax Salience	-0.0066	-0.0475	-0.0842	0.0802*
•	(0.0400)	(0.0539)	(0.0524)	(0.0438)
Macro Narrative	0.0233	-0.0413	0.0324	0.0582
	(0.0369)	(0.0500)	(0.0480)	(0.0418)
Micro Narrative	0.0423	0.0127	0.0101	0.0876**
	(0.0365)	(0.0490)	(0.0468)	(0.0417)
Growth & Redistribution	0.0178	0.0188	-0.0247	0.0472
	(0.0368)	(0.0492)	(0.0472)	(0.0435)
Income & Mobility Updating	-0.0316	-0.0781	-0.0884*	0.0459
, 1	(0.0387)	(0.0510)	(0.0510)	(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.

First of all, if we look at column 1 which specifies the outcome as an index of all sixteen potential redistributive policies (grouping the real-stake policies together with the government-duty policies), we could see 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 in support for redistribution compared to the control group. 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, and more opportunistic & luck-oriented dimensions of how rich people became rich in China nowadays has made them even less willing to level down the rich, or redistribute income away from the rich to the poor.

If we further decompose this aggregate measure into the three constituting indicies, 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. The government-duty effect is particularly strong with a 0.16 s.d. decrease. It indicates that our treatment could have triggered a more significant opposition against government intervention and regulation in the redistributive domain. Furthermore, what's noteworthy here is that the treatment of "Poor by Luck" also resulted in a significant decrease in support for government-duty policies, which is quite surprising on its own. This could potentially be reconciled if we believe that while being

presented with these vignettes, our respondents, in a similar fashion as where they regard the wealthy people who strike it rich via "luck" to be fair, they may also think the poor stuck in poverty not as a result of pure misfortune, but rather an indicator of lacking the necessary elements (such as talent or efforts) which could make them rich.

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 position and social mobility, we observed that Chinese public significantly underestimate their relative income positions as well as the social mobility figures. As shown by Figure 5, the average Chinese people underestimate their relative income position by 18 percent. Figure 6 shows that people think a child of a person in a high-level white collar job has 60% chance to stay a high-level white collar worker, while the true chance is 28%. This is the opposite of our prior that the Chinese people might project themselves to be in the middle-income position like other developing countries or be overly optimistic about the social mobility. In fact, the degree to which Chinese people underestimate their relative income positions is comparable to that of the Swedish people as documented by (Karadja et al., 2017).

The decrease in support for the taxing-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 position, being told that they are richer than they thought, thus decreased their support for policies taxing the rich.

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. Further 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 difficulties related to housing more acute. This 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 a somewhat mitigating effect of the significant decrease in redistribution support conferred by the "Rich/Poor by Luck" treatment, although there's no statistically discernible significant differences among these treatment arms alone, but the significant negative effects do turn insignificant with the additional layer of the tax salience treatment. This is somehow expected as the tax treatment is oriented towards informing the citizens of the "invisible" tax burden shouldered by the poor in China.

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

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" propagandist rhetoric has already been deeply imprinted in the Chinese mentality. As such, priming a somewhat familiar concept might 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 both treatment arms are the only ones that produced an increase in support for both initiating property tax, and an increase of social housing. This could very much be a 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.

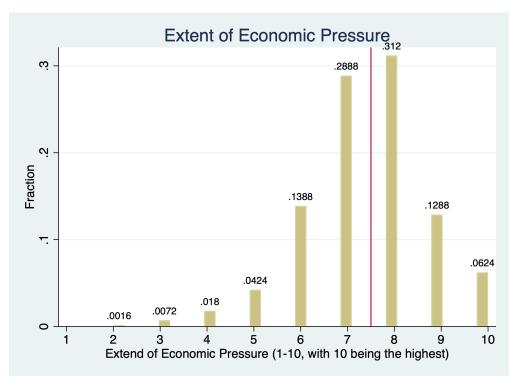


Figure 4: Extent of Economic Pressure (whole sample, N=2,500)

5.2 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 somewhat triggered reactions among our respondents such that on average, they regard the rich to be even more deserving, such "increased" identification with the rich should be more pronounced among the part of the population that is potentially less anxious economically. Given the rather incomplete as well as inaccurate information offered by self-reported income brackets, we resort to a more subjective measure of economic anxiety for additional heterogeneous treatment effects analyses.²³

At baseline, we surveyed our respondents their subjective perception 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.

 $^{^{\}rm 23}{\rm This}$ is true for almost all of the surveys conducted in China.

We construct a dummy variable of economic pressure as the following:

$$Dummy_EconPressure_i = \begin{cases} 1, & \text{if } EconPressure_i \ge 8 \\ 0, & \text{otherwise} \end{cases}$$
 (3)

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 treatment 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

	(1)	(2)	(3)	(4)
VARIABLES	All-Policies Index	Gov. Duty	Tax Rich Index	Help Poor Index
Rich by Luck	-0.1640***	-0.2059***	-0.1536**	-0.1483**
,	(0.0541)	(0.0792)	(0.0690)	(0.0603)
Rich by Luck × Econ Pressure	0.1350*	0.0857	0.0597	0.2188***
,	(0.0735)	(0.1012)	(0.0949)	(0.0828)
Rich by Luck & Tax Salience	-0.0922*	-0.1481*	-0.0995	-0.0548
	(0.0555)	(0.0803)	(0.0714)	(0.0572)
(Rich by Luck & Tax Salience) × Econ Pressure	0.1238*	0.1777*	0.1164	0.0868
	(0.0752)	(0.1048)	(0.0990)	(0.0807)
Poor by Luck	-0.0311	-0.1114	-0.0331	0.0194
•	(0.0512)	(0.0701)	(0.0646)	(0.0577)
Poor by Luck \times Econ Pressure	0.0330	-0.0259	-0.0138	0.0896
•	(0.0712)	(0.0964)	(0.0930)	(0.0816)
Poor by Luck & Tax Salience	-0.0025	-0.0382	-0.0707	0.0726
•	(0.0504)	(0.0697)	(0.0648)	(0.0566)
(Poor by Luck & Tax Salience) × Econ Pressure	0.0046	0.0062	-0.0171	0.0147
	(0.0750)	(0.0989)	(0.0984)	(0.0840)
Income & Mobility Updating	-0.0736	-0.0985	-0.1260*	0.0015
, 1	(0.0487)	(0.0709)	(0.0645)	(0.0561)
Income & Mobility Updating × Econ Pressure	0.0866	0.0484	0.0794	0.0913
7 1 0	(0.0696)	(0.0919)	(0.0917)	(0.0813)
Economic Pressure	0.0474	0.1319**	0.0812	-0.0182
	(0.0424)	(0.0578)	(0.0566)	(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 the 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 Eco	n Pressure				Iean Difference	
	Mean	S.D.	Mean	S.D.	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 Owndership	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		

6 Interpretation of Results

6.1 The Rich are More Deserving - and Why?

Why does support for redistribution (specifically in the domains of government duty and taxing-the-rich policies) significantly decrease after our treatment interventions, which prime the "luck/un-meritocratic component" of either becoming rich or staying poor?

To begin with, irrespective of the exact mechanisms at play, our information vignettes in these treatments must have triggered an increase in supporting the "deserving-ness" of the rich among our experiment subjects. To probe a bit further into the underlying mechanisms, we have a few different hypotheses as to why people now regard the rich to be more deserving.

6.1.1 Belief Updating: Getting Rich by Luck is More Likely

If we begin with the premise that our respondents indeed interpret these stories as "Rich by Luck", why would they consider striking it rich by "luck" so justified?

First and foremost, Chinese people do consider income differences due to "luck" to be relatively fair at baseline, as demonstrated by the cross-country experiment study from Almås et al. (2021), where Chinese citizens are the ones least willing to redistribute if income differences are only due to luck among all countries in their study.²⁴ Their results also correspond to our observations in the qualitative surveys where people widely regard inheritance and parental transmission of wealth to be legitimate. Hence, when our treatment emphasises the archetypical Chinese rich person getting rich via these factors, they feel that the rich people's incomes in general are more deserving and should be protected against taxation.

Furthermore, what's more interesting is that at baseline, Chinese people do not think luck to be a very important determinant of actual income inequalities, as it's shown from three waves of data from the China Inequality and Distributive Justice Survey, consistently across time, around 70 % of the individuals consider ability and efforts to be important factors in determining either an individual becomes rich or stays poor, while only 30% of respondents agree that luck is equally important. Consequently, in this potential mechanism, we conjecture that our treatment could have made our respondents update their prior beliefs on the relative roles of ability, merit and luck in determining actual income inequalities. In a way, our "Rich by Luck" intervention gives the impression that more Chinese people are rich due to luck and "updated" upwards respondents' beliefs on the importance of luck and pure opportunity as a source of actual income inequalities. Furthermore, since luck is considered a legitimate and fair source of income

²⁴They covered sixty most representative countries across the globe in their sample.

that should be protected, instead of increasing redistribution to correct the luck component of income, respondents actually become more more opposed to redistributing away the wealth from the rich.

Not Solely a "Self-serving Bias" Story

Such a belief updating process is also consistent with interpreting our heterogeneous treatment effects. As mentioned in Table 5, we detect that the decrease in support for redistribution is driven particularly by a part of the population which is relatively less anxious economically speaking. While exposed to the stories of getting rich by luck, respondents with low economic pressure (who are also relatively richer, although not by a very large margin) could be projecting themselves into these particular case studies. As such, a certain kind of "self-serving bias" could emerge, and their support for policies that aim at taking wealth away from "the rich" would accordingly decrease as well.

However, it's important to note that not all the decrease in support for redistribution was triggered by self-serving bias. As in another treatment arm where we inform our respondents of their true relative income positions and social mobility figures, an overwhelming majority significantly under-estimate their own economic positions. Past research in this strand of literature predicts that such an updating process should produce a large decrease in support for redistribution due to self-serving bias. Indeed, in Table 5 we also observe that the marginally significant decrease in support for taxing-the-rich policies is also driven by people with low economic pressure. However, the coefficient is slightly smaller than that on the "Rich by Luck" treatment arm.

Moreover, the "Rich by Luck" treatment not only triggered the "self-serving bias" along the dimension of making people less willing to take money away from the rich, individuals (with low economic pressure) also endorse much less government's involvement in regulating income gaps (decrease in support for redistributive policies emphasizing government duty). This ideological shift is quite striking, as our stories of individuals striking it rich either on their own, or via the unit of families (which in itself is also in distinction from the force of the public - government) could have made our respondents believe more in the initiatives of self-made men, with constrained government intervention on the side. This is not present in a conventional interpretation with self-serving perceptions.

6.1.2 Dog-whistling Effect: Pure Primer on "the Rich"

An alternative explanation to our treatment effect is that it could just be a simple dog-whistling effect. The experiment participants did not go through a belief updating process where they now think more realized income differences are due to luck, but they are simply triggered by something inherent in the word "rich people". In other words, it could well be a pure priming effect of mentioning the words "rich", "wealth",

etc. For the moment, we do not argue that this is a main mechanism driving our results, but given that we have no concrete evidence against it, we plan to test this concretely in the next step of our experiment.

6.1.3 Is "Luck" another kind of "Ability"?

In addition, another potential explanation is that Chinese people draw the luck/merit boundary rather differently, especially compared to citizens in the western world. They might still be meritocratic, but rather consider factors such as family inheritance and housing speculation a part of one's own merit, while they are more considered as pure background factors and luck in western countries. For example, Chinese people usually think that being able to seize the opportunity of demolition and choose to build a house in an area destined for demolition is an ability, thus deserving. They might equally think that being able to be born in a rich household is an ability, or that parent's effort cannot be separated from the children's efforts, thus a person born into a rich household is also deserving. We also plan to test this alternative hypothesis in our next-step experiment, where we will ask participants to explicitly point out whether they think a certain way of getting rich is just.

6.2 Potential Explanations of Libertarian Fairness Views

The remaining question to be asked is why Chinese people hold such libertarian fairness views, and why they perceive income due to luck and inheritance as just. This question is a part of the wider question in explaining the differences in fairness preferences across the world (Almås et al., 2020, 2021), and we intend to delve deeper into this question in an accompanying theoretical paper. In the scope of this paper, we think the main reasons Chinese people hold libertarian fairness views are twofold: wealth aspiration and attribution of high income to effort.

6.2.1 Wealth Aspiration and Collective Illusion about the Rich

On the one hand, Chinese people might be more accepting of the income differences due to luck and opportunities (inheritance, arbitrage, housing speculation) due to strong wealth aspiration. They underestimate their current income position and over-estimate the security and happiness that one would enjoy as a rich person, and thus desire to become richer by any mean possible.

The average Chinese person thinks he/she is much poorer than he/she actually is: in the incomeupdating treatment arm, we notice that the majority of Chinese people severely under-estimate their relative income positions. In Figure 5, we can observe that survey participants significantly underestimate their relative income positions: almost all participants think they are below the 70th percentile in national income. The average estimation of income ranking is at the 32^{th} percentile, which results in an 18% underestimation on average. This feeling of still being poor and economically insecure might generate a strong desire to become richer and to own property.

On the other hand, we notice that they also collectively over-estimate the inter-generational persistence of professions in the top socio-ecconomic category. In Figure 6, our sample (again in the income updating treatment arm only) think that the child of a person occupying a high-level white collar job have 60% of chance to stay as a high-level white collar worker, while the actual probability is only 28%. The average Chinese citizen thinks social stratification, thus the financial safety for the upper class, is much stronger than it actually is. Hence, one might think that once he/she becomes rich, he/she would be much more stable and happy.

6.2.2 Attribution of High Income to Effort

As demonstrated previously, Chinese people believe that wealth is overwhelmingly determined by merit and effort. Counter-intuitively, they might recognize more the legitimacy of income difference by luck, since luck is not an important determinant of wealth anyway. In other words, the benefits of correcting income difference due to luck might not be as large as the costs to implement this correction, if we think the difference in income due to luck is inherently low.

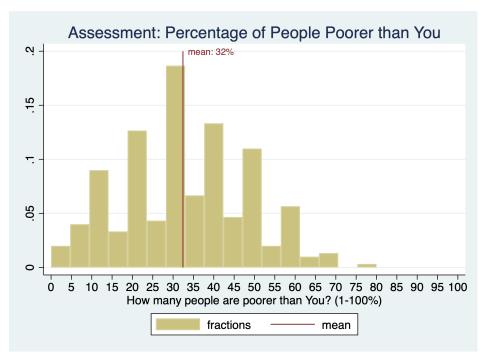


Figure 5: Under-estimation of Relative Income Position

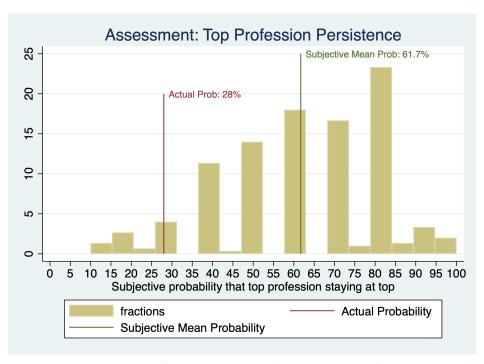


Figure 6: Over-estimation of Inter-generational Top Income Profession Persistence

7 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 redustribution 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 the coexistence of high demand of government provision and low willingness to redistribute from the rich. We suspect that we have not made the positive association between higher levels of government provision and more effective redistribution salient enough with our current treatment interventions. For the next step, we are interested in making this choice explicit for participants, and observe which side of the trade-off the Chinese people will choose. Then, we will continue delving into the mechanisms of our observed treatment effects, especially those identified with our "Rich by Luck / Poor by Luck" vignettes. Especially importantly, we would like to get a rather precise answer as to whether the belief updating process

really happened, and whether Chinese people draw the luck/effort boundary differently by eliciting their fairness preferences explicitly ("To what extent do you think rich people today deserve their wealth?" "Do you think it is just for someone to be rich by pure inheritance?", etc). Those are both meaningful questions in deciphering the determinants of redistributive preference not only in China, but also potentially in developing countries in general.

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*.
- Almås, I., Cappelen, A. W., & Tungodden, B. (2020). Cutthroat capitalism versus cuddly socialism: Are americans more meritocratic and efficiency-seeking than scandinavians? *Journal of Political Economy*, 128(5), 1753–1788.
- Almås, I., Bonn, C., Cappelen, A., Cappelen, C., & Tungodden, B. (2021). Inequality acceptance in china: fairness views and policy attitudes in a socialist market economy. *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.
- Andersen, A. G., Franklin, S., Tigabu, G., Kotsadam, A., Somville, V., & Villanger, E. (2020). Does wealth reduce support for redistribution? evidence from an ethiopian housing lottery.
- 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.
- Di Tella, R., Galiant, S., & Schargrodsky, E. (2007). The formation of beliefs: evidence from the allocation of land titles to squatters. *The Quarterly Journal of Economics*, 122(1), 209–241.
- 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.

8 Appendices

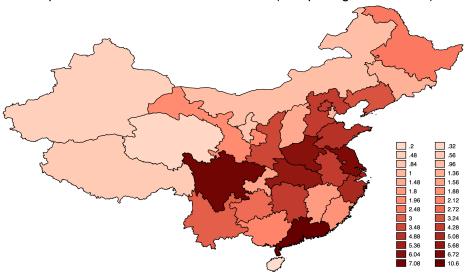
8.1 Experiment Preparation

Profile Summary of Qualitative Interviewees

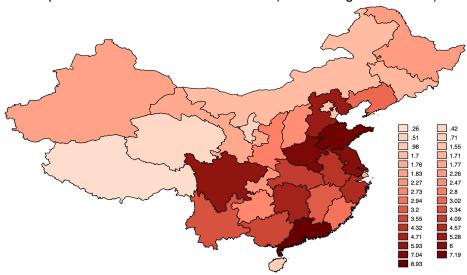
Gender	Age	Hukou	Occupation	Income(yuan/month)	Social Class
Male	51	Beijing, Metropolis	IT research	Unclear but "competitive"	Middle Class
Female	49	Beijing, Metropolis	Publisher, Middle Management	Unclear but "ok"	Middle Class
Female	61	Shandong, City	Retired	2.5 k	Lower Middle Class
Female	32	Shandong, 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	Enterpreneur	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

8.2 Geographical Outreach of Online Experiment

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



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



8.3 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.

8.4 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%
- \bullet 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%

8.5 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.
- Low-income families would be reimbursed for most treatment costs for serious chronic and major illnesses.
- 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.

8.6 Additional Analyses

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

	(1)	(2)	(3)	(4)
VARIABLES	Wealth Tax	Property Tax	Auditing	Capital Control
Rich by Luck	-0.0722**	-0.0135	-0.0373	-0.0768**
	(0.0338)	(0.0383)	(0.0337)	(0.0325)
Rich by Luck & Tax Salience	-0.0547*	0.0128	-0.1010***	-0.0406
	(0.0329)	(0.0379)	(0.0355)	(0.0308)
Poor by Luck	-0.0359	0.0214	-0.0133	-0.0156
	(0.0326)	(0.0378)	(0.0321)	(0.0305)
Poor by Luck & Tax Salience	-0.0354	-0.0005	-0.0089	-0.0437
	(0.0328)	(0.0389)	(0.0322)	(0.0314)
Macro Narrative	0.0164	0.0810**	-0.0064	0.0071
	(0.0294)	(0.0349)	(0.0306)	(0.0283)
Micro Narrative	0.0204	0.0638*	0.0057	-0.0154
	(0.0287)	(0.0353)	(0.0309)	(0.0289)
Growth & Redistribution	-0.0213	-0.0017	-0.0191	-0.0009
	(0.0301)	(0.0365)	(0.0309)	(0.0283)
Income & Mobility Updating	-0.0279	-0.0124	-0.0647**	-0.0315
	(0.0306)	(0.0368)	(0.0328)	(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)

	(1)	(2)	(3)	(4)
VARIABLES	Income Ceiling	Poor Student Quota	Free Healthcare Poor	Raise Min. Wage
D: 1.1 X .1	0.0004	0.0507	0.0060	0.0040
Rich by Luck	-0.0234	-0.0506	-0.0268	-0.0343
	(0.0411)	(0.0395)	(0.0242)	(0.0338)
Rich by Luck + Tax	-0.0275	-0.0370	-0.0334	-0.0560*
	(0.0413)	(0.0395)	(0.0244)	(0.0336)
Poor by Luck	-0.0145	0.0559	0.0101	-0.0525
	(0.0411)	(0.0384)	(0.0219)	(0.0341)
Poor by Luck + Tax	-0.0688*	0.0362	0.0007	0.0114
	(0.0409)	(0.0383)	(0.0224)	(0.0318)
Macro Narrative	0.0276	0.0250	-0.0079	-0.0138
	(0.0392)	(0.0376)	(0.0217)	(0.0319)
Micro Narrative	-0.0325	0.0564	0.0039	0.0234
	(0.0390)	(0.0361)	(0.0216)	(0.0305)
Growth & Redistribution	0.0267	0.0291	0.0016	-0.0117
	(0.0397)	(0.0375)	(0.0217)	(0.0321)
Income & Mobility Updating	-0.0482	0.0211	-0.0116	-0.0444
	(0.0388)	(0.0369)	(0.0220)	(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)

	(1)	(2)	(3)	(4)
VARIABLES	Social Housing	Double Dibao	Raise Income Tax Threshold	New Sent-down
Rich by Luck	0.0621**	-0.0242	-0.0361	0.0326
	(0.0306)	(0.0368)	(0.0350)	(0.0403)
Rich by Luck + Tax	0.0137	-0.0047	-0.0241	0.0817**
	(0.0324)	(0.0359)	(0.0347)	(0.0405)
Poor by Luck	0.0235	0.0267	0.0061	0.0422
	(0.0323)	(0.0357)	(0.0338)	(0.0404)
Poor by Luck + Tax	0.0551*	0.0534	0.0032	0.0286
•	(0.0311)	(0.0347)	(0.0335)	(0.0415)
Macro Narrative	0.0564*	0.0268	0.0262	0.0502
	(0.0295)	(0.0340)	(0.0312)	(0.0382)
Micro Narrative	0.0590**	0.0764**	-0.0246	0.0403
	(0.0294)	(0.0334)	(0.0329)	(0.0388)
Growth & Redistribution	0.0344	0.0302	-0.0228	0.0603
	(0.0311)	(0.0338)	(0.0327)	(0.0389)
Income & Mobility Updating	0.0573*	0.0309	-0.0193	0.0530
, ,	(0.0293)	(0.0345)	(0.0328)	(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)

	(1)	(2)	(3)	(4)
VARIABLES	Reduce Income Gap	Job Provision	Redist. Just	Edu. Admission Standardize
D: 1.1 x .1	0.0044	0.0000444	0 004 488	2.2442
Rich by Luck	-0.0366	-0.0933***	-0.0914**	-0.0442
	(0.0267)	(0.0353)	(0.0362)	(0.0345)
Rich by Luck + Tax	-0.0241	-0.0486	-0.0512	-0.0480
	(0.0258)	(0.0345)	(0.0359)	(0.0343)
Poor by Luck	-0.0019	-0.0517	-0.1003***	-0.0589*
	(0.0250)	(0.0344)	(0.0369)	(0.0352)
Poor by Luck + Tax	-0.0236	-0.0095	-0.0991***	-0.0377
•	(0.0262)	(0.0321)	(0.0361)	(0.0348)
Macro Narrative	-0.0574**	0.0068	-0.0430	0.0163
	(0.0262)	(0.0309)	(0.0340)	(0.0319)
Micro Narrative	0.0002	-0.0174	-0.0003	0.0032
	(0.0237)	(0.0315)	(0.0331)	(0.0317)
Growth & Redistribution	-0.0037	0.0102	-0.0178	-0.0038
	(0.0239)	(0.0308)	(0.0337)	(0.0320)
Income & Mobility Updating	-0.0198	-0.0219	-0.0497	-0.0093
	(0.0247)	(0.0315)	(0.0342)	(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