# POPULAR PERCEPTIONS OF DISTRIBUTIVE JUSTICE IN CHINA: LOCAL AND REGIONAL VARIATIONS<sup>\*</sup>

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The reform era launched in 1978 has produced dramatic changes in Chinese society. The dismantling of centrally planned socialism and the transformation of China into a market-based economy have fundamentally altered that society's social order. In many respects China's reforms have been extraordinarily successful, with sustained high levels of economic growth, rising income levels and consumption patterns, growing integration of China into the global economy, massive infusions of foreign investment, and sharp reductions in the proportion of the population that is desperately poor. However, this transformation from a socialist to a market-based society has also had more divisive and less savory consequences. Older Chinese who had learned how to survive by playing by the rules of Mao-era socialism had to adapt to a fundamentally changed distribution system in which there were plenty of losers alongside the many winners. Chinese society changed from being a society with relatively modest income disparities to one with large and in some periods escalating gaps between the rich and the poor. Many who felt they should be honored for their contributions to building socialism found themselves unemployed, while suspicion was rife that many of China's new millionaires were the beneficiaries of corruption and official favoritism. In recent years China has been rocked by a rising tide of public protests by peasants, workers, and others, with unfairness of the current social order repeatedly challenged.

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China's new leaders who took over after 2002 have been alarmed about the prospect of rising inequality eventually making China into a "social volcano," and they have begun to take steps to try to shift China from an emphasis on "growth at all costs" to "growth with equity" and developing China into a "harmonious society." However, some analysts contend that China's reforms have been so successful that they have produced sufficient opportunities and optimism about getting ahead to effectively counter-balance such tensions and grievances in the minds of most Chinese, contributing to social and political stability now and in the future.

It is in the context of these recent trends and debates that the China Inequality and Distributive Justice Survey Project was launched in the late 1990s.<sup>1</sup> This project is dedicated to investigating the nature of Chinese popular reactions to the new structures of inequality and how those reactions vary across regions and major social groups.<sup>2</sup> How much acceptance or even popular enthusiasm is there for the new market-oriented system? How much nostalgia is there for the socialist rules of the game? How fair or unfair do Chinese citizens feel the current, reformed system is? Do they think that what makes the difference between those who are rich versus poor is mainly variations in merit

<sup>&</sup>lt;sup>1</sup> Whyte serves as the PI for the project, which also involves Prof. Albert Park at the University of Michigan, Prof. Wang Feng at the University of California at Irvine, Prof. Jieming Chen at Texas A&M University at Kingsville, Prof. Pierre Landry at Yale, and Prof. Shen Mingming at Peking University, with Chunping Han joining the project as a research assistant in 2003.

<sup>&</sup>lt;sup>2</sup> Another goal is to place Chinese popular attitudes toward inequality and distributive justice issues into comparative context, particularly with the attitudes of citizens of other former socialist societies of Eastern Europe. Many of the questions used in our Chinese surveys are based upon the questionnaires used in the International Social Justice Project (ISJP) which conducted two rounds of national surveys in several Eastern European countries ca. 1991 and 1996. In addition, we have also replicated some questions used in the recurring inequality modules included in International Social Survey Project (ISSP) surveys, which again have been carried out in multiple countries, including several in Eastern Europe. See, in particular, James Kluegel, David Mason, and Bernd Wegener, eds., <u>Social Justice and Political Change: Public Opinion in Capitalist and Post-Communist States</u>, NY: Aldine de Gruyter, 1995; David Mason and James Kluegel, eds., <u>Marketing Democracy: Changing Opinion about Inequality and Politics in East Central</u> Europe, Lanham, MD: Rowman & Littlefield, 2000. The present paper will not deal with comparisons of attitudes of Chinese citizens with respondents in either the ISJP or ISSP surveys in other countries.

and effort, or that such gaps are based more on corruption, dishonesty, and discrimination? How closely tied are popular attitudes on these issues to how people feel they and members of their families have fared economically in recent years, or are such attitudes broadly shared in certain locales or social groups regardless of specific individual experiences of upward or downward social mobility? In general are there sharp differences from place to place within China, or from one social group to another, in how fair or unfair the current social order is seen? Our survey work is designed to answer questions such as these, and hopefully as a result to shed light on the issue of how socially volatile or politically stable China is likely to be in the years ahead.<sup>3</sup>

As a first step, and primarily in order to explore the feasibility of conducting academic survey work on inequality issues in the Chinese political context, we carried out a pilot survey in Beijing late in 2000 through incorporating a module of inequality attitude questions into that year's Beijing Area Survey project conducted by Prof. Shen Mingming and his colleagues at the Research Center on Contemporary China at Beida.<sup>4</sup> In previous publications and unpublished papers based upon the Beijing survey, some of them involving systematic comparisons with a comparable survey conducted in Warsaw, Poland, in 2001, we have reported that while Beijing residents in 2000 definitely felt there was too much inequality currently, at the same time they were fairly optimistic

<sup>&</sup>lt;sup>3</sup> We recognize that protest movements that can threaten political stability are the product of a complex set of conditions and contingencies, rather than a mechanical product of the level of popular discontent. However, it is also the case that the more widespread and severe are popular feelings that the system is unjust, the more difficult it is for the leadership of society to effectively respond to the variety of grievances and protests that are likely to arise, so that maintaining political control becomes very difficult. For a general commentary on the conditions that may foster popular protests in China, see Martin King Whyte, "Chinese Social Trends: Stability or Chaos? in D. Shambaugh, ed., <u>Is China Unstable?</u>, Armonk, NY: M.E. Sharpe, 2000.

<sup>&</sup>lt;sup>4</sup> The 2000 Beijing survey interviewed a probability sample of 757 adult residents of the urban areas of that city, as well as a not-strictly probability sample of 128 migrants residing in some of the same neighborhoods used for the resident survey.

about the chances for individuals to prosper based upon hard work, talent, and other forms of merit, and they were significantly less likely than their counterparts in Warsaw to see the social order as an unjust one stacked against the efforts of ordinary, honest citizens to get ahead.<sup>5</sup> In other words, the results of the Beijing survey seemed to bolster the case for broad acceptance of the status quo and stability rather than a looming "social volcano."

One criticism raised when we have presented such results from the 2000 Beijing survey is that the relatively accepting and positive attitudes we reported might be due in large part to special features of Beijing, even in comparison with a city like Warsaw. In addition to the special, preferential treatment received by citizens of Beijing as residents in China's capital city, two other factors may have produced even more special efforts to keep Beijingers satisfied—the desire of political elites to avoid any repetition of the mass demonstrations of 1989, and the Herculean efforts devoted to China's eventually successful bid to host the 2008 Olympics, which fueled many new employment opportunities and improvements in many city facilities. Wouldn't Chinese in other parts of the country that are less favored, and particularly in regions that have not been doing well in the reform era (such as the "rust-belt" cities of the Northeast), have much more negative and pessimistic views about the current distributive system? In addition, given the apparently rising tide of grass-roots popular protests that have swept China in recent

<sup>&</sup>lt;sup>5</sup> See Martin K. Whyte, "Chinese Popular Views about Inequality," <u>Asia Program Special Report</u>, Woodrow Wilson International Center, no. 104, August 2002; Chunping Han, "Popular Legitimation of Inequality in Reform-Era Urban China," unpublished MA paper, Harvard University, October 2003; Martin K. Whyte and Chunping Han, "Distributive Justice Issues and the Prospects for Unrest in China," paper presented at conference on "Reassessing Unrest in China," Washington, D.C., December 2003; Martin K. Whyte, "Popular Attitudes toward Income Inequality in China," paper presented at conference on Income Inequality in China, Shanghai Academy of Social Sciences, January 2005; Whyte and Han, "Learning to Love the Market: Beijing and Warsaw Compared," unpublished paper, December 2005.

years, isn't it likely that popular attitudes toward inequality and distributive justice attitudes in all locales have turned more negative since 2000?

The present paper is an initial and very preliminary effort to respond to such questions by using more recent data from the national survey we conducted subsequently. Encouraged by the lack of political problems arising in response to the 2000 Beijing survey, our collaborative team of U.S. and China researchers carried out a national survey in the fall of 2004, resulting in 3267 completed interviews with adults between the ages of 18 and 70. In order to avoid the increasingly serious problems arising from conventional reliance on household registration records for sampling, our national survey relied instead on a relatively new method, spatial probability sampling.<sup>6</sup> Our national questionnaire repeated most questions from the 2000 Beijing survey and added additional questions to explore other aspects of popular attitudes about inequality and distributive justice issues. Because of our interest in having a sufficient number of urban residents in our final sample in order to analyze urban attitudes toward these issues separately, our national survey involved a base probability sample of 2130 interviews and then a supplementary urban sample of 1137 interviews, so that the final sample has about 55% urban respondents, rather than the approximately 30% urbanites that would be found in a national survey without such stratification and urban over-sampling. Where appropriate in the pages that follow, we will use sampling weights to correct for this over-sampling of

<sup>&</sup>lt;sup>6</sup> With more and more Chinese on the move, many people are residing in places other than where they are officially registered. In particular, China's large cities all have on the order of 30% of their de facto population consisting of migrants from elsewhere, and such migrants are not eligible for inclusion in the sample if household registration records are used as the basis for sampling. Even the temporary registration documents that migrants are supposed to obtain are not a good basis for sampling, since enforcement of the temporary registration is spotty and variable from place to place, with some analysts estimating that 50% or less of the migrants obtain such temporary registrations. Spatial probability sampling, in contrast, uses maps, population data, sampling statistics, and GPS machines to select specific sampling points, with all households that fall within the designated distance of those points included in the sample (and random methods used to select specific respondents within selected households).

urban respondents in order to present accurate statistics on the distribution of attitudes in our national sample.<sup>7</sup>

### **Measuring Distributive Injustice Attitudes**

How does one measure popular attitudes toward distributive justice versus injustice in a questionnaire-based survey? Our national questionnaire contains a very large number of questions probing respondent attitudes toward issues regarding inequality and distributive justice, and it is clear to us that no one question or scale computed from several questions can summarize views on distributive justice issues. However, it does not make sense to try here to analyze all or even most of the questions we used. Instead, we focus our attention on five measures that emerged from our earlier analysis of the Beijing pilot survey, measures telling us about different aspects of the popular attitudes we are studying.

Two of these measures come from a broad set of questions in which we asked respondents to give their assessments of why some people in China today are poor, and why some others are rich. The list included such factors as ability, effort, luck, personal character, discrimination, dishonesty, personal connections, and system deficiencies. Respondents were asked to rate whether each trait mentioned had a very large importance, large importance, some importance, small importance, or no importance at all in explaining why some people are poor, or why some people are rich. (Two sets of questions were used, one asking for explanations of why people are poor, and the other asking for explanations for why some people are rich, as was done in the ISJP surveys.)

<sup>&</sup>lt;sup>7</sup> To be precise, our sampling weight corrections are designed to correct for other potential if small biases as well, such as the fact that some households had more potential respondents in them than others (with only one eligible respondent interviewed in each household). Our final sample included interviewing clusters in 23 of China's 31 provinces—all but Jilin, Inner Mongolia, Tianjin, Sichuan, Chongqing, Tibet, Qinghai, and Gansu.

The two scales we created from some of these items are designed to tap merit-based explanations of poverty or wealth (six items: ability, effort, and educational level as affecting poverty and the same traits as affecting wealth) and structural or non-individual merit-based explanations (nine items: luck, discrimination, lack of equal opportunity, and defects in the economic structure as explanations of poverty, and luck, dishonesty, unequal opportunities, personal connections, and unfairness of the economic structure as explanations of wealth).<sup>8</sup> We refer to these as our "merit attribution" and "structural attribution" (of inequality) scales. The presumption is that individuals who score high on "merit attribution" think that generally acceptable individual merit reasons (such as hard work, talent, and education) are the main things that distinguish the rich from the poor in China today, and they tend to see the current pattern of inequalities as fair. In contrast, those who score high on structural attribution feel that external features (such as dishonesty, unequal opportunities, and discrimination) are the main sources of current inequalities, which are therefore likely to be seen as unjust.

We also wanted to include a measure of optimism versus pessimism about chances for getting ahead in Chinese society today. For that purpose we rely on a single, global question: "Based on the current situation in the country, the opportunities for someone like you to raise their standard of living are still great," with the five response categories provided ranging from strongly agree to strongly disagree. We reverse this

<sup>&</sup>lt;sup>8</sup> The items were reversed in creating the scale, so that a high score indicates that respondents felt that the traits listed had a very important influence on whether people were rich or poor. The resulting scale is then estimated by a score of the common factor the constituent items share, a procedure also used in creating our other distributive justice scales. (Factors scores were used in preference to a simple mean of each item because they allow items that are closer to the common factor to influence the final scale score more than items that are not quite as close to common factor they all share. Preliminary analysis of the intercorrelations among the items in this and the other scales used here indicated that the items were closely related, with reliability ranging from  $\alpha$ =.66 to .77)

item, so that a high score indicates optimism about ordinary people improving their standard of living, and we refer to this as a measure of "opportunities of getting ahead."

A fourth scale used here is designed to tap feelings of hopelessness and injustice. Three questions were used, again with respondents asked to give responses from strongly agree to strongly disagree to each statement: "Since we are unable to change the status quo, discussing social justice is meaningless;" "Looking at things as they are now, it is very difficult to say what is just and what is unjust;" and "Government officials don't care what common people like me think." Again we reversed these items, so that high scores indicate feelings of hopelessness and injustice, and then our scale is a common factor score computed from the three item scores. We refer to this as our "feelings of injustice" scale.<sup>9</sup>

The fifth and final measure we use in this paper is a summary scale derived from three questions about what role respondents think that the government should (or should not) play in reducing inequalities in Chinese society. Each interviewee was asked to say whether they strongly agreed, agreed, were neutral, disagreed, or strongly disagreed with the following statements: "The government should assure that every person is able to maintain a minimum standard of living;" "The government should provide an opportunity to work for every person willing to work;" and "The government has the responsibility to shrink the gap between high and low incomes." These items were then reversed, so that a high score means support for an active role of the government in promoting social equality, and then the resulting scale is a common factor score computed from the three item scores. We refer to this as our "government leveling" scale. The presumption here

<sup>&</sup>lt;sup>9</sup> Note that none of these three questions specifically refers to distributive injustice. However, we presume that the focus in our questionnaire generally on inequality and distributive justice issues would predispose most respondents to answer these questions with distributive issues in mind.

is that those who score high on this measure think that more active measures should be taken to reduce current inequalities (since none of these three things are currently being done much) and are willing to entrust the government with this role.

These five measures (merit attribution of inequality, structural attribution of inequality, optimism about getting ahead, feelings of injustice, and preference for government leveling) constitute the attitude domains we will focus on in this paper.<sup>10</sup> In the pages that follow we will examine how attitudes in these five realms vary across the face of Chinese society, again in a very preliminary way. We start with a rather simple-minded set of expectations. Other things being equal, we would expect that respondents who are comfortable operating in the current system and don't have strong feelings of distributive injustice would score high on the merit attribution scale and on the chances of getting ahead scale, and low on the scales designed to tap structural attribution of inequality, a desire for government redistribution to limit inequality, and on feelings of injustice. Conversely, those who feel the current system is unjust and who harbor nostalgia for the socialist era are likely to score high on the structural attribution, government leveling, and feelings of injustice scales, while scoring low on the merit attribution and chances of getting ahead scales.<sup>11</sup> So in the analysis that follows, can we

<sup>11</sup> However, the pattern of intercorrelations among five measures is more complicated than this simpleminded logic might suggest. In particular, as the correlation matrix among our five outcome measures shows, it turns out that the meritocratic attribution scale has a significant <u>positive</u> correlation with the structural attribution scale as well as with the government leveling scale, and not a significant association one way or the other with the feelings of injustice scale:

2	Meritocratic Attribution	Structural Attribution	Getting Ahead	Feelings of Injustice
Structural Attribution	.31***			
Getting Ahead	.15***	14***		
Feelings of Injustice	01	.34***	15***	
Government Leveling	.27***	.29***	.00	.25***
(***=p<.001; **	=p<.01; *=p<.05)	1		

<sup>&</sup>lt;sup>10</sup> The weighted distribution of responses to the questions included in our five outcome measures are displayed in the Appendix to this paper.

identify respondents of particular social backgrounds, or who live in particular regions, who fit these patterns, and thus seem to be particularly satisfied and optimistic versus aggrieved and pessimistic, about the current distributive system?

### **Background Predictors of Injustice Attitudes**

In the pages that follow, we will be examining how scores on these five aspects of distributive justice and injustice attitudes vary among our 3267 survey respondents. We are particularly interested in whether the social group a respondent belongs to and the region in which a respondent lives have a net influence on their attitudes on these issues, once other background characteristics (age, education, etc.) are controlled for statistically. In order to answer this question we necessarily have to include in our statistical models a broad range of other predictors of attitudes beyond regional location. We operationalize the predictors used in the present analyses as follows:

First, we measured respondent's status along two dimensions: employment and household registration. Employment and occupational status have been used as key indicators of social status in sociological research on all societies. Household registration (*hukou*) status adds an equally important dimension that is distinctive to China, with whether an individual holds agricultural or non-agricultural *hukou* determining what types of opportunities and benefits he or she has access to. We are aware that there are high correlations between *hukou* status and occupations in China, with most farmers being agricultural *hukou* holders. The effect of being a farmer and the effect of holding an agricultural *hukou* can attenuate each other if they are included in the same statistical model. To address this potential problem, we created the following eight composite status

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groups, taking into account employment and occupational status and the type of *hukou* one holds.

- (1) current or retired farmers regardless of their hukou status;
- migrants from rural to urban areas regardless of their current employment or occupational status;
- (3) agricultural *hukou* holders having a non-farming job currently or before retirement;
- (4) Agricultural *hukou* holders who do not belong to categories 1-3;
- (5) current or retired workers or the self-employed with non-agricultural hukou;
- (6) current or retired white-collar workers (professionals, managers, officials, clerks, or private business owners) with non-agricultural *hukou*;
- (7) urban unemployed; specifically, urban *hukou* holders who are currently not working and have been looking for a job over the past month;
- (8) other non-agricultural *hukou* holders who do not belong to categories 5-7.

Conventional wisdom might imply that agricultural *hukou* holders (and farmers in particular), who have been discriminated against and have a low status in society, are likely to feel more distressed and reluctant to accept the current market-oriented system. However, a contrary possibility is also plausible. Rural people in China have been exposed to a market-oriented environment more intensively and for a longer time than their urban counterparts, since the rural reforms began in 1978 and the urban reforms only slowly after 1984, with most urbanites still enjoying the "iron rice bowl" of protected jobs and fringe benefits until the mid-1990s.<sup>12</sup> Perhaps this experience inclines

<sup>&</sup>lt;sup>12</sup> One survey study of the attitudes of residents of the Tianjin area in 1990 found much more modern attitudes among rural residents interviewed in general, and employees in rural factories in particular, than

rural people to be more favorable toward the current distributive system, rather than more critical. On the other hand, some analysts contend that it is China's urban workers who have experienced the most dramatic fall from grace as a result of China's reforms, with their treatment and status in decline and with unemployment a constant threat. So perhaps it is urban workers rather than farmers who feel particularly aggrieved. With the composite employment/household registration status categorical measure we have created, we will be able to test a variety of such hypotheses about which groups are most satisfied with the current system and which most dissatisfied.

The other primary factor whose influence on attitudes toward distributive justice issues we are particularly interested in here is regional location. Do residents of some regions of China, perhaps particularly areas that have experienced serious economic difficulties, feel more strongly than residents of other regions that the current system is unjust? There has been a long convention in China studies of dividing China into East, Central, and West regions according to geographic location and socioeconomic development level. Reform policies have long benefited the East region, or coastal provinces, disproportionately--so much so that after 2000 China's top leadership felt it was necessary to launch special programs to try to foster more development in the West. While this three-region categorization may make sense for China during the pre-reform era and the initial period of reform, we wonder whether it is still as useful now, since there have been increasing variations within each region in terms of economic growth, changes in standards of living, and levels of social protest activity. For example, China's northeastern provinces, which used to be the industrial pillar of the nation in the Mao era,

among the more educated urban respondents. See Alex Inkeles, C. Montgomery Broaded, and Zhongde Cao, "Causes and Consequences of Individual Modernity in China," <u>The China Journal</u>, 1997, 37:31-59.

have experienced a down-turn in economic growth and drastic increases in layoffs and unemployment during the process of downsizing and privatization of "rustbelt" stateowned enterprises. On the other hand, some southwestern provinces that used to lag behind, such as Yunnan, have benefited from booming tourism and the border trade with Southeast Asian countries in recent years. We are interested in whether and how these new trends in regional variation are reflected in people's attitudes toward distributive inequality and injustice. Therefore, instead of following the conventional East-Center -West trichotomy, we grouped the 23 provinces covered in our survey into five regions based on location and our understanding of the overall economic performance and development trajectory of various provinces in the reform era.<sup>13</sup> The five regions are:

- East: Beijing, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Hainan;
- (2) Northeast: Liaoning and Heilongjiang;
- (3) Middle: Shanxi, Anhui, Jiangxi, Henan, Hubei, Hunan, and Guangxi
- (4) Northwest: Shaanxi, Ningxia, and Xinjiang
- (5) Southwest: Yunnan and Guizhou

In the statistical analyses that follow, we also control for a set of other predictors in order to estimate the net effects of employment/registration status and of regional location on attitudes toward inequality and distributive justice. We include several demographic and socioeconomic characteristics in our model: gender, age, age squared

<sup>&</sup>lt;sup>13</sup> In preliminary analyses we examined variations in our five outcome measures across provinces in our sample, and also in terms of the conventional three region categorical scheme of the National Statistics Bureau (with Liaoning and Guangxi grouped with the East region, Heilongjiang with the Middle region, and our categories 4 and 5 combined in the West region). In general we found that the five-category region scheme did a better job of explaining variations in distributive attitudes than these alternatives.

(in order to detect any curvilinear influence of age), marital status, ethnicity, household income, party membership, and experience of working in a state-owned enterprise. We are also interested in whether, other things being equal, those who live in large cities have different views about distributive justice than those who lives in small cities, towns, and in rural villages. For this reason we also control residence in any big city in our analyses.<sup>14</sup>

Research in other countries has revealed that subjective perceptions of personal and family status and of changes in social position over time often have more influence on distributive justice attitudes than such objective indicators of current social status.<sup>15</sup> Therefore we also include among our control variables measures of subjective social status (ranked from low social status=1 to high social status=10) and of perceived relative gains under the reforms (ranked from 0=all losses, no gains to 10=all gains, no losses). We also created a summary scale of inequality-related bad personal or family experiences, and we include this summary measure among our statistical controls.<sup>16</sup> Information on the weighted distribution of our sample across all of these independent variables is provided in Table 1.

(Table 1 about here)

<sup>&</sup>lt;sup>14</sup> Those who live in big cities are coded for 1, and 0 otherwise.

<sup>&</sup>lt;sup>15</sup> See James Kluegel, "Economic Problems and Socioeconomic Beliefs and Attitudes," <u>Research on Social</u> <u>Stratification and Mobility</u>, 1988, 7:273-302.

<sup>&</sup>lt;sup>16</sup> In our survey, we asked respondents whether they or members of their families had had the following negative experiences over the past three years: being seriously ill, suffering physical injury or economic loss due to natural or artificial disasters, being laid-off or becoming unemployed, having difficulty paying for medical care, dropping out of school because of inability to pay the tuition, having to borrow money to cover basic expenses, and being treated unfairly by local officials. For each item, we assigned 1 to those who replied to have ever had that experience, and 0 otherwise. Then we created a scale of negative experiences by summing the values for those seven items. The higher the value of the scale, the more bad experiences a respondent or their family had suffered.

### **Models and Findings**

As mentioned earlier, four of the five dimensions of attitudes toward inequality and distributive justice (with the exception of opportunities to get ahead, which is based upon a single question) are measured by multiple-item scales, with scale scores computed via factor analysis. Factor loadings were estimated from confirmatory factor analysis with the Amos program.<sup>17</sup> Table 2 reports the results from regression analysis, which reflect the patterning of the five measures of inequality and distributive justice attitudes, with employment and household registration type, region, and all the other social background variables shown in Table 1 controlled for simultaneously.<sup>18</sup> Keep in mind that interpreting the figures in Table 2 involves looking for patterns across all five outcome measures. A fully consistent pattern of support for the current distributive system would

<sup>&</sup>lt;sup>17</sup> We used Amos 4 for our analysis. Amos is a program specifically designed to implement the idea of structural equation modeling. This procedure has two advantages compared to other techniques. First, it estimates the measurement model for confirmatory factor analysis and regression simultaneously. Second, it computes full information maximum likelihood (FIML) estimates that are efficient and consistent when there are missing values that are missing at random.

The standardized loading coefficients of items in our four composite scales range from .381 to .785. The items measuring the meritocratic and structural attributions of inequality load an average of .597 and .520 on their latent constructs respectively. The three items measuring preference for government leveling load an average of .634. The three items for the scale of feelings of injustice load an average of .671. Some items do not have as high a loading coefficient as desired, but are still included in the analysis for their conceptual importance.

As the models in this study involve latent constructs derived from observed variables, Amos requires sufficient constraints to be made for the models to be identifiable. Two types of constraints were made to estimate the parameters. First, the intercept of the latent variables is constrained to be zero. As a result, no constant is reported. However, the absence of the constant does not have substantive impact on the interpretation of the findings, as our interest is in the regression coefficients. Second, the latent constructs are rescaled. Therefore, the magnitude of unstandardized coefficients does not convey substantive meaning. Instead, we rely on standardized coefficients to interpret the effect of various variables.

<sup>&</sup>lt;sup>18</sup> Note that in Table 2 the omitted category for employment/registration category is urban workers, so that the attitudes of the other seven categories are being compared with urban workers. Similarly, for regions the comparison group is respondents living in central provinces; for education it is those who attended primary or lower-middle school; and for family income it is those in the second income group (those with low-middle incomes). For purposes of this regression analysis, the ordinal measure for optimism about opportunities to get ahead is treated as an interval variable. The coefficients in Table 2 are standardized regression coefficients, so that the size of the association of various predictor variables can be directly compared for any one of our five outcome measures.

involve, as indicated earlier, high scores on meritocratic attribution and optimism about getting ahead and low scores on structural attribution, feelings of injustice, and support for government leveling. Conversely, those groups and categories critical of the status quo as unjust should tend to have low scores on meritocratic attribution and feelings of optimism about getting ahead, and high scores on the other three measures.

### (Table 2 about here)

# *Effects of Occupational and Hukou Status on Attitudes toward Inequality and Distributive Justice*

From the coefficients in Table 2 we can see that in general, rural people as well as migrants display relatively high optimism and acceptance of the market-oriented system. Farmers are less likely to attribute wealth or poverty to structural bias than are urban workers. They also tend to perceive more opportunities of improving their livelihood (although the effect is only marginally significant, with the p value of .082) and have weaker feelings of injustice. Also, it should be noted that the absence of a significant difference in farmers' views of government leveling compared to urban workers is a result of the inclusion in our statistical model of a dummy variable for living in big cities. When we removed the "residence in big city" variable from the model, farmers showed significantly stronger opposition to government redistribution than urban workers. In other words, the effect of city residence partly cancels out the effect of being a farmer versus an urban worker on this particular outcome measure.

Similar to the pattern for farmers, rural migrants indicate stronger disagreement with attributing inequality to structural reasons than do urban workers, they are more optimistic about prospects of getting ahead, and they are somewhat more reluctant to see

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government redistribution. Agricultural *hukou* holders doing non-farming jobs show similar tendencies regarding structural attribution of inequality, opportunities to get ahead, and opposition to government leveling, and they are also significantly less likely than urban workers to harbor strong feelings of social injustice. Our final rural group, people with other types of employment or occupational status, has attitudes that are a little more inconsistent. They share the tendency of the other rural groups to oppose government redistribution, and to be less likely than urban workers to express feelings of injustice and to attribute inequality to structural causes (although only weakly so in the latter two cases), but they are not significantly more likely than urban workers to be optimistic about getting ahead, while they are significantly less likely to attribute inequality to meritocratic causes (such as differences in education, hard work, and talent).

While the effects are not entirely consistent across the several rural subgroups in our sample, as a general pattern it is striking that respondents with rural ties are more likely than the reference group of urban workers to have positive views about the current distributive system and not to favor greater government efforts to reduce inequalities.<sup>19</sup> Even though most observers as well as rural people and rural migrants themselves see rural residents as pretty much at the bottom of China's social hierarchy, subject to multiple disadvantages and discriminated against in many ways, it is striking that

<sup>&</sup>lt;sup>19</sup> We wondered whether our choice of urban workers colored our conclusions about China's rural residents, since it might be argued that urban workers have had a particularly hard time since the reforms were launched, and thus might have unusually negative views about current patterns of inequality. However, when we ran the same analysis with other comparison groups (urban white collar workers, urban unemployed) we found pretty much the same pattern of greater rural satisfaction and more pro-market inclinations. Thus our conclusion here is not simply an artifact of our choice of urban workers as the reference group in our regression analysis, as can also be seen by the generally weaker and more inconsistent pattern of coefficients in Table 2 when the other urban groups are compared with urban workers.

respondents with rural roots see the current system on balance as less unfair than do other groups, once you control for other social background characteristics.<sup>20</sup>

When we examine the coefficients for the various urban subgroups in the first panel of Table 2, the results are less clear or more inconsistent. Urban white collar workers are significantly more optimistic about the chances for ordinary people to get ahead than are urban workers, but also slightly more in favor of government redistribution efforts to limit inequality, and not significantly different on any of the other three outcome measures we are using. One particularly striking finding is that the urban unemployed, who might be expected to have the strongest feelings of lost entitlement and distributive injustice, do not differ significantly from urban workers on any of our five outcome measures.<sup>21</sup> Finally, our category of urban "others" is significantly different from urban workers on only one of our outcome measures, being significantly less likely to attribute inequality to structural causes. So the general conclusion of this comparison of employment and household registration status subgroups is that people with rural links are more accepting of the status quo in several ways, while urban people in general display less consistent attitudes on distributive justice issues (although perhaps our

<sup>&</sup>lt;sup>20</sup> It might be objected that by controlling for such background factors as educational level, family income, and subjective social status, we are in some sense artificially taking the substance out of our rural-urban comparison, since it is precisely a combination of those objective traits of low status, and not rural links per se, that would incline rural people to feel unjustly treated by the current system. However, the somewhat inconsistent pattern of association of some of these other background traits and our five distributive justice measures shown in Table 2 makes this sort of argument difficult to maintain. In this pattern of findings and in regard to other variables to be examined later, it turns out that simple predictions about which groups and residents of which localities ought to feel most upset about the current system are not supported by our survey results.

<sup>&</sup>lt;sup>21</sup> In alternative analyses with other urban comparison groups, the unemployed differed significantly only from urban white collar employees with regard to optimism about ordinary people getting ahead. They did not differ significantly from urban white collar employees on the other four outcome measures, or from other urban comparison groups on any of the five outcome scales. Here our results parallel the findings of the International Social Justice Project in Eastern European countries, where the unemployed were not found to harbor stronger feelings of injustice than other groups studied. See James Kluegel and David Mason, "Market Justice in Transition," in Mason and Kluegel, eds., <u>Marketing Democracy</u>, op. cit.

reference group of urban workers is somewhat more likely than others to express dissatisfaction with the current distributive system).

#### **Regional Variation in Attitudes toward Inequality and Distributive Justice**

Results in Table 2 also allow us to examine regional variations in attitudes toward inequality and distributive justice issues, once other characteristics of respondents are controlled for statistically. The results of this comparison are harder to summarize than our analysis of employment and household status categories, but they provide no support for our simple-minded prediction that people in the least favored regions should feel the current system is unjust, while those who live in favored regions should be more accepting and optimistic. Respondents from the East region, which has been systematically favored and has generally experienced the most dramatic economic growth rates, might be expected to be voice significantly more support for the current system than residents of middle provinces (our comparison group in Table 2). However, other things being equal, respondents in Eastern provinces are significantly less likely than residents of middle provinces to explain the gap between wealth and poverty in terms of variations in individual merit, although they are also slightly less likely to express feelings of injustice and significantly less likely to favor government efforts to level current inequalities. They do not differ significantly in terms of structural attribution of inequality and the perceived opportunities for ordinary people to improve their livelihood.

Respondents from the Northeast region, where we might expect economic difficulties to produce strong feelings of distributive injustice, are in fact significantly <u>less</u> likely than respondents in middle provinces to express such feelings or to favor

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government leveling to reduce inequalities, while they do not differ significantly on any of our other three outcome measures. Respondents from the Northwest score significantly lower than those in middle provinces on everything except the measure of feelings of injustice, a pattern that does not lend itself to simple interpretation. Finally, respondents from the Southwest show some pro-market inclinations in being less likely to attribute inequality to structural causes and less likely to voice feelings of injustice than respondents in middle provinces, but they do not differ significantly on our other three measures.<sup>22</sup>

This examination of regional variations in distributive justice attitudes, a primary purpose of this paper, has not produced very clear results. The pattern of associations between our five regions and distributive justice attitudes is less consistent than the patterns we found earlier for employment and household registration status categories. Perhaps residents of Eastern China are a little more positive toward some aspects of the current distributive system than residents of Central China, as perhaps are residents of Southwestern China. But we don't see in these results a particular region of China that is a hotbed of grievances and feelings of distributive injustice. If anything it looks like Central China, our reference group in these statistical analysis, is where feelings of injustice specifically are most likely to be expressed (see the fourth column of coefficients in panel 2 of Table 2), although given the questions used to construct our "feelings of injustice" measure, it is not too clear whether the feelings involved refer to <u>distributive</u> justice specifically. Residents of Central China also show some tendency to

<sup>&</sup>lt;sup>22</sup> We also ran statistical models using the traditional three region model of Eastern, Central, and Western Provinces, but in general the results of that alternative analysis were even less consistent and harder to interpret than the five region categories used in Table 2, while also obscuring some of the variations revealed when five regions are used.

favor government leveling policies (see the fifth column of coefficients). However, for the other three outcome measures, respondents in Central China do not display distinctive attitudes.

One conclusion of this part of the analysis might be that locality can make a significant difference in regard to popular attitudes toward inequality and distributive justice attitudes, so that we shouldn't take the findings of any one survey in a particular locality (such as our 2000 survey in Beijing) as representing the general sentiments of the entire population.<sup>23</sup> However, at the same time we don't have a ready explanation for why the residents of our five regions differ in the ways they do in regard to our five scales. One possible explanation of our difficulties here is that region is a very large area that may not be very meaningful for the kind of analyses of popular attitudes that we are carrying out here. Our regions are combinations of two or more provinces, and even provinces cover very large territories and populations, with considerable internal variations in standards of living and other characteristics. We had been assuming, for example, that a pervasive malaise in China's Northeast might influence popular attitudes of a variety of kinds of people in different social settings all over the region, both among those who are doing relatively well and those who have been direct victims of recent economic retrenchment. However, our respondents in each province are not an evenly distributed sample covering all areas of a province, not to mention a region, but instead were interviewed in clusters at the chosen sampling points within that province. Those

 $<sup>^{23}</sup>$  It is worth noting, however, that the attitudes of the Beijing residents included in our national sample (N=121) do not look very different from the rest of our sample in terms of our five outcome measures. The bivariate correlation of a Beijing/non-Beijing dummy variable and our five scales shows Beijing residents scoring significantly higher on <u>both</u> meritocratic and non-meritocratic attribution of inequality, but with r only .07 and .12; for the other three outcome measures the correlation with being a Beijing resident was only in the -.03 to .03 range, too small to be statistically significant.

sampling points may, in fact, share relatively little of the fate of the average citizens of the province in which they reside. (In other words, as in any national survey, the resulting sample is representative of the population of the entire country, but the portion of the sample within any one territorial subunit is not representative of the total population of that subunit.) This line of thought suggests that if local factors and local public opinion have a strong influence on distributive justice attitudes, the region and even the province may be too far removed to be able to capture such local influences. In further work with our national survey data we plan to try to collect aggregate information on the prefectures and perhaps even the counties from which our sample was drawn (still large and diverse units to be sure, but less so than provinces and regions) to see if we can do a better job of finding meaningful patterns in the geographical variations in popular attitudes on these issues.<sup>24</sup>

## Effects of Control Variables on Inequality and Distributive Justice Attitudes

Although not the primary focus of this paper, some control variables display interesting associations with one or more of our attitude scales that are worthy of mention. The strongest and most consistent patterns are found in the fourth panel of Table 2, which reports the net influence of subjective status and personal experiences rather than objective status characteristics of the respondents (the focus of panel 3). As expected, those who feel they have gained much more than they have lost as a result of China's reforms are significantly more likely than other respondents to attribute current

<sup>&</sup>lt;sup>24</sup> There are other possibilities we will try to explore. For example, G. William Skinner has long argued that the most important axes of variations in Chinese social life are within, rather than across, regions (which Skinner calls "macroregions")—between those who live near the urban core, in the semi-periphery, and in the far rural periphery of each region. We will see if we can classify our sampling points in terms of Skinner's regional systems zones to see if that system of categorization does a better job in models of statistical prediction of regional effects of distributive justice attitudes.

inequalities to merit factors and not to structural causes, to feel there are ample chances for ordinary people to get ahead, and to harbor fewer feelings of social injustice, although they are not significantly more likely than others to oppose government efforts to limit inequality. On a similar note, those who report that they have high social status in society are significantly less likely than others to attribute inequality to structural causes, are more optimistic about ordinary people getting ahead, and are less likely to favor government leveling, although they do not differ from others on the other two scales. Finally, those respondents who reported that they or members of their families had had multiple bad experiences (things like serious illness, suffering a natural disaster, not being able to pay medical expenses, etc.) were significantly more likely than others to attribute current inequalities to structural factors, to favor government leveling, to be pessimistic about chances for ordinary people to get ahead, and to express strong feelings of social injustice. In general these three measures of subjective status and mobility and personal experiences are relatively strong and consistent factors associated with variation in inequality and distributive justice attitudes.

In terms of the remaining objective social background predictors in panel 3 of Table 2, the most consistent patterns are found in regard to residence in large cities. It turns out that, other things being equal, residents of large cities tend to harbor several different kinds of dissatisfactions with the current system. They are significantly more likely than residents of smaller communities to attribute inequality to structural causes, more likely to favor government leveling to reduce inequality, less optimistic about the chances for ordinary people to get ahead, and more likely to express sentiments of social

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injustice. Again this pattern contradicts conventional wisdom, since residents of large cities are often seen as benefiting disproportionately from reform-era policies.

One other particularly interesting pattern in panel 3 concerns the effects of age on these attitudes. There is a very strong curvilinear relationship between age and both structural attribution of inequality and sentiments of social injustice, with middle-aged people having more discontent with the current distributive system than either the young or the elderly.<sup>25</sup> This curvilinear association makes a certain amount of sense in relation to the common observation that, in urban areas at least, those now in middle age are China's "lost generation" who had their lives and mobility opportunities disrupted by the Cultural Revolution and thus missed out on many of the opportunities for social advance available to those who came of age during the 1950s or since the 1980s.<sup>26</sup>

The effects of the remaining social background factors are more scattered and inconsistent. Women are somewhat more likely than men to attribute inequality to structural causes, but on the other hand they are less likely than men to favor government leveling and slightly less likely to report feelings of social injustice. Education does not have a clear or consistent relationship with our five outcome measures. Family income also does not have very consistent net effects, although the top two income groups are significantly more optimistic about ordinary people getting ahead than the reference group (those with lower-middle incomes), and the top income group is significantly less likely to express sentiments of social injustice. Han Chinese are more likely than ethnic

<sup>&</sup>lt;sup>25</sup> The strong positive coefficients for the age effect suggest a linear association between age and these attitudes, while the strong negative coefficient of the age-squared variable indicates that at older ages, this increase gets reversed, producing a curvilinear trend with age. Since these are standardized coefficients, the size of these coefficients indicates that the age effects for these two outcome scales are particularly strong.

<sup>&</sup>lt;sup>26</sup> See, however, Xueguang Zhou and Liren Hou, "Children of the Cultural Revolution: The State and the Life Course in the People's Republic of China," <u>American Sociological Review</u>, 1999, 54:12-36.

minorities to favor government leveling. Finally, as expected party members are significantly more accepting of the current system than are non-members on two of our five scales, while those who have worked in state-owned enterprises are significantly less accepting than non-members according to two of our measures, but neither of these groups differs from others according to the remaining three scales used in our analysis. On balance, and with some partial exceptions (the big city effect, the curvilinear age effect), these objective status characteristics seem less important in explaining distributive justice attitudes than do either the rural/urban differences shown in panel 1 of Table 2 or the subjective and personal experience measures shown in the final panel of the table.

### Conclusions

We have used five different outcome measures designed to tap several dimensions of popular attitudes toward inequality and distributive justice issues in this preliminary analysis of data from our 2004 national survey. Our goal has been to try to shed light on the variable pattern of support for the current distributive system versus opposition to that system and feelings that it is unjust. Several kinds of conclusions are suggested by the analyses we have conducted for this paper.

Perhaps the most important finding is a negative one. We find precious little evidence here for the view that Chinese citizens whose objective status is at or near the bottom of the social hierarchy, or who belong to groups that have disproportionately lost out objectively relative to other groups as a result of the shift from socialist/bureaucratic allocation to market distribution, will perceive the current system as unjust. Farmers, migrants, the illiterate, the unemployed, those with low income, ethnic minorities,

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women, residents of Western provinces or the "rustbelt" Northeast—all groups that are disadvantaged in some respect in the status order of contemporary China—either do not differ significantly and consistently from more advantaged groups or localities (as in the case of the unemployed, for instance), or in some respects actually express more support for the current system and fewer injustice sentiments than do other groups (as in the case of peasants and rural migrants). On a similar note, we also find little support for the notion that those who belong to groups or reside in regions that have been "winners" in the reform era objectively will be the most likely to view the current system as just. Residents of Eastern provinces and of big cities, party members, college graduates, males, Han Chinese, those with high household income, and urban white collar workers either do not stand out significantly and consistently as more satisfied and optimistic than other groups, or actually express more negative evaluations and injustice sentiments.

So what patterns do we find, and what sense can we make of them? We have concluded that the set of geographical region categories we used here are probably not the most meaningful to explore the influences of locality on distributive justice attitudes, and we will need to go back to the drawing board to try to find a better way to analyze geographical variations.<sup>27</sup> However, the remaining background variables employed in Table 2 reveal some interesting patterns. Generally speaking, the respondents who are most critical of the current distributive system are those who live in large cities, have had a series of bad experiences, feel they have low social status or have suffered more losses than gains as a result of China's reforms, are middle aged, and perhaps are urban workers

<sup>&</sup>lt;sup>27</sup> We also plan in the future to examine whether there are interaction effects between location and social background characteristics. In other words, we want to know, for example, whether being a farmer in one locality is associated with above average feelings of social injustice, but with below average injustice sentiments in another region, and similarly for other social background characteristics.

and/or are affiliated with state owned enterprises. On the other side of the ledger, the respondents who express most optimism and support for the current distributive system are farmers and rural migrants, those who live in small communities, those who subjectively feel they have high social status and have gained more than they have lost from the reforms, and in certain respects those who have high incomes or are party members.

The pattern of these results is not a complete surprise, since we have earlier noted that research on attitudes toward inequality and distributive justice in other societies indicates that such attitudes are shaped in powerful ways by expectations, past mobility experiences, reference groups used, a sense of relative deprivation, and other subjective and dynamic factors, rather than in a simple or direct fashion by the objective status characteristics of respondents.<sup>28</sup> So it makes some sense, for example, that rural migrants should on average feel that the current system allows people ample chances to get ahead. After all, many of them have managed to do just that, compared to the conditions they faced back in their villages, despite the very real discrimination they face on a daily basis in the cities. Similarly, it also makes sense that urban workers in state enterprises located in large cities will feel surrounded by anxiety about future mobility opportunities and suspicion about the basis for the newfound wealth of others, despite the fact that they continue to enjoy advantages compared to most farmers and rural migrants.

Stated in this way, these observations seem quite mundane and perhaps even obvious. However, much of the commentary about inequality trends in China, both by Chinese leaders and scholars and by foreign analysts, tends to ignore these generalizations about the important role of subjective and dynamic factors in shaping

<sup>&</sup>lt;sup>28</sup> See the discussion in Kluegel, "Economic Problems and Socioeconomic Beliefs and Attitudes," op. cit.

popular attitudes. Instead, relatively simple predictions about the direct translation of objective status into attitudes about inequality are the stock in trade of many analyses of inequality in China. For example, it is guite common to find claims that China's gini coefficient measuring the inequality of income distribution in China is rising and will soon reach a "danger point," in terms of the potential for social turbulence. Similarly, China's leadership seems to assume that measures that raise the average incomes of depressed regions will automatically help promote social order. Our survey findings indicate, to the contrary, that variations in support for, and opposition to, the current distributive system do not map closely with the objective terrain of contemporary inequalities in China. Certainly the five attitude scales we have focused on for this paper do not represent the totality and full complexity of popular attitudes about issues of inequality and distributive justice, and in future work we plan to analyze other measures that can be created from our survey data. That said, the results of this preliminary analysis of five different measures of distributional attitudes suggest that those who are concerned with promoting social and political order in China or with predicting social turbulence in China face a difficult challenge. Only when they gain some understanding of the complex and subjective influences that shape popular attitudes on these issues can they hope to shed light on where and within which social groups feelings of distributive injustice are most deeply felt.

Table 1. Weighted Descriptive Statistics of Independent Variables
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1. Status group		
Farmer	51.4%	
Migrant	4.4%	
Rural non-farming	ing 7.5%	
Rural others	7.2%	
Urban workers	11.1%	
Urban white-collar	9.7%	
Urban unemployed	2.0%	
Urban others	6.8%	
2. Regions		
East	40.1%	
Middle	32.7%	
Northeast	12.3%	
Northwest	4.3%	
Southwest	10.6%	
3. Other SES variables and pe	rsonal experiences	
Gender	Female: 48.7%	
	Male: 51.3%	
Age	Mean: 38.46	
C C	Standard deviation: 13.31	
	Minimum: 18	
	Maximum: 70	
Education	Illiterate: 24.4%	
	Primary or junior middle school: 48.6%	
	Upper middle school: 17.0%	
	College or more: 9.5%	
Married	78.6% (yes)	
Han ethnicity	86.7% (yes)	
Household income	HH income group1 (lowest): 33.5%	
	HH income group2 (lower middle): 21.9%	
	HH income group3 (upper middle): 23.2%	
	HH income group4 (highest): 21.5%	
Party member	6.3% (yes)	
SOE	10.5% (yes)	
Big city	29.3% (yes)	
4. Perceived personal status a		
Gain/loss in reform	Mean: 4.84	
	Standard deviation: 2.02	
	Minimum: 0	
	Maximum: 10	
Subjective status	Mean: 4.34	
5	Standard deviation: 1.87	
	Minimum: 1	
	Maximum: 10	
Bad experiences	Mean: 1.80	
1	Standard deviation: 1.84	
	Minimum: 0	
	Maximum: 7	

	Meritocratic	Structural	Opportunity	Feelings of	Government		
	attribution -	attribution +	of getting ahead -	injustice +	leveling +		
1. Status group (urban	workers as base	group)	alicau -				
Farmer	058	171***	.061+	184***	062		
Migrant	027	056*	.047*	032	044 <sup>+</sup>		
Rural non-farming	021	044 <sup>+</sup>	.035 <sup>+</sup>	066**	079**		
Rural others	070**	048 <sup>+</sup>	.029	046 <sup>+</sup>	135***		
Urban white-collar	030	.018	.061**	037	.046 <sup>+</sup>		
Urban unemployed	027	022	017	002	.009		
Urban others	.003	062*	.000	.028	002		
2. Regions (middle regi	on as base grou						
East	114***	018	.000	044 <sup>+</sup>	072**		
Northeast	.006	.012	.031	183***	122***		
Northwest	189***	115*	098***	021	176***		
Southwest	.032	054*	.015	068**	021		
3. Other SES variables							
Female	.019	.045*	023	037 <sup>+</sup>	044*		
Age	.169	.403**	096	.379**	.095		
Age2	168	359**	070	316*	101		
Illiterate	108***	049*	.007	021	193***		
High school	012	.014	023	007	002		
College or more	002	.019	.071**	025	022		
Married	004	055	.025	.031	.021		
Han ethnicity	.034	.006	.124	.023	.096***		
HH income grp1	029	038	022	.013	052 <sup>+</sup>		
HH income grp3	033	051 <sup>+</sup>	.059*	025	.005		
HH income grp4	.018	.017	.071**	074*	.002		
Party member	.019	049*	006	081***	.036+		
SOE	052*	.012	083***	033	.001		
Big city	.013	.087**	121***	.098**	.145***		
4. Perceived status and	experiences						
Gain/loss in reform	.074***	102***	.121***	122***	013		
Subjective status	.024	078***	.124***	010	160***		
Bad experiences	009	.078***	079***	.115***	.071**		
R-2	.078	.130	.153	.132	.235		

# Table 2. Regressions of the Distributive Justice Attitudes (aggrieved =+ or -)

Note: \*\*\*= p<=.001; \*\*=.001<p<=.01; \*=.01<p<=.05; + =.05<p<=.10

# Appendix: Weighted Distribution of Responses to Multiple Items

Constituting Distributive Justice Attitude Scales (	(%)	
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	Strongly	Somewhat	Neutral	Somewhat	Strongly
	disagree	disagree		agree	agree
1. Merit attribution					
Ability affects poverty	2.2	4.5	32.0	43.5	17.8
Effort affects poverty	3.2	7.2	35.6	43.9	10.1
Education affects poverty	2.9	8.6	34.0	37.8	16.6
Ability affects wealth	1.8	3.8	25.0	46.3	23.2
Effort affects wealth	1.5	5.7	31.1	49.5	12.3
Education affects wealth	2.3	6.2	30.9	39.5	21.1
2. Structural attribution					
Luck affects poverty	9.1	18.1	45.9	21.7	5.2
Discrimination affects poverty	7.2	18.8	52.8	16.9	4.3
Opportunity affects poverty	4.3	15.2	53.1	22.3	5.2
System defects affect poverty	5.4	11.8	61.8	16.1	4.9
Luck affects wealth	7.0	13.4	40.5	29.8	9.3
Dishonesty affects wealth	13.3	26.7	42.6	12.8	4.6
Connections affect wealth	1.4	6.3	32.3	41.0	19.0
Opportunity affects wealth	1.9	8.5	44.4	34.9	10.4
Unfair structure affects wealth	3.6	14.4	56.0	19.5	6.5
3. Optimism about getting ahead					
Optimism about getting ahead	4.3	15.3	23.5	47.2	9.6
4. Feelings of injustice					
Meaningless to discuss justice	6.1	23.0	36.5	27.5	6.9
Don't know what justice is	6.0	20.2	35.7	28.5	9.6
Officials don't care	4.5	16.5	28.9	31.2	18.9
5. Preference for government leve	ling				
Ensure min. standard of living	.5	2.7	16.1	39.4	41.4
Provide job for everyone	.5	3.9	20.0	45.6	30.1
Reducing income gap	1.8	10.3	30.6	34.2	23.1

Note: response wording for 1. and 2. was actually "no influence at all," "little influence," "some influence," "large influence," and "very large influence." For full wording of the questions, see text of paper.