China's Ideological Spectrum

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The study of ideology in authoritarian regimes—of how public preferences are configured and constrained—has received relatively little scholarly attention. Using data from a large-scale online survey, we study ideology in China. We find that public preferences are weakly constrained, and the configuration of preferences is multidimensional, but the latent traits of these dimensions are highly correlated. Those who prefer authoritarian rule are more likely to support nationalism, state intervention in the economy, and traditional social values; those who prefer democratic institutions and values are more likely to support market reforms but less likely to be nationalistic and less likely to support traditional social values. This latter set of preferences appears more in provinces with higher levels of development and among wealthier and better-educated respondents. These findings suggest that preferences are not simply split along a proregime or antiregime cleavage and indicate a possible link between China's economic reform and ideology.

nderstanding the nature of latent strains, disagreements, and cleavages in societal preferences has implications for the emergence of party systems, the dynamics of political conflict, and the stability of democracy (Dalton 1988; Lijphart, Rogowski, and Weaver 1993; Lipset and Rokkan 1967). While the study of how public preferences are configured—known also as the study of ideology, belief systems, and political cleavages¹—has been the subject of intense interest in democratic settings,² it has received minimal consideration in nondemocratic contexts. This is because the arrangement of preferences is often seen as unimportant where individuals cannot vote or where votes do not meaningfully influence political outcomes. However, studying ideology in authoritarian regimes is valuable because it can shed light on the contours of opposition to and support for the regime.

We take a step to ameliorate this gap in knowledge by examining ideology in China—how preferences are configured and the extent to which preferences are bound together by some form of constraint. How preferences are configured refers to whether individuals who are more likely to hold certain preferences on one set of issues are also more likely to

hold certain preferences on other issues. For example, are those who favor democratization also more likely to favor free markets, and are those who oppose democratization also more likely to oppose free markets? The extent to which preferences are bound together by some form of constraint refers to how well the identified configuration of preferences can correctly predict preferences. For example, if preferences are configured so that those who favor democratization tend to also favor free markets, what is the likelihood an individual favors both democratization and free markets?

Based on a large-scale online survey, our study examines how preferences are configured and constrained across a wide range of issues. We uncover three main findings. First, we find that public preferences over policy and social issues are constrained in China, but less so than preferences in competitive democracies. Second, the configuration of preferences across different issues reflects known debates and falls along the following dimensions: (i) preference for authoritarian institutions and conservative political values versus preference for democratic institutions and liberal political values, (ii) preference for promarket economic polices and nontraditional

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- 1. We use the terms "belief system," "ideology," and "cleavage" interchangeably in this paper.
- 2. For examples, see Ansolabehere et al. (2001), Converse (1964), Ellis and Stimson (2012), Heckman and Snyder (1997), Poole and Rosenthal (1991, 2000), Stimson (2012), Treier and Hillygus (2009).

social values versus preference for state intervention in the economy and traditional social values, and (iii) preference for nationalism. We find that respondents' estimated latent traits in the three dimensions are highly correlated with one another, and we refer to these highly correlated latent traits as "China's ideological spectrum." Third, we find that China's ideological spectrum is related to respondent characteristics such as education and income as well as regional economic indicators, such as trade openness and urbanization.

We obtain our first finding, focused on the constraint of preferences, by using principal component analysis (PCA) and exploratory factor analysis (EFA) to extract information from the variance-covariance matrix of the data. We find that the first principal component explains roughly 18% of the total variation in the data and increases the percentage of responses correctly predicted (PCP) to 70%. This PCP is considerably lower than what has been observed in data from consolidated democracies such as the United States (Jessee 2009; Tausanovitch and Warshaw 2013), suggesting that while public preferences in China are bound together by some constraint, the constraint is relatively weak.

Our second finding, focused on the configuration of preferences, is obtained by combining our substantive knowledge of debates in China with confirmatory factor analysis (CFA). We organize the online survey questions into seven categories that reflect known debates over China's political, economic, and social trajectory and test a large set of models using CFA. The best fit model is three dimensional. In the first dimension, which we refer to as the political dimension, individuals who favor more inclusive political institutions such as a multiparty system and universal suffrage are also more likely to favor protecting individual rights from state intervention (we call this set of preferences "liberal"). In contrast, individuals who are more likely to oppose the adoption of more inclusive political institutions are more likely to believe that the state should intervene in the private domain (we call this set of preferences "conservative"). In the second dimension, which we refer to as the economic/social dimension, individuals who are more likely to oppose state intervention in markets are more likely to oppose state ownership of assets for protectionism, less likely to believe that China's economic reforms have generated negative outcomes for the working class and peasants, and more likely to endorse nontraditional social values, such as sexual freedom (we call this set of preferences "promarket/nontraditional"). On the other hand, individuals who believe that China's economic reforms have generated negative externalities are more likely to support greater state intervention in market dynamics, such as price setting, more likely to support state ownership of assets to protect national interests, and more likely to endorse traditional values, such as social hierarchy and practices such as the study of Confucian classics (we call this set of preferences "antimarket/traditional"). Finally, in the third dimension, which we call the *nationalism* dimension, individuals are divided between those who endorse nationalism—for example, strong defense of territorial sovereignty and adversarial view of the West (we call this set of preferences "nationalist")—and those who oppose nationalism (which we call "nonnationalist").

We find that respondents' latent traits in these three dimensions are strongly correlated so that individuals who are politically "liberal" are also more likely to be promarket/ nontraditional and nonnationalist, while individuals who are politically "conservative" are more likely to be antimarket/ traditional and nationalist. Despite the high correlation of the latent traits of the dimensions, preferences are better described as three dimensional rather than reduced to one dimension. If we were to visualize the configuration of preferences, China's ideological spectrum is better described as a three-dimensional ovoid (think football) than either a one-dimensional line or a three-dimensional sphere.

Our third finding focuses on the relationship between China's ideological spectrum and individual- and regional-level covariates. We find that individuals from regions such as Guangdong, Shanghai, and Beijing with higher levels of economic development, trade openness, and urbanization on average lean toward the liberal, promarket/nontraditional, and nonnationalist end of the spectrum in comparison with respondents from poorer regions such as Guizhou, Guangxi, and Henan, who lean on average toward the conservative, antimarket/traditional, and nationalist end of the spectrum. At the individual level, those with the liberal, promarket/nontraditional, and nonnationalist clustering of preferences are more likely to have higher levels of income and education. We validate these results with the nationally representative Asian Barometer Survey.

These findings have implications for our understanding of potential opposition to Chinese Communist Party (CCP) rule. The configuration of preference we identify does not represent a pro- or antiregime cleavage. Those who are more likely to favor political reform and liberalization are supportive of market reform and liberalization, while those supportive of China's current political institutions favor changes to the economic status quo. In other words, although wealthier and better-educated individuals may support changes to China's political system, these preferences may not result in opposition to the CCP because the same subpopulation prefers the regime's trajectory of market-oriented economic reform. Similarly, those who oppose economic policies—the less educated and well-off—are likely to support the continuation of CCP rule, given their opposition to political liberalization and

emphasis on national strength. On the whole, China's current configuration of preferences does not appear conducive to the emergence of consolidated opposition to the CCP.

These results may also expand our understanding of what factors shape the emergence of political cleavages. Lipset and Rokkan (1967) argue that cleavages in Western Europe emerged through a series of conflicts between the church and state. Kitschelt (1992) critiques this view and instead argues that different types of political cleavages emerge depending on whether resources are allocated by the market or by the state when political liberalization occurs. We examine a context marked by absence of electoral competition and organized political opposition.3 China's ideological spectrum appears to correspond with the outcomes of post-Mao market reforms. China has experienced tremendous growth but also increasing inequality in income, wealth, and access to public goods (Khan and Riskin 2001). Those who are relatively better off in China's era of market reform tend to welcome continued market reforms as well as political reform toward democratic institutions but tend to reject traditional social norms. Those who are relatively worse off tend to support authoritarian rule, favor a return to state allocation of resources, and endorse traditional values. While we cannot establish a causal relationship between economic outcomes and preferences, our data are consistent with several existing explanations of how economic reforms and attendant changes may influence the configuration of preferences, including theories of material self-interest, information exposure, cognitive mobilization, and personality traits.

STUDY OF IDEOLOGY IN AUTHORITARIAN REGIMES

In this section, we discuss why relatively little attention has been paid to the study ideology in authoritarian regimes and why studying ideology advances our understanding of non-democratic regimes. Then we discuss how we operationalize the concept of ideology.

Ideology and authoritarian regimes

While there has been rapid growth in research examining public opinion in authoritarian regimes, relatively little attention has been put on how these opinions are organized and arranged.⁴ This inattention may relate to the perception that the organization of societal preferences is largely irrelevant for political systems without voters as well as the belief that those

living in authoritarian regimes may not have organized preferences.

In his work on belief systems in mass publics, Converse (1964) notes that the organization of societal preferences is largely irrelevant in nondemocratic settings because mass publics in these political regimes are not voters. However, Converse notes that in nondemocratic settings, belief systems are occasionally extremely important—in periods of "crisis or challenge to the existing power structure" (Converse 1964, 2). Periods of crisis could arise because societal preferences become organized in opposition to regime policies. Elite rivals can exploit divergences in preferences to gain mass support. Outside of periods of crisis, mass preferences may also influence policy and governance outcomes in nondemocratic regimes, as a growing body of work shows (Wang 2008; Weeks 2008).

For post-totalitarian and post-communist regimes, the lack of attention to studying ideology also stems from the assumption that societal actors are unlikely to have coherently organized preferences because of the legacy of ideological control and suppression of autonomous social organizations (Elster, Offe, and Preuss 1998; White, Rose, and McAllister 1997). However, instead of destroying the organization of preferences, totalizing ideology could instead structure cleavages in public preferences. For example, Maoism was put into place by the CCP as a totalizing ideology to motivate voluntary compliance and involvement in societal transformation (Schwartz 1970; Starr 1973). However, rather than flattening ideological divisions, state-led ideological campaigns, such as China's Anti-Rightist Movement in the late 1950s, reified the ideological cleavage between the regime and "rightists" supposedly sympathetic to liberal political values.

Studying ideology can help advance our understanding of support for and opposition to autocratic rule. Research on public opinion in authoritarian regimes, including China, focuses on assessing regime support and alternative political institutions (Dickson 2008; Dowd, Carlson, and Shen 1999; Shi 2001; Tang 2005; Wright 2010). Studying the configuration of preferences (ideology) allows us to examine how public preferences across issues are arranged relative to the policy positions of the regime. Instead of evaluating regime support by directly asking respondents about their trust in current and alternative institutions, procedures, and outcomes, as is the main strategy of public opinion research, studying ideology allows researchers to evaluate regime support by whether public preferences are organized so that key cleavages align with the policies and positions of the regime.

Conceptualizing ideology

The diverse meanings of the term "ideology" may also help explain why it has been understudied. In authoritarian and

^{3.} Elections in China are relegated to villages and neighborhoods where the authority of officeholders is limited, and candidates do not compete on differing party platforms (e.g., Manion 2006; O'Brien and Li 2000; Xu and Yao 2015).

^{4.} Exceptions include Blaydes and Linzer (2012) and Wu (2013).

especially post-communist settings, the term is closely associated with totalitarianism and the use of totalizing ideology to motivate and reinforce social control (Friedrich and Brzezinski 1965; Inkeles 1954; Linz 1975; Neumann 1957).

In this paper, ideology refers to the study of how public preferences are configured and the extent to which this configuration is bound by some constraint. This conception of ideology follows Converse (1964) and focuses on the extent of agreements and disagreements in people's beliefs and attitudes across myriad issues. In any given society, each individual likely has beliefs on many issues at the same time—for example, one might have opinions on religion, globalization, urbanization, nationalism, and income redistribution. These beliefs may be shaped by various internally developed or externally imposed factors. We are interested in whether and how beliefs across issue areas are organized among individuals in a society. To put it differently, we are interested in whether individuals who are more likely to hold certain preferences on one set of issues are also more likely to hold similar preferences on other sets of issues. The study of ideology or belief systems differs from the general study of public opinion, which tends to focus on preferences on individual issues or support for the incumbent, rather than the organization of preferences across a variety of different issues.

Our conceptualization of ideology implies a focus on "operational" ideology, namely, the measurement and description of how preferences are arranged, which follows a long tradition in the study of belief systems in American politics. Our operational definition is distinct from "symbolic" ideology, or self-identification, and differs greatly from the use of ideology to denote domination by the ruling class (Marx and Engels 1970) as well as cultural understandings of the term (Geertz 1964).

A configuration of preferences refers to the minimum number of coordinates of a space (known as *dimensions*) that can best capture divisions and clusterings in beliefs and attitudes. A unidimensional ideology means that divisions can be mostly captured by a line in a high-dimensional space. A two-dimensional ideology means that divisions in beliefs and attitudes are best represented by a plane, and a three-dimensional ideology means that divisions mostly occur within a cuboid.

To illustrate this more clearly and to show what a configuration implies for how preferences are arranged, we describe a hypothetical society where individuals have diverse preferences across two issue areas: attitudes about whether the individual or the group is the fundamental unit of concern (individualism vs. collectivism) and beliefs about whether the state should or should not intervene in economic production and allocation (economic interventionists vs. economic non-interventionists).

If beliefs in this hypothetical society are configured such that preferences for individualism or collectivism (*x*-axis) are uncorrelated with preferences in the economic realm (*y*-axis), we would say the configuration of preferences is two dimensional and the two dimensions are orthogonal to each other. This configuration is best represented by a plane, as depicted in figure 1*A*. In this case, divisions in both issue areas exist—there are cleavages between those who are collectivist and those who are individualist and between those who support and oppose economic intervention.

In contrast, if beliefs in this hypothetical society are configured such that individuals who support collectivism almost all support economic interventionism, and individuals who support individualism almost all support economic non-interventionism, then the two dimensions would be reduced to one dimension—the 45° line in figure 1B. In this case, we

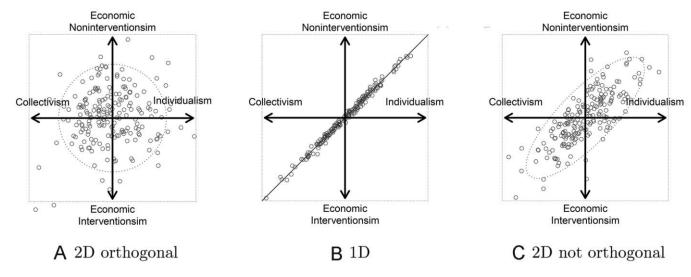


Figure 1. Dimensionality of ideology: hypothetical examples

would say that the configuration of preferences is one dimensional. The main cleavage lies between those who favor collectivism and economic interventionism and those who favor individualism and economic noninterventionism.

A more realistic configuration may fall somewhere between theses two cases: opinions are split on both issue areas, but individual preferences in the two issue areas are correlated (Stimson 2012). For example, people who support individualism are more likely to support economic noninterventionism and people who support collectivism are more likely to support economic interventionism, as shown in figure 1*C*. In this case, we would say that the configuration of preferences is two dimensional, but they are not orthogonal to each other, and the main cleavage in society resembles that of a one-dimensional configuration.

DATA

We explore ideology in China mainly using data from the online *zuobiao* survey between January 1, 2012, and December 31, 2014.⁵ During this period, 460,532 respondents completed the online survey. In this section, we describe the characteristics of this unique data set and how we reweight the data and construct a more representative sample. We also describe the issue areas that the questions in this survey cover and how these issues relate to existing debates in China.

Opt-in sample and resampling

The zuobiao survey, also known as the Chinese Political Compass (中国政治坐标系), was designed and set up by a diverse group of graduate students and researchers at Peking University in 2007 to measure beliefs and preferences of the public. These researchers developed the 50 questions through a process of consultation and discussion with a wide range of experts that emphasized the creation of a set of questions that were time insensitive and covered a wide array of debates on key issues facing China. Like questions included in survey-based measures of ideology in democratic contexts, the zuobiao survey focuses on questions related to politics and positions of political elites. In the study of ideology in the United States, survey-based measures of ideology include questions on issues

ranging from redistribution to morality because these are the issue where the Democratic and Republican parties have established viewpoints and positions. In the *zuobiao* survey, questions not only include those where the CCP has established a position, but also those where there is debate among elites and the public over whether the regime should alter its stance.

The *zuobiao* website gained traction among Chinese students through online bulletin boards and spread through (virtual) word of mouth. Since these data are generated through an opt-in online survey, they have both advantages and limitations. The survey's most important advantage is that it includes questions typically excluded from nationally representative surveys, which are subject to government and CCP oversight. Another advantage is that in comparison with officially approved surveys, participants in opt-in samples are typically more intrinsically motivated and are likely to produce data with less measurement error, satisficing, and social desirability bias (Chang and Krosnick 2009). The main limitations of the data are that the sample is not representative of the Chinese population as a whole, and it only records a small number of respondent characteristics.

The zuobiao website records the IP address associated with each respondent, which we use to identify the location of respondents. The nearly half million respondents come primarily from mainland China (90%), with a few 4,310 (less than 1%) from Hong Kong, and the remaining 45,066 (10%) from countries and regions outside of mainland China. As shown in figure 2, respondents come from all 31 of China's provincial-level administrative units. The largest proportion (21%) come from Beijing, followed by Guangdong (9%), Shanghai (8%), and Jiangsu (7%). Although the overall sample size is large, the number of respondents is only in the hundreds for some provinces. It is clear that the zuobiao data are geographically biased toward more developed areas. The zuobiao survey asks respondents for their gender, year of birth, level of education, and annual income.7 Figure 3A shows the age and gender composition of respondents in the zuobiao sample. As we can see, the majority of the respondents are young and male.

In order to achieve better representativeness across geography and demographics, we construct a new sample of 10,000 observations using a resampling scheme. We conduct all subsequent analyses on this 10,000 observation sample.

^{5.} In democratic contexts with national-level elections and robust party competition, nonsurvey-based methods such as campaign contributions (Bonica 2014), Twitter networks (Barberá 2015), and representation in the media (Groseclose and Milyo 2005) are used to study ideology. However, the activities of competing political parties underlie these nonsurvey methods, which are often validated by comparison to roll call data (Heckman and Snyder 1997). Although ideology could also be measured with nonsurvey methods in a context like China, survey-based measures will likely remain important in the absence of voting and roll-call data.

^{6.} In China, controversial questions have high rates of noncompletion and high levels of social desirability bias (Meng, Pan, and Yang 2014).

^{7.} For education, respondents can select "middle school and below," "high school," "college," and "advanced degree." For annual income, respondents can select less than 50,000 RMB, 50,000–150,000 RMB, 150,000–300,000 RMB, and more than 300,000 RMB.



Figure 2. Number of respondents in each province and abroad

We do not embed a reweighting scheme in statistical modeling because most of estimation procedures we use, such as PCA, EFA, and CFA, cannot easily accommodate sampling weights. The resampling procedure entails two main steps. First, we adjust weights of the *zuobiao* sample using calibration reweighting such that sample-estimated totals of province, age cohorts, gender, and their interactions match the population total in the 2005 One-Percent Intercensal Population Survey (Särndal and Lundström 2006; Zaslavsky 1988).⁸ Since most of the *zuobiao* data come from urban areas, we focus on urban population characteristics from the Population Survey. Second, we randomly sample 10,000 observations from the *zuobiao* data based on the weights.

Figure 3*B* shows the age and gender composition of the constructed sample, which is very close to that of China's urban population. College-aged men in the original *zuobiao* data are much less likely to enter the new sample than respondents who are middle-aged women. Similarly, respondents from western provinces, such as Shaanxi and Gansu, are more likely to enter the new sample than respondents

from areas such as Beijing, Shanghai, and Guangdong. We exclude provinces with fewer than 1,000 respondents in the original data, which removes Qinghai, Ningxia, and Tibet from the new sample. Table A2 (tables A1–A5 available online) shows the regional distributions of respondents in the original sample and in the new 10,000 observation sample.

Although we work to improve data quality, limitations remain. For example, there are characteristics we are not able to incorporate in the reweighting/resampling scheme, but which may be correlated with the probability of participating in the online survey. In addition, while we believe that the questions of the zuobiao survey provide insight into our ability to understand ideology in China, we cannot determine whether the questions of the zuobiao survey are the best questions to use when measuring ideology in China. These are questions that scholars should continue to explore. To go an additional step in addressing these concerns in this paper, we use data from the third wave of the Asian Barometer Survey (ABS) China Section, a nationally representative survey, to validate the relationship between ideology and various individual- and regional-level covariates.9 Altogether, we believe we can gain valuable insights from the zuobiao data because we have an understanding of the nature of the sample

^{8.} Inverse probability reweighting based on province, gender, and age gives similar results. We use calibrations reweighting because it allows us to borrow strength from neighboring cells since it targets marginal distributions of the covariates instead of their joint distribution.

^{9.} We focus on ABS questions that cover issues similar to zuobiao.

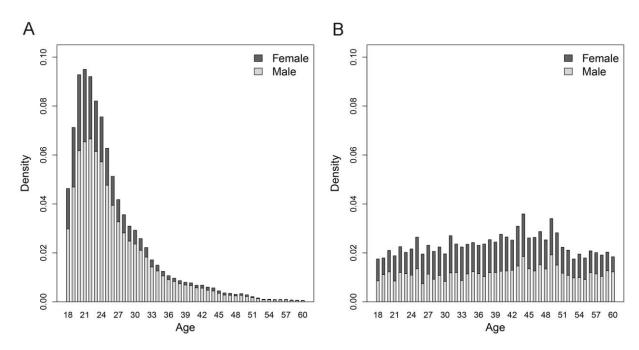


Figure 3. Age and gender: original and new samples

bias and it is unlikely the sample bias will lead us to uncover patterns that are not present in a larger population (Manion 1994).

Survey questions and existing debates

The *zuobiao* survey comprises 50 statements with responses on a 4-point scale—"strongly disagree," "disagree," "agree," and "strongly agree." The statements are randomly ordered for each respondent. The *zuobiao* website only records a respondent's answers if responses to all 50 statements are obtained. As a result, there are no missing data in the sample.

We group the 50 questions into seven categories: (1) political institutions, (2) individual freedom, (3) market economy, (4) capital and labor, (5) economic sovereignty and globalization, (6) nationalism, and (7) traditionalism. These categories represent areas where cleavages in public preferences, were they to exist, would most likely be found. We identify these sources of potential cleavage based on prior academic research as well as the substance of debates among Chinese intellectuals and elites.

Political institutions, individual freedom. First and foremost, politics occupies a central position in debates over China's future. We place questions related to political preferences in the political institutions and individual freedom categories. Statements falling into the political institutions category are those that pertain to preferences over the type of political, legal, and media institutions that are appropriate for China. An example statement in this category is: "Western multiparty systems are unsuitable for China in its current state." The political institutions category reflects debates following Mao's death over China's political trajectory. Senior members of the CCP agreed that excessive concentration of power was at the root of Maoist era economic disasters (Perry and Wong 1985), and reforms decentralized power through changes in cadre appointment and monitoring (Burns 1989; Manion 1985). Marxist humanists within the CCP wanted to go further. They believed China's stability and prosperity required new institutions such as multiparty competition (Goldman and Lee 2002). Calls for changes to political institutions led to the protest movements of the late 1980s and culminated in the 1989 Tiananmen incident.

After state suppression of the 1989 movement, the push for political liberalization was halted until the late 1990s when prominent economists and jurists argued for changes to political institutions and greater protection of individual freedoms (for examples, see Feng 2005). This new wave of debate informs the questions we place into the political institutions category as well as the questions we place into the individual freedom category. The individual freedom category includes

^{10.} The creators of the *zuobiao* survey organized the 50 questions into three categories: political, economic, and social. While our grouping shares some commonalities with this typology, we organize question with a greater focus on known debates. There are other ways of grouping the questions (e.g., Wu 2013).

^{11.} In appendix A.1 (appendix available online), we show the full list of questions in each category and more details on the coding of specific questions. Their descriptive statistics are presented in table A2.

statements about whether the state should intervene in individual behavior and in the private domain, or whether some individual-level choices should be protected from state intervention. Questions in this category include those on educational choice and religious freedoms as well as reproductive rights—for example: "Even with population pressures, the state and the society have no right to interfere in the decision to have a child, or how many children to have." Debates over what type of political institutions are best for China and the extent to which individual freedoms should be protected persist in China today, despite censorship and other controls on the free flow of information (King, Pan, and Roberts 2013).

Market economy. Debates over China's political trajectory go hand in hand with debates over China's economic reforms. We put questions that relate to the role of the state in allocating resources in the market economy category. Before 1979, resources were allocated by the state and CCP. After Mao's death in 1976, Deng Xiaoping introduced market reforms and China has since continued down the path of reducing state intervention in the market—privatizing state-owned enterprises, lifting price controls, reducing state regulations of industries, opening up the country to foreign investment (Naughton 2007). However, there has always been opposition to decreasing state intervention in markets. In the 1980s, Leftists, including senior Party leaders, believed that marketoriented reforms would bring dangerous Western values, such as individualism and materialism, into China and ultimately lead China to the fate of the USSR under Gorbachev. Leftists within the party continued to oppose the economic reforms of Deng's successors. Questions from the zuobiao survey that reflect these debates on how resources should be allocated and the extent of state intervention in markets fall in the market economy category, which includes attitudes toward price controls, private ownership, and redistribution. For example: "Attempting to control real estate prices will undermine economic development."

Capital and labor. Debates over state intervention in markets remain relevant in part because China's economic reform continues to have dramatic effects on Chinese society. While economic reform has coincided with unprecedented growth and dramatic increases in living standards for much of China's population, it has also been accompanied by sharp increases in inequality and other social disparities. Around 30 millions workers were laid off during privatization of stateowned enterprises (SOEs) from 1998 to 2004 and the disparity between rural and urban areas has widened (Naughton 2007; Yang 1999). Increasing inequality generates debates over the

effect of economic reform on disadvantaged groups.¹² Many of these debates are framed with language of Marxist economics and, especially, the "labor theory of value." Questions in the capital and labor category reflect these debates, evaluating perceptions of distributive justice and the consequences of China's economic reforms such as: "The fruits of China's economic development since reform and opening up are enjoyed by a small group of people; most people have not received much benefit."

Economic sovereignty and globalization. China's economic reform also dramatically altered China's relations with the rest of the world. As China opened its market to foreign and private investors, debates emerged over whether economic openness would constrain or damage China's economic sovereignty. For example, neo-nationalists argued that economic reforms, particularly the reduction of protectionist barriers and the opening of Chinese markets to foreign investment, would damage China's national interests (Fewsmith 2008). Questions placed into the economic sovereignty and globalization category reflect these debates, including the extent to which China should cede control of its economic activities, wealth, and natural resources to foreign or societal interests. or whether economic activities that relate to national interest should remain firmly under the control of the state. For example: "Sectors related to national security and important to the national economy and people's livelihoods must be controlled by state-owned enterprises."

The categories market economy, capital and labor, and economic sovereignty and globalization all relate to preferences in the economic domain and to China's economic reforms. We place them into three separate categories because they reflect different aspects of existing debates—on the extent of state intervention in markets, on the effects of market reform on Chinese society, and on the effects of market reform on China's international standing and national interests. By doing so, we leave open the possibility that public preferences diverge in these three areas.

Nationalism, traditionalism. The last two categories, nationalism and traditionalism, reflect debates with longer historical trajectories that remain salient today. Nationalism has been a subject of debate since the late Qing dynasty and continues to attract the attention of Chinese scholars and intel-

^{12.} For example, the so-called New Left were concerned with the effects of China's economic reforms on the urban and rural underclass, especially the welfare of workers, pensioners, and peasants laid off during SOE privatization that emerged in the late 1990s.

lectuals (e.g., Gries 2004; Unger 1996; Weiss 2014). Questions falling into the nationalism category reflect public concerns over territorial integrity, China's relationship with the West, as well as its status on the international stage. For example, a question in this category is: "National unity and territorial integrity are the highest interest of society."

Questions falling into the traditionalism category reflect debates over the relevance of Confucian doctrines and teachings for China's current social and political order, as well as debates about sexual freedom and homosexuality. For example: "The modern Chinese society needs Confucianism." Confucian teachings have been deeply influential in China's political tradition (Tang 2005). While Mao aimed to remove the influence of Confucian hierarchy from Communist society, Confucian values shaped implicit practices throughout the Maoist era (Perry 2008). In recent years, various schools of thought advocating for the explicit application of Confucian doctrines and institutions to Chinese society have emerged under the broad banner of neo-Confucianism (Jiang 2012).¹³

While the *zuobiao* survey includes questions across a large number of issue areas, the survey does not contain a comprehensive list of issues and debates. For example, the survey does not touch on ethnic relations or gender issues. As a result, the configuration and constraint of preferences we identify is not an exhaustive description of preferences in China, and preferences on issues not included in this survey may change the configuration of preferences. Despite this and other shortcomings of the data, we believe these data offer a compelling first step in the examination of ideology in China. We hope others will build on these results in China as well as in other authoritarian contexts.

CONSTRAINT AND CONFIGURATION OF PREFERENCES

We present the main empirical results of the constraint and configuration of preferences in this section. First, we use principal component analysis (PCA) and exploratory factor analysis (EFA) to gauge the strength of the constraint on the configuration of preferences, namely, the extent to which preferences and attitudes are organized and how predictive the most salient latent dimensions are of responses. We then move onto the framework of confirmatory factor analysis (CFA), where we use the seven categories of questions described earlier along with a few additional assumptions to identify the configuration of preferences.

Strength of constraints

We employ PCA on the 10,000 observation sample to determine whether there is any systematic grouping of preferences among respondents. PCA is a dimension reduction procedure that converts multiple possibly correlated variables into linearly uncorrelated composite variables called principal components (PCs). These composite variables are orthogonal linear combinations of the original variables and are ordered according to their variances. In other words, PCA transforms correlated observed responses to the 50 statements to a smaller set of important composite variables that explain the most variability in the original responses, plus errors. There is a sizable literature on the use of PCA to study the configuration of preferences (Ansolabehere, Snyder, and Stewart 2001; Carsey and Layman 2006; Heckman and Snyder 1997).

If responses to the zuobiao survey are random, then the first PCs would not explain much more of the variance in responses than the subsequent PCs. This is not what we observe in the data. Figure 4A is a scree plot that displays the eigenvalue of each PC (in solid black dots), which corresponds to the amount of variance each PC explains in the normalized data (hence the total variance equals 50, the number of questions). We see that the first nine PCs have eigenvalues bigger than 1, which is the variance of a normalized variable; in particular, the first three PCs have considerably larger eigenvalues than the rest of the PCs and they explain 19%, 6%, and 4% of the total variance, respectively. This means that there is at least some level of organization of the respondents' preferences, and configuration of preferences may be captured by a three-dimensional subspace. To lend further support to this finding, we subsequently conduct an EFA, which is widely used in psychology to uncover the underlying structure of a potentially large set of variables (Gorsuch 1988). It is a method of factor analysis (with a formal statistical model) but requires minimal prior knowledge of the latent factor structure. In contrast to PCA, EFA recovers factors that maximize the shared portion of the variance instead of total variance.¹⁴ Eigenvalues of estimated factors from EFA are also shown in figure 4 (in hollow gray dots). Consistent with the PCA, the EFA shows that there may be three factors that can explain a relatively large chunk of the variance in the data.

Having established that there exists some form of constraints of the respondents' preferences, we investigate how

^{13.} Some strains of Confucian thought are increasingly well received by the CCP, and interest in Confucianism as normative political theory has also garnered interest beyond China in recent years.

^{14.} Mathematically, EFA constructs factors by extracting information from the off-diagonal entries of the variance-covariance matrix while PCA takes on the entire variance-covariance matrix. Because parameters are assigned to variance of each variable in EFA, the off-diagonal matrix will not be full rank. As a result, some eigenvalues will be negative.

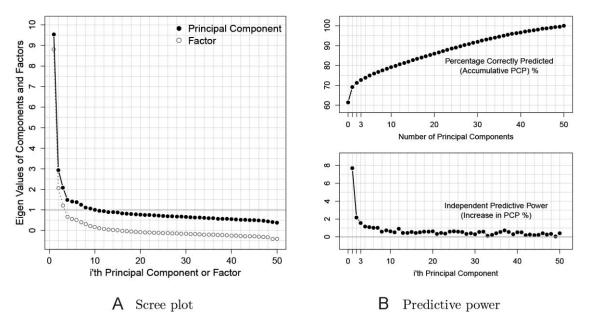


Figure 4. Results from principal component analysis (PCA) and exploratory factor analysis (EFA). PCP = percentage correctly predicted

strong these constraints are, where strength refers to the extent the PCs from PCA (and latent factors from EFA) can predict preferences on individual questions. In the upper panel of figure 4*B*, we show the percentage correctly predicted (PCP) by each PC. PCP is the proportion of respondents' answers that would be correctly predicted had we observed this set of PCs. It is a commonly used measure of the constraint of preferences. The baseline is the PCP when none of the PCs are observed but the mean of responses to each question is used. The lower panel of figure 4*B* shows the increase in PCP due to the inclusion of each PC.

As figure 4*B* shows, (1) the predictive power of the first PC is considerably higher than the rest of the PCs, which indicates some systematic organization of preferences, and (2) the overall predictive power of the first few PCs is relatively low. For example, the first PC produces a classification rate of 69% (from the baseline of 61%), and the number increases to 73% when two additional PCs are added. To put these numbers into context: based on an internet survey of American voters on policy issues, Jessee (2009) finds that a one-dimensional ideal point model produces an overall correct classification rate of 79%, while a two-dimensional model increases classification rate to 82%; Tausanovitch and Warshaw (2013) find that a one-dimensional item response theory model can correctly classify 79% of responses to policy questions using a

nationally representative survey, and the PCP increases to 80% when a second dimension is added.

In summary, through PCA and EFA, we find systematic groupings of preferences, but the strength of the constraints is much weaker compared with what has been observed in competitive democracies like the United States. PCA and EFA results also suggest that the configuration of preferences is best captured by a multidimensional space. However, the PCs from the PCA and factors from the EFA do not naturally align with the issue categories described above. In fact, by construction each principal component from PCA or factor from EFA contains information from all questions, so their substantive meanings can be hard to interpret. Next, we turn to confirmatory factor analysis to investigate the configuration of preferences more formally.

Configuration of preferences

Confirmatory factor analysis (CFA) is a method of factor analysis that allows researchers to test whether their understanding of the relationship between a construct of latent traits (factors) and observed measurements is consistent with the data. Similar to other methods of factor analysis, CFA starts with the assumption that observed measures (in our case, respondents' answers to the 50 questions) reflect some latent traits of the subjects. In contrast to EFA, however, CFA requires researchers to clearly specify the factor structure, namely, the mapping from the latent traits and the observed measures, based on their prior knowledge. A CFA model is a set of system equations, which are often estimated using weighted least-squares or maximum likelihood methods.

^{15.} Following common practice in the literature, the responses are first dichotomized to "agree" or "disagree."

^{16.} This number is known as the aggregate reduction in error, or APRE. See Poole and Rosenthal (2000).

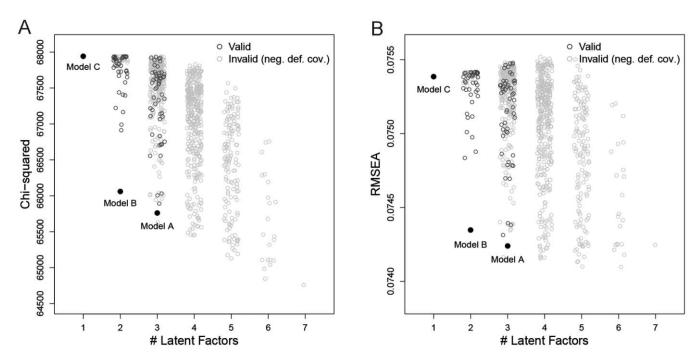


Figure 5. Confirmatory factor analysis (CFA) model fit

The CFA model has two main advantages over EFA and PCA. First, because each latent trait is assumed to be driving only a subset of measures, they are easier to interpret. Taking the *zuobiao* data as an example, if we assume that each of the seven categories is driven by one distinctive factor, then the estimated factors likely represent our understanding of these categories, as long as the model is correctly specified and converges. Second, because we specify a fully generative probabilistic model for each CFA, we can conduct statistical tests to evaluate the models. These test statistics help us select a model that best characterizes the data. For the same reason, CFA can accommodate more complicated data generating processes, such as ordinal items.¹⁷

The main challenge for researchers in using CFA, however, is to specify a model that they believe to be both substantively meaningful and to reflect the true data-generating process. This is often a difficult task because with a large set of measures, the number of all possible models is astronomical. In order to simplify the model and keep the problem tractable, we add two modeling assumptions: (1) each question is driven by only a single factor, and (2) questions within the same category (as described above) are driven by the same factor. The first assumption rules out the possibility that two or more latent factors affect the answer to one question simultaneously. Though restrictive, this assumption

dramatically reduces model complexity, and makes sense substantively given the nature of the 50 zuobiao questions. The second assumption sets the maximum number of latent factors (dimensions) to seven and allows for clear interpretation of each of the factors. Note that we allow any factors to be correlated with the others or to collapse into one factor. Given the seven categories, our two assumptions reduce the number of candidate models to 877, allowing for models of one to seven dimensions. Throughout the paper, we use the diagonally weighted least squares (DWLS) estimator to estimate CFA models, given our ordinal data (Li 2016). We run a complete search of all 877 models and select the model that has the best fitness statistics, such as chi-squared (χ^2), the root mean square error of approximation (RMSEA), and the comparative fix index (CFI). These test statistics help us access model fit and determine the dimensionality, or number of factors, that make up the configuration of preferences.

Dimensionality. Figure 5 presents the results from evaluating 877 models. It shows two goodness of fit measures, χ^2 and RMSEA, for all 877 models. Figure 5A shows the χ^2 measure of fitness, the difference between observed and expected covariance matrices, where a smaller χ^2 (closer to 0) indicates a better fit. Figure 5B shows RMSEA, the difference between the hypothesized model and the population covariance matrix, where again, smaller values indicate better model fit. In both plots, black circles represent valid models and light gray circles invalid models, where the estimated variance-covariance matrices of the latent factors are not positive definite, which

^{17.} We thank an anonymous reviewer for suggesting the use of CFA with ordinal items and formal statistical tests.

happens when some of the estimated factors are highly collinear, suggesting that they should be collapsed into a single factor. Valid models with the best fit with each number of dimensions are shown with solid black circles.

Figure 5 shows that the valid model with best measure of fit is a three-dimensional model (model A). This three-dimensional model provides better fit than the best two-dimensional model (model B) and the one-dimensional model (model C). Table 1 shows measures of absolute fit (χ^2 and RMSEA) and relative fit (CFI and TLI, the Tucker-Lewis index) for models A, B, and C. The three-dimensional model A outperforms the two-dimensional model B ($\Delta\chi^2$ of 301), and the difference between these models is statistically significant (p-value, .000). The two-dimensional model B outperforms the one-dimensional model C ($\Delta\chi^2$ of 1879), and the difference between the two models is also statistically significant.

Altogether, our analyses reveal a multidimensional configuration of preferences, where a three-dimensional model describes the configuration of preferences.²¹ The results from CFA are broadly consistent with those from PCA and EFA in terms of dimensionality.

Substantive meaning of latent traits. We now describe how the seven categories map onto the three dimensions in model A and examine the substantive interpretation of each dimension. The first dimension of model A, which we will refer to as the *political* dimension, includes questions in the political institution and individual freedom categories.²² The CFA estimates of this first latent variable, as well as their 95% confidence intervals, are shown in figure 6.²³ Each coefficient represents a standard-deviation increase (or decrease if the

number is negative) in the response to a question due to a one-standard-deviation increase in the corresponding latent factor. From figure 6, we can see that individuals who favor more inclusive political institutions such as a multiparty system and universal suffrage are also more likely to favor protecting individual rights from state intervention (we call this set of preferences "liberal"). For example, those more likely to agree that "When events that have major repercussions for the safety and security occur, the government should freely disseminate information even if information disclosure increases the risks of unrest" (political institutions) are also more likely to agree that "Religious adherents should be allowed to conduct missionary work in nonreligious spaces" (individual freedom).

In contrast, figure 6 shows that individuals who oppose the adoption of more inclusive political institutions are more likely to believe that the state should intervene in the personal and private domain (we call this set of preferences "conservative"). For example, respondents who agree that "People should not have universal suffrage if they have not been educated about democracy" (political institutions) are more likely to agree that "Primary school, secondary school, and college students should all participate in government organized military training" (individual freedom).²⁴

The second dimension of model A, which we call the economic/social dimension, includes questions in the free market, capital and labor, economic sovereignty, and traditionalism categories. Three of these categories are related to China's economic reforms while the last category reflects respondents' preferences toward social values. The CFA estimates of this second latent variable are shown in figure 7. These estimates show that individuals who are more likely to oppose state intervention in markets are more likely to oppose state ownership of assets for protectionism, less likely to believe China's economic reforms have generated negative outcomes for the working class and peasants, and more likely to embrace nontraditional values, such as sexual freedom and same-sex marriage (we call this set of preferences "promarket/nontraditional"). For example, those more likely to believe "Individuals should be able to own, buy and sell land" (free market) and that "Foreign capital in China should enjoy the same treatment as national capital" (economic sovereignty) are more likely to disagree that "People who make money through gains from financial investments contribute less to the society than people who make money through labor" (capital and labor) and agree that "Two adults should be free to engage in voluntary sexual behavior regardless of their marital status" (traditionalism).

 $^{18.\,}$ A graphical presentation of a three-dimensional model is shown in fig. A1.

^{19.} Compared with model A, model B collapses the political dimension (which includes the political institutions category and the individual freedom category) and the nationalism dimension.

^{20.} Compared with model B (or model C), model A only loses two (or three) degrees of freedom.

^{21.} It is important to note that our results do not imply that ideology in China definitively consists of three dimensions, only that it is multi-dimensional. As shown in fig. 5, higher dimensional models have better fit but are not supported by our current data. Using 12 questions from the *zuobiao* survey plus three additional questions, Wu and Meng (2017) suggest that a two-dimensional factor model can capture the configuration of preferences of the public.

^{22.} We assign a text label to each of the three categories for ease of reference, but these text labels may not fully encapsulate the nuances of the question included in this dimension. See appendix A.1 for details of how questions as assigned to the seven categories, which form the basis of the dimensions.

^{23.} All point estimates and standard errors of model A are shown in table A3

^{24.} The question on "wasting food" evaluates beliefs about the limits of individual autonomy and whether individual freedom refers to protections for all types of individual behavior.

Table 1. CFA Model Selection

	No. of Dimensions	χ^2	CFI	TLI	RMSEA	$\Delta\chi^2$	<i>p</i> -Value
Model A	3	65,761	.909	.905	.0742		
Model B	2	66,062	.908	.904	.0743	301	.000
Model C	1	67,941	.906	.902	.0754	2,180	.000

Note. CFA = confirmatory factor analysis; CFI = comparative fix index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation.

On the other hand, from figure 7, we see that individuals who believe China's economic reforms have generated negative externalities for workers and peasants are more likely to support greater intervention of the state in the market, more likely support state ownership of assets to protect national interests, and more likely to subscribe to traditional values (we call this set of preferences "antimarket/traditional"). For example, those who are more likely to agree that "The process

of capital accumulation is always accompanied by harm to the working class" (capital and labor) are more likely to agree that "If the price of pork is too high, the government should intervene" (free market) and that "The Eight Diagrams (*Bagua*) in The Book of Changes (*Zhouyi*) can explain many things well" (traditionalism).

The third dimension of model A includes only the questions in the nationalism category, as shown in figure 8. Here,

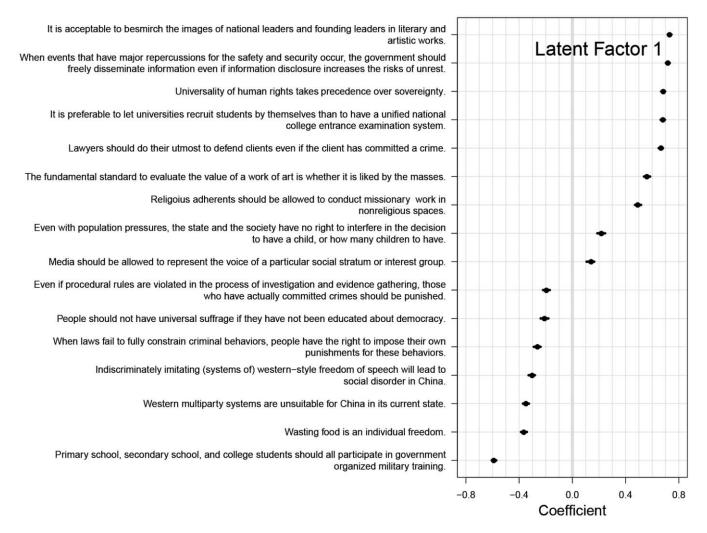


Figure 6. Estimated coefficients: first latent factor

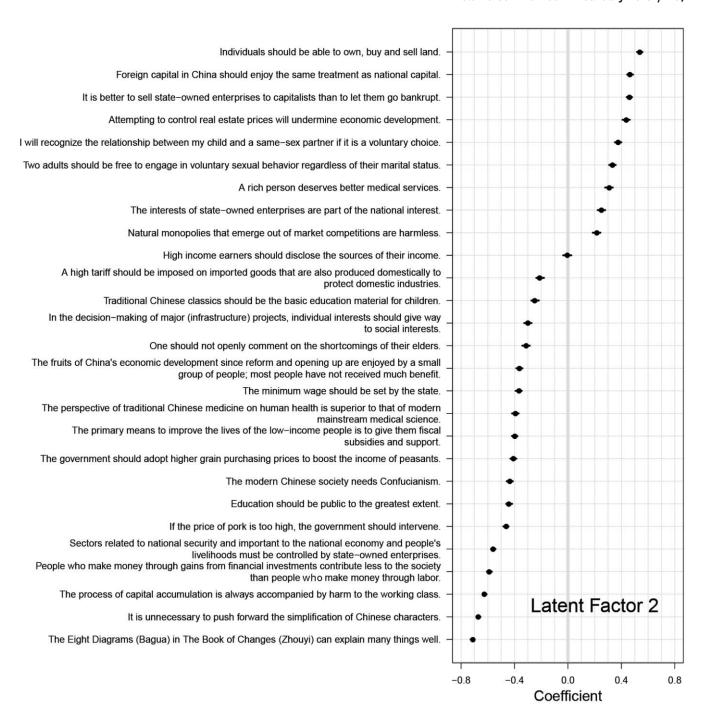


Figure 7. Estimated coefficients: second latent factor

respondents are split between those who endorse nationalistic positions, such as "National unity and territorial integrity are the highest interest of society," favor strong defense of territorial sovereignty, and take an adversarial view of the West (we call these preferences "nationalist") and those who do not (we call these preferences "nonnationalist"). In the rest of the paper, we use the estimated latent factors in these three dimensions as the measure of ideology.

Strong correlations between latent traits. CFA allows estimated latent traits to be correlated with one another. We examine the correlations among the three latent traits of CFA model A, as well as the first principal component of the PCA (recall the difference between the three cases in fig. 1). Figure 9 shows that the latent traits on all three dimensions are highly correlated with each other. The correlation coefficients range from 0.937 to 0.993. It also shows that they are strongly

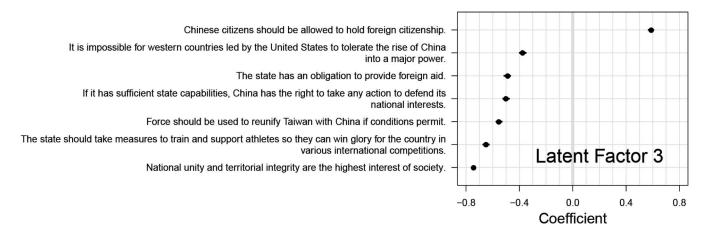


Figure 8. Estimated coefficients: third latent factor

correlated with the first principal component from the PCA, from 0.975 to 0.992.²⁵

The high correlations suggest that individuals who are politically liberal are also more likely to be promarket/non-traditional and more likely to be nonnationalist while individuals who are politically conservative are more likely to be antimarket/traditional and more likely to be nationalist. We call this correlated, three-dimensional configuration of preferences China's ideological spectrum. On one end of the spectrum, preferences for political liberalism, limited state intervention in markets, liberal social values, and opposition to nationalism are more likely to go together, and on the other end, preferences for political conservatism, state intervention in markets, traditionalism, and nationalism are more likely to go together.

It is important to note that preferences are best described in these data as three dimensional not one dimensional, but the three latent dimensions are strongly correlated with each other. If visualized, China's ideological spectrum is better described as a three-dimensional ovoid (football) than either a one-dimensional line or a three-dimensional sphere.

INDIVIDUAL AND REGIONAL-LEVEL VARIATION

In this section, we explore the relationship between the latent traits we obtain from the CFA (model A) and individual

and regional variables. We use the constructed 10,000 observation sample from zuobiao in our main analyses, 26 and we use data from the Asian Barometer Survey (2009)—a nationally representative sample—for our robustness check.²⁷ The ABS data employ a stratified sampling strategy that was carefully designed and implemented, and ABS allows for nonresponses and hence contains missing values.²⁸ The ABS contains questions on politics that overlap in part with those found in the zuobiao survey, but the ABS contains a larger array of questions related to traditional values and fewer questions related to economic preferences and nationalism. Given the results presented in the previous section and scarcity of questions related to nationalism, we fit a two-dimensional CFA model, where ABS questions pertaining to political institutions and individual freedom are placed in one dimension and question pertaining to traditional values and economic policies are placed in the other dimension.²⁹ Additional analyses using PCA and EFA also point to a two-dimensional factor model (fig. A4; figs. A1-A5 available online). Finally, the ABS survey does not have regional representativeness; in fact, the public version of the ABS data does not release regional identifiers. Thus, we cannot use it to explore the correlation between ideology and regional indicators, such as provinciallevel economic development.

Ideology and individual-level characteristics

At the individual level, we see that individuals with higher levels of education and higher levels of income are more likely to be liberal, promarket/nontraditional, and nonna-

^{25.} The fact that the three latent factors are correlated at such a high level is somewhat unexpected, especially since PCA results suggest the underlying latent structure to be highly multidimensional. We conducted three separate PCAs using questions from each of three dimensions identified through CFA and measured correlations among the first principal component from each of these three PCA analyses. The correlations from this analysis range from 0.69 to 0.75, suggesting that there is a chance the very high CFA model correlations among the latent variables may be overestimates. The correlation between the two factors estimated from the ABS data is 80% (fig. A4). Since correlations of 69% to 80% are still extremely high, we believe it remains appropriate to characterize the dimensions we identify as highly correlated.

^{26.} Using the raw zuobiao data produces almost the exact same results.

^{27.} Descriptive statistics are shown in table A5.

^{28.} We impute missing data using a standard multiple imputation procedure.

^{29.} Table A4 shows the full list of questions.

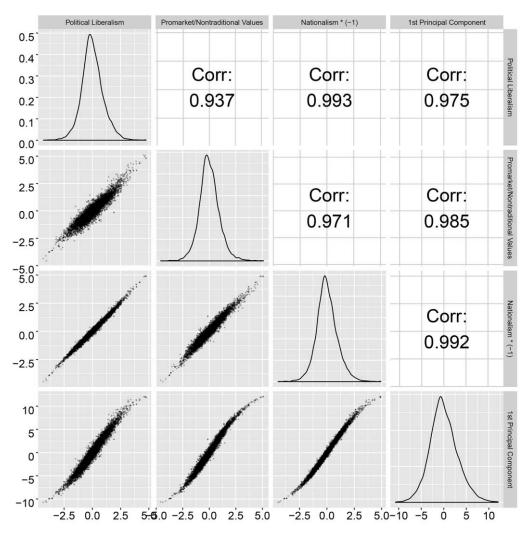


Figure 9. Correlations among latent traits and PC1

tionalist. This pattern is clearly seen in the *zuobiao* data shown in figure 10. In the ABS data, we also see that those who have higher levels of education and income are more likely to be liberal and endorse nontraditional social values.

In terms of age, both the *zuobiao* sample and ABS show that conservative and antimarket/traditional preferences increase with age for those ages 35 and over (see fig. 11). However, in the *zuobiao* data, there seems to be an increase in liberal and promarket/nontraditional preferences between the ages of 18 and 35, while in the ABS data liberalism and promarket/nontraditional preferences decrease linearly with age. When we split the ABS data into two subsamples, urban and rural, we see a nonlinear pattern similar to the *zuobiao* data in urban areas and a monotonically decreasing relationship between ideology and age in rural areas (fig. A5). Additional research is needed to examine whether the ideological shift toward political liberalism is being halted among young people and, if so, the reasons behind it.

Ideology and regional developmental indicators

Figure 12 shows the relationship between one of the ideological measures (the political dimension of CFA model A) and provincial-level economic indicators: log income per capita (left), trade openness (middle), and urbanization (right). Larger, positive values on the *y*-axis refer to a liberal political orientation, and smaller, negative values on the *y*-axis refer to a conservative orientation. Average income refers to provincial mean of log income per capita. Urbanization is the proportion of permanent urban residents. Trade openness is imports and exports as a proportion of GDP.³⁰ The gray dots are the average ideological measure for each province, and black lines are loess fits.

^{30.} The calculation for the x-axis is (imports + exports)/GDP × 100. All regional economic indicators are from *China Statistical Yearbook* (2015). Lan and Li (2015) find that regions with lower levels of trade openness show greater nationalistic sentiment.

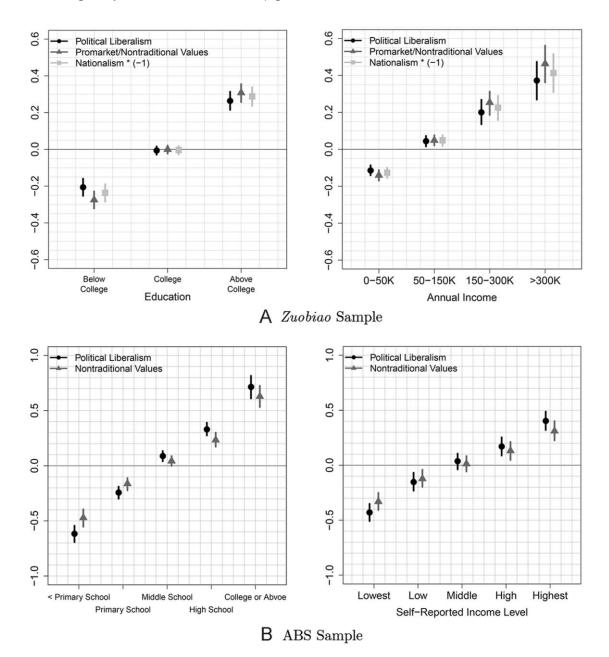


Figure 10. Education and income

Figure 12 reveals positive correlations between liberal preferences and all of these economic variables at the provincial level. It is worth emphasizing that none of the relationships are causal, and the three indicators used are highly correlated with one another. However, these figures point to a general pattern that provinces such as Beijing, Shanghai, and Guangdong with higher average disposable incomes, more urban residents, and more trade openness tend to have more liberal political preferences on average while poorer provinces such as Guizhou, Guangxi, and Henan with lower levels of economic development, urbanization, and foreign trade tend to have more conservative political preferences on average. We see similar patterns for the promarket/nontraditional dimen-

sion and the nationalism dimension. On average, regions with higher levels of development and openness are more likely to have promarket/nontraditional and nonnationalist preferences while regions with lower levels of development are more likely to have antimarket/traditional and nationalist preferences (see appendix fig. A3).

CONCLUDING REMARKS

In this paper, we study ideology in China—how public preferences are constrained and configured. We find that although preferences are less constrained than what has been observed in competitive democracies, they are grouped in systematic ways that reflect known debates about China's political, eco-

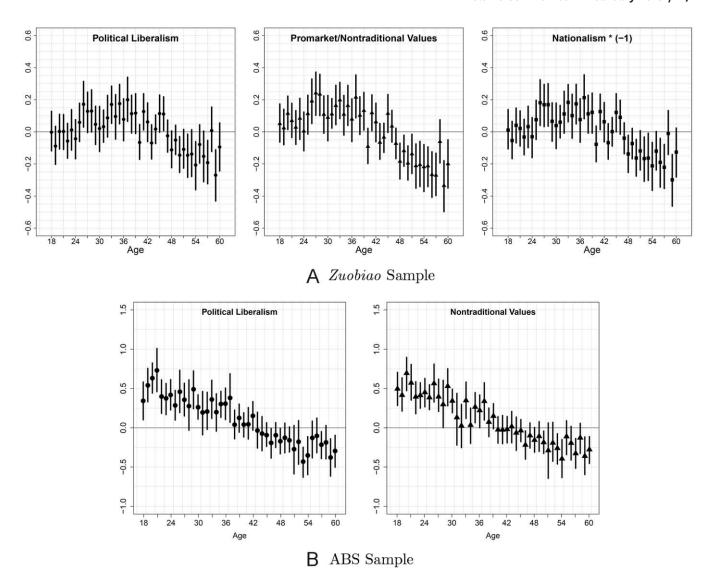


Figure 11. Ideological measures and age

nomic, and social trajectory. Preferences are best described as multidimensional. A three-dimensional CFA model best characterizes the configuration of preferences in our data. Preferences diverge between (1) liberal versus conservative views of political institutions and individual freedoms, (2) promarket and nontraditional social values versus antimarket and traditional values, and (3) nationalism. At the individual level, these latent traits are highly correlated. Individuals with liberal values are also more likely to welcome market-oriented economic polices and embrace nontraditional values and less likely to subscribe to nationalism while individuals who are politically conservative are more likely to support greater state intervention in the economy, subscribe to traditional, conservative social values, and be nationalistic. In China's ideological spectrum, preferences for liberal, promarket, nontraditional, and nonnationalistic values are associated with higher levels of education, income, and regional development.

These results have implication for our understanding on how political cleavages emerge. China's ideological spectrum appears linked to the outcomes of market reforms enacted by the Chinese Communist Party. Those who are relatively better off in China's era of market reform tend to welcome additional market liberalization as well as political reform toward democratic institutions and tend not to endorse traditional social norms. Those who are relatively worse off tend support a return to political redistribution, authoritarian rule, and traditional and social values.

The relationship we identify between economic structure and divergent preferences is not causal, and our evidence is consistent with several different explanations of this relationship. The alignment of preferences could directly result from material self-interest—as people become wealthier, they wish to protect economic property through certain types of liberal political institutions. Alternatively, these preferences may

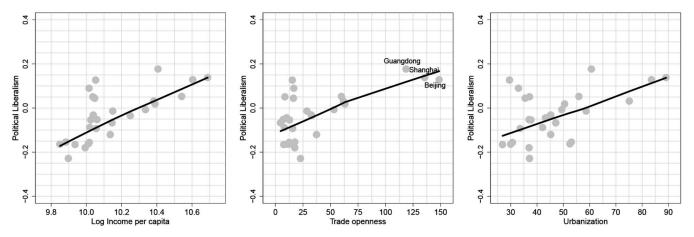


Figure 12. Correlates of provincial ideological measure

have emerged because those who are wealthier and better educated have greater exposure to ideas of political liberalism and free markets. Another potential explanation not ruled out by these data is that education, urbanization, and higher incomes influence attitudes through some form of cognitive mobilization. These preferences may also be related to psychological factors and personality traits related to authority and risk-taking (Hetherington and Weiler 2009). We cannot rule out the reverse relationship, that the configurations of preferences may influence economic outcomes.

These results shed light on our understanding of potential opposition to CCP rule. The belief system we identify does not reflect an alignment of proregime or antiregime preferences. Even though those who are better educated and wealthier may prefer changes to China's current political system, these preferences may not lead to opposition if the CCP maintains the trajectory of market-based economy. Similarly, those who oppose economic reforms—the less educated, the less well-off, those who have benefited less from China's economic reforms—support the continuation of CCP rule. On the whole, the current configuration of preferences in China does not appear conducive to the development of consolidated opposition to Communist Party rule.

By studying ideology, we complement existing studies of public opinion in China by offering a different perspective on assessing regime support. We see this research as a first step in examining the configuration of preferences in nondemocratic contexts, which we hope others will take up.

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