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Is *guanxi* unfair? Market reform and the public attitude toward *guanxi* in urban China

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Abstract

Guanxi is a fundamental, but controversial, feature of Chinese society. This article examines public attitudes about the fairness of *guanxi* and how Chinese market reform is affecting these attitudes. The reciprocity-laden and tie-sensitive nature of *guanxi* conflicts with the efficiency-oriented goal of a market economy. Disapproval of *guanxi* is thus increasing as marketization progresses. Results from the 2008 Chinese General Social Survey show that *guanxi* is more likely to be viewed as unfair in places with higher levels of marketization. The educational gradient decreases with marketization, and change is more pronounced among people working in the market sector than it is among people working in the state sector. My findings suggest that Chinese market reform increases public disapproval of *guanxi*.

Keywords: *Guanxi*, Chinese market reform, Public attitude, Fairness, Education, Employment sector

Introduction

Guanxi is a foundational system of transactional social ties in China that have a strong emotional foundation based on kin and pseudo-kin relationships (Barbalet 2014; Bian and Zhang 2013; Luo 2011). *Guanxi* emphasizes obligations and reciprocity, and it is a fundamental feature of Chinese society (Yang 1994). Since China's post-1978 market reform, the significance of *guanxi* and the future of it in the economy has been the subject of extensive debate (for a review, see Bian 2018). Quantitative studies have documented a consistent increase in the use of *guanxi* in the Chinese labor market since the 1980s (Bian 2002; Tian and Lin 2016; Zhang and Guo 2011; Zhang and Cheng 2012; Zhang and Zhang 2012; Zhao 2013). This increase has led scholars to depict a model of "network capitalism" (Boisot and Child 1996), wherein *guanxi* promotes the exchange of favors, enhances trust, and reduces uncertainty (Nee and Oppen 2012; Yeung and Tung 1996). Yet, network scholars interpret this trend with caution, noting that *guanxi* practices have evolved along with the market reform to focus less on back-channel negotiations and more on social capital, such as weak ties and brokerage for



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information exchange, which are also typical of Western market economies (Burt and Burzynska 2017; DiTomaso and Bian 2018; Lin et al. 2013; Tian and Lin 2016).

So far, few researchers have systematically examined public attitudes toward the fairness of *guanxi* and whether such attitudes have changed since the post-1978 market reform. Public attitudes toward *guanxi* involve a shared knowledge of institutional contexts that provides a legitimate basis for social actions (Berger and Luckmann 1966; Douglas 1986). The key to understanding the *guanxi* dilemma is determining whether it violates principles of justice and fairness (Dunfee and Warren 2001). If the public views *guanxi* as unfair, people may not want to use *guanxi* or at least acknowledge using it for the exchange of favors because it is hard to justify that practice. Thus, understanding public attitudes toward the fairness of *guanxi* may have important implications for the future of *guanxi* in Chinese society.

Existing research indicates that *guanxi* is indeed morally controversial (Yang 1994). For example, some research on samples of firm managers indicates that they find *guanxi* morally contemptible (Su et al. 2003; Warren et al. 2004). A few qualitative interviews of college students and managers likewise reveal increasing resistance to *guanxi* during the market reform era (Guthrie 1998; Hanser 2002; Huang 2008). However, the limited scope of these research samples undermines the robustness and generalizability of these studies.

This article uses data from the 2008 Chinese General Social Survey (CGSS) to show how the Chinese view the fairness of *guanxi* and to test whether these views are associated with the degree of marketization that has been reached. The results suggest that *guanxi* is increasingly viewed as unfair in places with higher levels of marketization. Individual characteristics, such as educational attainment and employment sector, also affect the negative association between marketization and the perceived fairness of *guanxi*.

Theoretical Background and Hypotheses

Guanxi in reform-era China

Many agree that *guanxi* is ingrained in Chinese culture (Hwang 1987; Yan 1996; Yang 1994). It eases social interactions and gives “the flow of many events a helping hand” (Zuo 1997, 69). Building and maintaining *guanxi* are critical for personal advancement and business success in China (Alngenberg 2008; Bian and Huang 2009; Burt and Burzynska 2017; Keister 2002; Luo et al. 2012; Yeung and Tung 1996). In several situations, building *guanxi* surpasses economic transactions as the main purpose of business interactions (Lin 2002).

The post-1978 reform has led to *guanxi* having increasing significance in the labor market, particularly in terms of its implications for job mobility. Bian (2018) has estimated that the proportion of jobs found through *guanxi*, as measured by network influence, nearly doubled from 1978 to 2009. Less than 40% of jobs were found through *guanxi* in 1978, compared to almost 80% in 2009. Tian and Lin (2016) have studied job mobility and have found that the use of *guanxi*, as measured by the use of kinship ties or very close ties, increased from about 10 to 20% between 1978 and 2008. Yet, *guanxi* may not always lead to better jobs (Obukhova 2012; Obukhova and Lan 2013; Obukhova and Zhang 2017), and the returns from it have declined somewhat (Zhang and Cheng 2012; Zhang and Zhang 2012). Still, quantitative research consistently highlights the growing significance of *guanxi* in the reform-era labor market (Bian 2018).

This rising significance of *guanxi* does not guarantee its moral legitimacy, however. Qualitative interviews with managers indicate that fairness remains a major concern in their views about the practice. Although Chinese managers view *guanxi* as a helpful system, they also believe it can undermine the competitiveness of corporations and the health of the business environment (Su et al. 2003; Warren et al. 2004; Yeung and Tung 1996). Managers tend to shy away from *guanxi* when discussing their corporate strategies, because it is perceived as illegal and is associated with corruption and bribery (Guthrie 1998; Hwang et al. 2009), and because it reduces trust in management (Chen et al. 2004).

The general public also believes that *guanxi* may violate fairness. For example, Yang (1994) has vividly captured Chinese perceptions of the coercive and objectionable nature of *guanxi* in the 1980s, when marketization had just begun. Some Chinese agreed that *guanxi* can help achieve a reasonable objective when other paths are blocked, but others viewed it as morally objectionable, aberrant, based on self-interest, and treacherous for social interactions. They equated *guanxi* with “badness,” “deception,” and “harm to society.” As one interviewee said, “*Guanxi*(xue) is when you treat someone differently than you otherwise would because of how much that person is of use to you. *Guanxi*(xue) is not upright; it is crooked and sly” (Yang 1994, 51).

The degree to which public attitudes about the fairness of *guanxi* may have changed since the Chinese market reform has never previously been tested with quantitative data. Bian (2018) has called for more empirical analyses of the extent to which *guanxi* ties grow or decline in relation to the rise of market economy in China, and under what conditions. A few studies based on qualitative interviews have implied that *guanxi* practices may decline with the rise of the market economy. For example, in interviews with managers at large, state-owned enterprises in Shanghai, Guthrie (1998) has shown that they reject *guanxi* practices in recruitment and consider them unnecessary in market transactions. In contrast, Huang (2008) has found that *guanxi* remained prevalent in state-sector organizations during the reform era. However, as these studies are based on small-scale, nonprobability samples, the findings are not generalizable (Bian 2018). Furthermore, although most people practice *guanxi*, few admit to it publicly, so the results from qualitative interviews must be interpreted with caution (Yang 2002). To address this question, this study uses a national representative sample from urban China.

Market economy and fairness of *guanxi*

The classic literature identifies three rules (equity, equality, and need) that define the fairness of an exchange (Deutsch 1975; Greenberg and Cohen 1982). The *equity* rule encourages distribution of resources according to relative contribution. The *equality* rule dictates that resources should be distributed equally regardless of one’s contribution. The *need* rule suggests resources should be distributed according to individuals’ legitimate needs, regardless of their contribution. Each rule finds legitimacy in certain institutional contexts. For example, the equity rule is legitimate in situations that emphasize productivity and efficiency; the equality rule is legitimate in situations that emphasize cooperation and harmony; and the need rule is legitimate in situations that emphasize social welfare and personal growth (Deutsch 1975; Ritzman and Tomaskovic-Devey 1992).

A market economy legitimizes the equity rule through the perception of the fairness of an exchange. Market exchange requires the distribution of resources and rewards to reflect the scarcity and importance of goods and skills (McClosky and Zaller 1984). It promotes competition and tolerates inequality, as long as achievement is positively associated with contribution (Ritzman and Tomaskovic-Devey 1992; Roller 1994). Exchanges that emphasize productivity and efficiency rely on abstract principles that are not contingent on relations or situations (Kohlberg 1981). In contrast, *guanxi* endorses a *renqing* rule, which highlights reciprocity and indebtedness as the means of maintaining harmony in a hierarchical social order (Hwang 1987). The Chinese structure personal relations according to familiarity and adopt multiple standards when interacting with people in different social circles (Fei 1947; Hsu 1953). Thus, the *renqing* rule is particularistic; it changes in proportion to the strength of relations between actors (Tan and Snell 2002; Yang 1994). The obligation of reciprocity is “heavily shaped by the hierarchically structured network of *guanxi* in which one is involved, by the long time period over which these relations are expected to last, and by the public nature of the obligations incurred in continuing exchanges” (Hwang 1987, 968).

Renqing differs from equity in two major ways. First, *renqing* is particularistic, whereas equity is universalistic. *Renqing* operates exclusively on specific types of ties in which both parties have something in common, maintain emotional attachment, and help one another in anticipation of future returns (Bian 2018; Hwang 1987). In contrast, *equity* operates on abstract principles and is not tie-sensitive: both parties in an exchange perceive each other as role occupants rather than as specific individuals (Ellard et al. 2016). Second, *renqing* highlights reciprocity, whereas equity emphasizes efficiency. In an exchange, the obligation of reciprocity implies that one should not allocate rewards based on performance or contribution but should instead prioritize network members or those with previous exchange experience (Barbalet 2015; Luo 2011). In contrast, when efficiency is emphasized, individual performance and contributions are rewarded in order to increase productivity (Lerner 1977).

One caveat needs to be mentioned here. During the 1950s and 1960s, the Communist Party of China (CPC) progressively denounced *guanxi* (Li and Tian 2020) and instead proposed universal egalitarianism (Vogel 1965). Yet, the state-controlled, top-down allocation of resources necessitated the tacit continuation of the *renqing* rule. In the socialist economy, resources had to be distributed through bureaucratic procedures, which were overseen by a relatively small number of government officials (Kornai 1992). This resource distribution system created a system of party clientelism requiring people to build relationships with officials and exchange their political loyalty for material and symbolic rewards (Gold 1985; Walder 1986). *Guanxi* became a necessary and somewhat coercive way to “bypass officially sanctioned, and onerous, bureaucratic procedures, solicit protection from more powerful actors, and acquire otherwise unavailable resources” (Chang 2011, 316)

I argue that a market economy should undermine the legitimacy of *guanxi*. Kluegel et al. (1995) have provided a comprehensive comparison of the fairness principle using a standard questionnaire administered in 22 countries in 1990 and 1991, right after the collapse of the Soviet Union. They have found that people in market economies endorse equity, whereas people in post-socialist economies endorse equality. Yet, a swift shift to equity occurred in the transition from a socialist to a market economy. Within

one year of the unification of East and West Germany, East Germans endorsed the equity principle to a degree close to the degree to which Western Germans endorsed it (Roller 1994). Thus, because actors in a market exchange prioritize equity, Chinese people undergoing marketization may view the reciprocity-bound, particularistic *renqing* rule of *guanxi* as unfair.

Hypotheses

Since the 1980s, China has transformed from a planned economy to a market economy. The shift to a market economy could facilitate changes in people's beliefs about fairness, which in turn could alter their attitudes toward *guanxi*. Indeed, visible signs of attitudinal changes (e.g., promoting equity and legitimizing inequality) appeared early in the reform era. Official slogans, for example, included "Time is money, efficiency is life [*shi jian jiu shi jin qian, xiao lv jiu shi sheng ming*]" and "Let some people get rich first [*rang yi bu fen ren xian fu qi lai*]" (Naughton 2006). Two national surveys in 2004 and 2009 by Whyte (2009) have shown that Chinese beliefs about fairness differed greatly from their beliefs during the socialist era and instead began to resemble those endorsed by Americans or Europeans. Furthermore, the Chinese tolerated the rising income inequality because they believed in hard work and were optimistic about their chances for upward mobility (Whyte and Im 2014). These findings imply a shift in public preference to the equity rule. As *guanxi* conflicts with the equity rule, it also becomes less legitimate. I thus propose the following hypothesis:

Hypothesis 1: As marketization increases, guanxi is more likely to be viewed as unfair.

The relationship between marketization and public attitudes about *guanxi* practices and fairness may vary according to one's education. Chinese people with college educations often prefer meritocracy and oppose the use of *guanxi* in job searches (Hanser 2002; Meng 2012). Sun (2009) has shown that an education-related bifurcation in Chinese public beliefs about fairness occurs along with market reform: people with college educations increasingly endorse meritocracy and equity, whereas people without college degrees stick firmly to the equality principle. I thus argue that college-educated people may be more affected by the contextual level of marketization than those with less education. Specifically, I hypothesize the following:

Hypothesis 2: The negative relationship between marketization and attitudes about the fairness of guanxi are stronger among the college educated than among the less educated.

Employment sector may be another important moderator. *Guanxi* prevailed in hiring decisions within the state sector during socialism (Walder 1986), and it has continued to be critical during the marketization process (Nee 2005; Nee et al. 2007). Despite ambitious legal efforts to reform the state sector, new laws and regulations have not yet been enacted in practice (Nee 2005). The informal decision-making embedded in party-controlled networks thus continues to prevail (Nee and Oppen 2010). In contrast, those working in the market sector may be more affected by the contextual level of

marketization than those working in the state sector. During the early stages of reform when resources were still monopolized by the state and rules were unclear, *guanxi* was necessary and beneficial in the market sector to navigate ambiguous situations and gain access to critical resources (Wank 2001; Xin and Pearce 1996). As the reform progressed, however, the significance of *guanxi* declined (Nee and Oppen 2010; Nee et al. 2007). This insight shapes my third hypothesis:

Hypothesis 3: The negative relationship between marketization and attitudes about the fairness of guanxi are stronger among those working in the market sector than in the state sector.

Data and methods

Data

Data used in this research came from the 2008 CGSS (<http://www.cnsda.org/>). Started in 2003, the CGSS is a national, representative, and repeated cross-sectional household survey of noninstitutionalized Chinese adults aged 18 to 69 years. It provides rich information on socioeconomic status, life events, and quality of life in this rapidly changing society. The CGSS sample is stratified in a four-stage sampling scheme, separated into urban and rural areas (Bian and Li 2012). The 2008 wave is the only one that collected public attitudes about *guanxi*. In this study, the analysis is restricted to the urban sample and respondents who were not farmers at the time of the survey. The sample size, with complete information on dependent, independent, and control variables, is 3628.

Methods

Public attitudes about the fairness of *guanxi*

The CGSS asks respondents to assess the statement “Using *guanxi* to do things does not violate fairness (strongly agree, agree, neutral, disagree, strongly disagree, and hard to say).” Very few people answered “strongly agree” or “strongly disagree.” I therefore use a three-level indicator of respondents’ attitudes (fair, neutral, or unfair). Answers are coded 1 if respondents viewed *guanxi* as fair (by answering “strongly agree” or “agree”); they are coded 2 if respondents viewed *guanxi* as neutral (by answering “neutral” or “hard to say”); and they are coded 3 if respondents viewed *guanxi* as unfair (by answering “strongly disagree” or “disagree”).

Independent and control variables

Marketization score (provincial level)

I use an index of the development of the non-state economy created by Fan et al. (2011) to measure marketization at the provincial level. This index includes three components: (1) industrial value-added, (2) investment, and (3) urban employment. Each province receives a numeric score indicating the development of its market economy, relative to other provinces. A higher value means a higher level of development. I use the 2007 indicator (1-year lag), ranging from 3.12 to 13.44, with Gansu province at the bottom and Jiangsu province at the top. Three provinces (Qinghai, Tibet, and Hainan) are dropped from the analysis because they were not surveyed in the CGSS.

Educational attainment (individual level)

Educational attainment is measured as the highest level of schooling attained, classified into three categories. Respondents who had no education, or who had a primary school or junior high school education, are coded as having a junior high education or below (reference group); those who had a senior high school education, a senior vocational school education, or a junior technical school education are coded as having a senior high education; and those who had associate's, bachelor's, master's, or doctoral degrees are coded as having a college education or above.

Market-sector employment (individual level)

Market-sector employment is a dummy variable indicating whether the respondent worked in the market sector. It is coded as 1 if respondents worked in private firms, foreign-owned firms, or joint ventures and as zero if respondents worked in government agencies, public institutes, or state-owned firms.

Individual-level control variables include gender, cohort, Communist Party membership, occupation, marital status, migration status, and region. Gender (1 = female, 0 = male), Communist Party membership (1 = party member, 0 = not), marital status (1 = currently married, 0 = currently not married), and migration status (1 = migrants, 0 = residents) are measured as dummy variables. Cohort is measured as the year respondents reached age 20 (prior to 1978, 1978–1992, 1993–2001, or 2002–2008), corresponding to the pre-reform, dual-track system, rapid privatization, and post-WTO periods, respectively (Bramall 2009; Tian and Lin 2016). Occupation is classified into white-collar (managers, professionals, technicians, and clerks), blue-collar (service, sales, and production workers), or not working (reference group). Region is coded as east (reference group)¹ middle,² or west³ and is included because in addition to marketization, Chinese attitudes about fairness and inequality vary by region (Whyte 2009). Table 1 shows the descriptive statistics of independent and control variables.

Multi-level ordinal logistic regression

I apply multi-level, ordinal, logistic regression to examine the likelihood of viewing *guanxi* as fair, neutral, or unfair. This random-intercept model of individuals is clustered within provinces. The level 1 predictors include individual-level controls. The level 2 predictors include the provincial-level private economic development scores, which indicate a province's marketization level. The multilevel, multiple equation notion is

$$Y_{ij} = \beta_{0j} + \sum_{k=1}^w \beta_{kj} W_{kj} + \gamma_{ij}$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01} Z_j + u_{0j}$$

Thus,

¹Provinces in the eastern region include Beijing, Liaoning, Hebei, Shandong, Shanghai, Jiangsu, Zhejiang, Fujian, and Guangdong.

²Provinces in the middle region include Jilin, Heilongjiang, Inner Mongolia, Shanxi, Henan, Anhui, Jiangxi, Hunan, and Hubei.

³Provinces in the western region include Xinjiang, Gansu, Shaanxi, Ningxia, Sichuan, Guizhou, Yunnan, and Guangxi.

Table 1 Mean statistics (unweighted) of independent and control variables

	Mean
Female	0.512
Cohort	
< 1978	0.278
1978–1992	0.333
1993–2001	0.209
2002–2008	0.180
Education	
≤ Junior high	0.450
Senior high	0.314
≥ College	0.236
Party member	0.145
Currently married	0.775
Migrants	0.222
Occupation	
White-collar workers	0.343
Blue-collar workers	0.576
Not working	0.081
Market sector employment	0.469
Region	
East	0.419
Middle	0.360
West	0.221
Number of cases	3628
Marketization score	8.403 (2.622)
Number of provinces	28

Standard deviation in parentheses

$$Y_{ij} = \gamma_{00} + \gamma_{01}Z_j + \sum_{k=1}^w \beta_{kj}W_{kj} + u_{0j} + \gamma_{ij}$$

where W_{kj} denotes individual-level controls and Z_j denotes the provincial-level marketization score. In this model, each individual's likelihood of viewing *guanxi* as fair, neutral, or unfair is composed of three elements: the overall mean (γ_{00}), the deviation of the cluster mean from the overall mean (u_{0j}), and the deviation of an individual's likelihood from the cluster mean (γ_{ij}). The value of u_{0j} is assumed to vary randomly across provinces, with a mean of zero and a variance of τ_{00} . γ_{01} represents the unit change in the predicted value of the intercept per unit of change in the province-level marketization score.

To examine whether the association between marketization and *guanxi* attitudes varies by education (or employment sector), I add the interaction between education (or employment sector) and marketization score as follows:

$$Y_{ij} = \gamma_{00} + \beta_1 X_j + \gamma_{01} Z_j + \beta_2 X_j * Z_j + \sum_{i=3}^w \beta_{ij} + W_{ij} + u_{0j} + \gamma_{ij}$$

X_j denotes individual-level educational level (or employment sector), and $X_j * Z_j$ denotes the interaction between education level (or employment sector) and marketization score.

Results

Diverging public attitudes about *guanxi*

Figure 1 plots public attitudes with regard to the statement “Using *guanxi* to do things does not violate fairness.” Urban Chinese diverged significantly, as 33.08% of respondents viewed *guanxi* as fair, compared with 19.01% of respondents who viewed it as neutral and 47.85% of respondents who viewed it as unfair. The following regression models compare these three groups.

Marketization and public attitudes about *guanxi*

Table 2 reports coefficients from the multi-level, ordinal, logistic regressions predicting whether *guanxi* practices is viewed as fair, neutral, or unfair. Model 1 includes individual-level controls and the provincial-level marketization score. The likelihood ratio test between multi-level ordinal logistic regression and ordinal logistic regression suggests that the former is a better model than the latter ($\chi^2 = 79.75, p = 0.000$). That is, there is significant provincial variation in public attitudes about *guanxi* practices and fairness.

Control variables show systematic variations in attitudes toward *guanxi* among urban populations. For example, Communist Party members have significantly higher odds of viewing *guanxi* as unfair, compared with non-Party members. The Communist Party of China strongly opposes *guanxi* in its official ideology, which would increase its members’ tendency to have or proclaim to have negative views on *guanxi* (Yang 1994). People living in the western region also have higher odds of viewing *guanxi* as unfair, compared to those living in the eastern region, after controlling for provincial-level marketization scores. This finding is consistent with others indicating that Chinese in the western region have different perceptions of inequality, social mobility, and development than those in other regions (Whyte

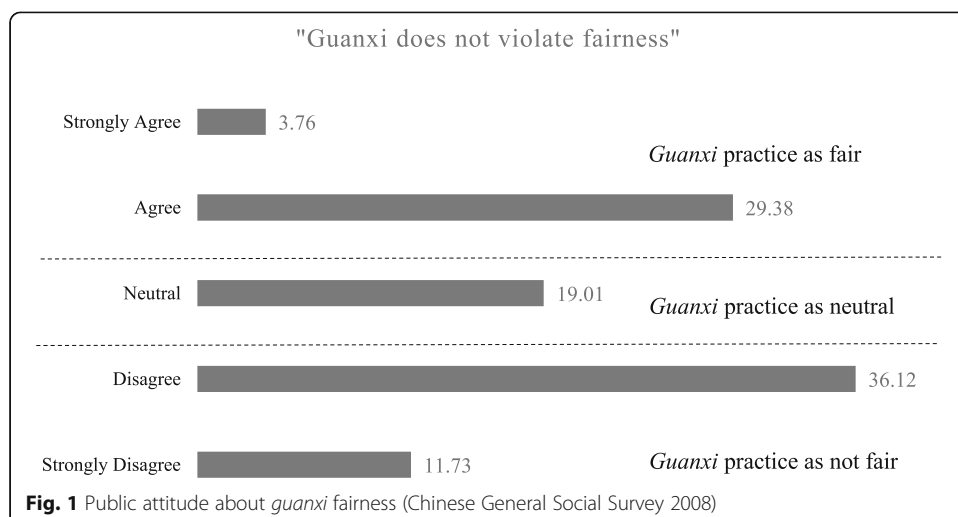


Table 2 Coefficients from multi-level ordinal logistic regressions predicting viewing *guanxi* as fair, neutral, or unfair (Chinese General Social Survey 2008)

	Model 1	Model 2	Model 3
	Coef. (S.E.)	Coef. (S.E.)	Coef. (S.E.)
Female	0.080 (0.066)	0.084 (0.066)	0.080 (0.066)
Cohort (ref: < 1978)			
1978–1992	– 0.154 ⁺ (0.089)	– 0.166 ⁺ (0.089)	– 0.154 ⁺ (0.089)
1993–2001	– 0.100 (0.106)	– 0.103 (0.106)	– 0.096 (0.106)
2002–2008	– 0.282* (0.130)	– 0.291* (0.130)	– 0.283* (0.130)
Education (ref: ≤ junior high)			
Senior high	– 0.006 (0.081)	0.366 (0.275)	– 0.011 (0.081)
≥ College	0.198 ⁺ (0.107)	0.871** (0.310)	0.191 ⁺ (0.107)
Party member	0.277** (0.103)	0.280** (0.103)	0.281** (0.103)
Currently married	0.088 (0.096)	0.087 (0.096)	0.095 (0.096)
Occupation (ref: not working)			
Blue collar	– 0.107 (0.134)	– 0.114 (0.134)	– 0.131 (0.135)
White collar	– 0.045 (0.141)	– 0.053 (0.141)	– 0.065 (0.142)
Migrants	0.134 (0.088)	0.129 (0.088)	0.133 (0.088)
Region (ref: East)			
Middle	0.363 (0.247)	0.375 (0.246)	0.376 (0.247)
West	0.717** (0.313)	0.725** (0.312)	0.709** (0.312)
Market-sector employment	0.046 (0.079)	0.051 (0.079)	– 0.445 ⁺ (0.247)
Marketization score	0.100* (0.050)	0.132* (0.053)	0.075 (0.052)
Interaction			
Marketization*senior high		– 0.040 (0.028)	
Marketization*≥college		– 0.072* (0.031)	
Marketization*market sector			0.053* (0.025)
Fair neutral	0.428	0.728	0.192
Neutral unfair	1.256	1.557	1.022
Province σ^2 intercept	0.138	0.137	0.137
Log-likelihood	– 3654.92	– 3641.10	– 3641.73
Chi-square	35.94**	41.50**	40.31**
<i>N</i>	3628	3628	3628
Two-sided test			
⁺ <i>p</i> < .1			
* <i>p</i> < .05			
** <i>p</i> < .01			
*** <i>p</i> < .001			

2010; Xie et al. 2012). Surprisingly, the most recent cohort (i.e., those who turned 20 years old in 2002–2008) has more lenient attitudes toward *guanxi* than previous cohorts. This cohort came of age in a period when *guanxi* was used pervasively in the Chinese economy (Bian 2018), which may lead them to perceive the practice as legitimate. It is also possible that the most recent cohort legitimizes *guanxi* because they understand it differently. In this period, the use of weak ties dramatically increased (Tian and Lin 2016) and the meaning of the word *guanxi*, as anecdotal evidence shows, evolved into a more neutral expression for the concept of networks, called *renmai*.

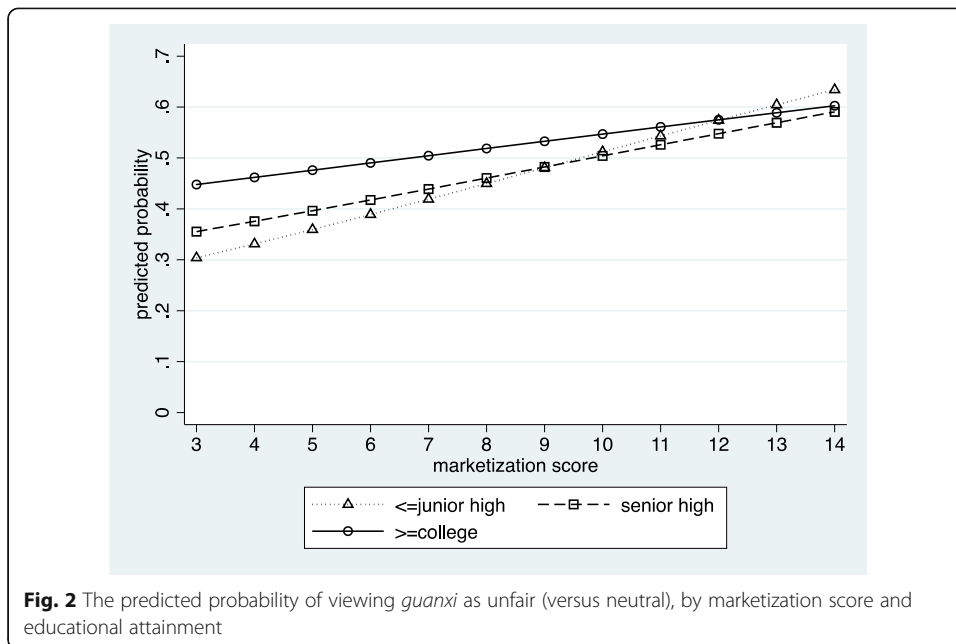
The perception of *guanxi* as unfair also varies by socioeconomic status, particularly by educational attainment. Those with a college education are significantly more likely to view *guanxi* as unfair than those whose education stopped at the junior high level or below. This result is expected, as college-educated Chinese tend to endorse meritocracy and equity (Sun 2009). Yet, occupation and migration status are not related to attitudes toward *guanxi*. Whyte (2010) has shown that the major gap in perceptions of current inequalities is between urban and rural populations. This analysis is primarily based on urban populations, which may not capture the occupational difference in attitudes toward the perceived fairness or unfairness of *guanxi*. Although migrants may endorse market equity to a greater degree than locals, they also use *guanxi* extensively in job searches (Lu et al. 2013). This result may help explain migrants' ambiguous attitudes toward *guanxi*.

Furthermore, the results in model 1 support the prediction that marketization increases public opposition to *guanxi* (hypothesis 1). The coefficient for the marketization score is positive and significant, indicating a positive relationship between the level of marketization and the likelihood of viewing *guanxi* as unfair. Specifically, for each unit increase in the marketization score, the odds of viewing *guanxi* as unfair increase by a factor of 1.104 ($e^{0.099}$). People living in provinces with higher levels of marketization are more likely to view *guanxi* as unfair.

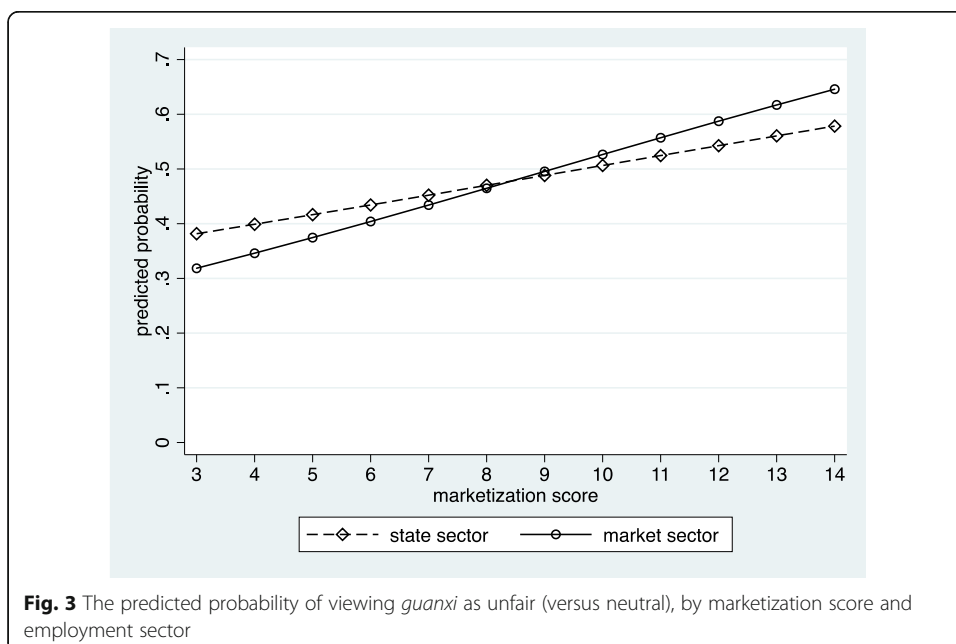
Models 2 and 3 add interactions to examine whether the association of marketization score and attitudes about *guanxi* varies by education and employment sector, respectively. Contrary to expectation (hypothesis 2), the interaction coefficient between marketization score and college education (model 2) is negative and significant, indicating that the education gap in the likelihood of viewing *guanxi* as unfair decreases with levels of marketization. As expected (hypothesis 3), the interaction coefficient between marketization score and market-sector employment (model 3) is positive and significant. The change in attitude about *guanxi* and fairness is more pronounced among those working in the market sector than those working in the state sector.

Figure 2 illustrates how the education gap in the likelihood of viewing *guanxi* as unfair changes with marketization score. This gap is based on estimates from model 2 of Table 2, with each control variable set at the main level. When the level of marketization is low (e.g., a score of 3, such as that of Gansu), the probability of viewing *guanxi* as unfair (versus neutral) differs across education levels: a college education is associated with a 44.7% probability, a senior high education is associated with a 35.5% probability, and a junior high or below education is associated with a 30.4% probability. When marketization is high (e.g., a score of 13, such as that of Jiangsu), attitudes about *guanxi* and fairness converge across education groups: all three groups have a predicted probability of roughly 58% to view *guanxi* as unfair (versus neutral).

Figure 3 illustrates how the likelihood of viewing *guanxi* as unfair changes with marketization score between those working in the state sector and those working in the market sector. When the marketization score is low, market-sector workers are less likely than state-sector workers to view *guanxi* as unfair. For example, at a marketization score of 3 (e.g., Gansu), market-sector workers have a predicted probability of viewing *guanxi* as unfair of 32%, which is 6% lower than state-sector workers' predicted probability of 38%. Several studies also show that in the early



phase of the market reform, private entrepreneurs viewed *guanxi* as crucial to gain information and obtain resources (Nee and Oppen 2012; Wank 2001; Yeung and Tung 1996). The two lines tend to cross when the marketization score is between 8 and 9. At a marketization score of 13 (e.g., Jiangsu), the predicted probability of viewing *guanxi* as unfair is 62% among market-sector workers and 56% among state-sector workers, or about 6% higher in the market sector than in the state sector. Thus, as a market economy grows, the opposition to *guanxi* grows faster in the market sector than in the state sector.



Robustness check

To avoid the possibility that the association found in the paper is a result of a temporary fluctuation in the 2007 scores, I further examine the relationships by using a 5-year average (2004–2008) of the development of the non-state economy. I also replicate the results with Fan et al. (2011) overall marketization score, both for the 2007 score and the 5-year average. Table 3 presents the results. The coefficients of the 5-year average of the development of the non-state economy are largely consistent with those of the 2007 score used in Table 2. When using Fan et al.'s (2011) overall marketization score, the pattern of a closing education gap is consistent, and the direction of coefficients for other models is largely consistent. The larger variation in models with overall marketization scores may be due to smaller variations in the overall marketization score (SD = 1.990 in 2007) than the scores for the development of a non-state economy (SD = 2.622 in 2007).

Discussion and conclusion

This article examines public attitudes toward the fairness of *guanxi* and how these attitudes change with the development of the market economy in urban China. I argue that the transformation from a planned economy to a market economy has shifted public beliefs about fairness toward the equity rule. As Chinese people increasingly believe in efficiency and distribution of rewards based on relative contributions, *guanxi*, which is reciprocity-bound and tie-sensitive, is increasingly perceived as less legitimate and unfair. The data from the 2008 CGSS support this argument: individuals are more likely to view *guanxi* as an unfair practice in provinces with a higher level of marketization. This relationship is also moderated by educational attainment and employment sector. As marketization grows, people with different education levels tend to view *guanxi*'s fairness similarly, but those working in the market sector are more affected than those working in the state sector.

The current findings indicate that the gap in attitudes about the fairness of *guanxi* decreases across education groups as marketization increases. This finding contradicts those of Sun (2009), who has found that people without college degrees still adhere to the *equality* principle even during market reforms. Whyte and Im (2014) have provided a clue that helps to explain how both findings make sense. They find that in the face of

Table 3 Robustness check

	2004–2008 marketization sector	2007 overall score	2004–2008 overall score
<i>Model 1</i>			
Marketization score	0.087 (0.057)	−0.005 (0.102)	0.116 (0.112)
<i>Model 2</i>			
Marketization*senior high	−0.041 (0.029)	−0.081* (0.037)	−0.086* (0.041)
Marketization*≥ college	−0.066* (0.032)	−0.087* (0.040)	−0.091* (0.044)
<i>Model 3</i>			
Marketization*market sector	0.051* (0.026)	0.049 (0.032)	0.056(0.036)

Two-sided test

* $p < .1$

* $p < .05$

** $p < .01$

*** $p < .001$

rising income inequality, Chinese people show no aggregated resentment toward the rich and successful. Rather, they have a strong desire for the government to provide sufficient welfare to the poor. Thus, the closing education gap makes sense in that Chinese with less education do not want to reverse the *equality* principle of the socialist era, but rather want the government to remedy the extreme inequality created by the *equity* principle.

Interestingly, both the use of *guanxi* and public objection to it have increased during the Chinese market reform era. Theories of culture in action (e.g., DiMaggio 1997; Swidler 1986; Vaisey 2009) demonstrate how culture and actions often do not correspond with each other. Swidler's (1986) well-cited culture-as-toolkit theory indicates that individuals possess several often-contradictory cultural repertoires for actions. These repertoires do not motivate behavior but instead provide justifications for behavior after the fact. Vaisey (2009) has provided a cognitive basis for the motivation-justification distinction. The two processes activate different parts of the brain, such that individuals may offer justifications that are not related to real motives because they feel pressure to provide a reason for their behavior. For example, people who endorse the value that marriage should be based on romantic love should end their romantic relationships as soon as such feelings fade, yet this is often not the case. Cultural repertoires are thus limited in their constraints on actions; rewards and sanctions in the physical and social environments must also be taken into account to explain the behavior (DiMaggio 1997).

Vaisey (2009) has recommended using fixed-response surveys to explore the connections between cultural motives and action, "the types of action-situation profiles that render certain forms of processing more relevant for predicting action" (p. 1706). For example, when examining the choice of neighborhood racial composition, Bruch and Mare (2006) have used vignettes to examine the individual preference for neighborhood racial composition. They showed respondents a series of 5 hypothetical neighborhoods and asked them which of these neighborhoods they would be willing to move into. Thus, to empirically explore the connection between the perception of *guanxi* and the actual use of it, instead of asking about the fairness of *guanxi* in abstract terms, future surveys could show respondents several concrete, hypothetical situations—such as job searches or business dealings—and ask them whether they would use *guanxi* in those situations, or ask them to judge the fairness of *guanxi* use in such situations.

Some limitations of the paper are worth mentioning here. First, although the robustness check results (Table 3) are consistent, Fan et al. (2011) marketization score is not above criticism. For example, Dong and Hao (2010) suggest that Fan's score is not comparable from year to year, as several components do not use consistent statistics. In addition, the development score of the non-state sector market (used in the main analysis) cannot differentiate private economic development from foreign investment (Shu and Bian 2003). Future research could use more consistent and nuanced indicators to address this question.

Due to the cross-sectional nature of the data, I do not make any causal claims and cannot address the possibility of reverse causation. It is possible that the results cannot entirely be explained by the effect of marketization. It is also possible that public disapproval of *guanxi* serves as a catalyst for market reforms in these provinces. The current data do not rule out this possibility, but fieldwork on early market reforms shows that reverse causation is not the whole story. In provinces that initiated marketization in the

early 1980s, *guanxi* was a vital component for business success and helped protect private entrepreneurs from predatory cadres (Nee and Oppen 2012; Peng 2004; Xin and Pearce 1996). The data (Fig. 3) also show that when the marketization level is low, most people working in the market sector view *guanxi* as fair. Future data using a longitudinal design can help further clarify the causal relationship between public attitudes about *guanxi* and marketization.

Taken together, these findings contribute to the debate about how *guanxi* has evolved during the Chinese market reform era. Public disapproval of *guanxi* increases with marketization and poses additional constraints for its use as an exchange of favors or to obtain illicit services from individuals and organizations. It is unlikely that *guanxi* will disappear, however. Instead, its meaning and practice in the contemporary Chinese market economy will likely evolve. Burt and Batjargal (2019) have proposed comparative research between China and other countries to help interpret *guanxi* in relation to social capital. Several studies have answered this call (e.g., Bian and Ang 1997; Lin et al. 2013; Son 2013). More research about public attitudes toward *guanxi*, especially in a comparative perspective, will facilitate understanding of whether and in which way *guanxi* is culturally idiosyncratic or congruent with the uses of social capital commonly observed in other societies.

Abbreviations

CGSS: Chinese General Social Survey; CPC: Communist Party of China

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Author's contributions

Solo author. Not Applicable. The author read and approved the final manuscript.

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Availability of data and materials

The Chinese General Social Survey is public available at: <http://www.cnsda.org/>.

Competing interests

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this manuscript.

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