ABSTRACT
The massive economic transformation in China has triggered a vigorous scholarly debate on whether the persistent power of the state or the increasing market liberalization is the main driving force of inequality. In this article, we attempt to understand this debate through the lens of two coexisting stratification systems—the longstanding hukou (household registration) system and an emerging class structure. Using data from the Chinese General Social Survey from 2008 to 2015, we develop new typologies for hukou stratification and class structure and examine their relative contributions in determining workers’ earnings. We further investigate differences in their effects between the Inland and Coastal regions. We find that class ranks ahead of education and hukou as the strongest determinant of earnings in China as a whole. Regionally, hukou and class are strong determinants of earnings, but hukou has a relatively stronger effect in Inland China. The findings shed light on the changing stratification dynamics in transitional China and contribute to the literature on the market transition debate.

Introduction
Four decades of market-oriented reform have brought booming economic growth and rising wages to China, as well as glaring economic disparities, which have triggered a vigorous scholarly debate on the effects of the
market transition. The core theoretical argument in the market transition debate centers on the tensions between the emergence of market liberalization and the persistent power of the socialist state in the context of a transitional economy (Bian and Logan 1996; Nee 1989). The market-centered perspective (i.e., market transition theory) identifies market mechanisms as the dominant force in emerging capitalist markets, while the state-centered perspective (i.e., power persistence thesis) emphasizes the continuity of the socialist state in determining life chances in transitional China. To resolve the market versus state debate, empirical studies have attempted to conceptualize market and state mechanisms and explore how they determine winners and losers in the process of transition (Wu 2019).

In prior research, scholars have utilized human capital to represent market forces and political capital to represent the power of the state in determining workers’ earnings. More specifically, education and work experience are proxies for human capital and Communist party membership is a proxy for political capital. However, human and political capital cannot fully capture the processes by which market and state forces account for the market transition (Wu and Xie 2003). While it is difficult to disentangle state and market forces in transitional China, in this article, we attempt to distinguish these processes by examining the twin pillars of the Chinese stratification system—the longstanding hukou system representative of Chinese socialism and the emerging class structure of modern capitalism. These two axes of stratification have very different cultural and socioeconomic origins, yet they are both necessary to fully understand inequality in contemporary China.

Hukou, China’s ancient household registration system, has been the key pillar of Chinese inequality for centuries and subsequently evolved into a powerful institution of the socialist state for controlling the population. In the hukou system, workers’ employment and social benefits, including education, healthcare, and social security, have traditionally been tied to their hukou registration. In the socialist era, the basic divide was between urban hukou and rural hukou, with the benefits of urban hukou being far superior to those of rural hukou. In the post-socialist period, this divide remains a core feature of the income gap between rural and urban residents (Boffy-Ramirez and Moon 2018; Sicular et al. 2007; Wu and Treiman 2007). Moreover, in the wake of the economic reforms of 1978, state-led hukou reforms altered the longstanding rural-urban separation by permitting migrants to move from their ancestral local hukou. This fueled a massive rural-to-urban migration of people to larger cities in China. The hukou system was further modified to permit hukou conversions whereby workers who meet certain national and locally-set criteria can transfer their hukou registration from their birthplace to a new
urban area. However, many migrants, especially poorly educated residents from rural areas, were blocked from attaining local *hukou* status. As a result, millions of Chinese workers remain tied to their birthplace by their *hukou* status, limiting opportunities for advancement. They are denied access to critical public services, face labor market discrimination, and earn less than local residents with urban *hukou* (Li, Gu, and Zhang 2015; Zhang and Wu 2017). Also, a more recent state-initiated policy has aimed to replace rural *hukou* with a new type of residence *hukou* which is, to some extent, equivalent to urban *hukou*. This new top-down policy has not been fully implemented in all Chinese provinces leaving uncertainty for residents. Therefore, China’s ongoing market liberalization has reduced the rigidity of the *hukou* system, but *hukou* has nevertheless remained firmly under control of the socialist state and affects workers’ life chances and well-being.

In the past 40 years, a new class structure has emerged as the second pillar of the Chinese stratification system. Starting in 1978, China initiated major economic reforms that began to replace state ownership of industry and central planning with more market-based, capitalistic forms of economic organization. The reforms included opening up the Chinese economy to foreign investment, developing a huge export sector, and joining the World Trade Organization (WTO), which elevated China to a leading player in the capitalist global economy. These dynamic changes have resulted in what Ding (2009) calls a “socialist market economy,” a transitional economy whereby collectivism and state control are slowly giving way to market-centered transformations of the economy. While this market liberalization was firmly guided by the heavy hand of the socialist state, it nevertheless led to a vast expansion of entrepreneurial activity and the growth of a dynamic private sector which, in turn, spurred explosive economic growth as well as economic inequality among citizens. Central to these transformations have been a class-based system of stratification built on relations of domination and exploitation characteristic of modern capitalist societies (Wright 2000).

While the emergent class structure in transitional China resembles those of Western capitalist societies, it nonetheless retains two legacy classes of pre-reform state socialism. The first, party-state cadres who control the organizational functioning of the state, still retain political and economic privileges in spite of a sizable decline in numbers. The second, a huge peasant class, is an anomaly in modern capitalist economies and occupies the bottom rung of the social ladder. With varying success, previous studies have invoked Western-oriented approaches to explain class dynamics in transitional China and have suggested an important relationship between class and earnings attainment (Lin and Wu 2009; So 2013; Zou 2015). We build upon past approaches by
introducing a modified form of Wright’s (2000, 2005, 2015) class system that incorporates the two legacy classes of cadres and peasants.

In this article, we investigate the twin pillars of the Chinese stratification system and their impact on earnings in transitional China. First, while some previous research has considered hukou and class as parts of a unified, uniquely Chinese stratification system (Lin and Wu 2009), we conceptualize hukou and class as distinctive, somewhat competing, dimensions of stratification with origins in different economic systems. Second, while some studies have investigated how hukou (Song 2016; Xiao and Bian 2018) or class (Liu 2020; Zou 2015) affect earnings, our study simultaneously considers the relative contribution of each to explaining earnings while controlling for covariates. Third, our conceptualization of both hukou and class incorporates important adaptations for the situation in modern China. For hukou, we move beyond the simple dichotomy between urban and rural to account for recent state changes permitting migration and hukou conversion. For class, we amend Wright’s 12-class scheme for Western capitalist nations by adding the two socialist legacy classes of cadres and peasants. Fourth, we account for the regional unevenness of the market transition and divergent patterns of economic development between Inland and Coastal China (Hauser and Xie 2005; Nee 1996; Xie and Hannum 1996). Most prior studies that have focused on the consequences of uneven regional development have failed to consider how stratification processes may differ in China’s two regions. To fill this gap, we apply multidimensional conceptualizations of hukou and class to explain regional differences in workers’ earnings and provide a more nuanced understanding of the market transition in China.

Theory and hypotheses

The hukou system and earnings

The hukou system has been a uniquely important institution in China for more than 2000 years. In broad strokes, the hukou system has been used to regulate the population by registering and identifying persons as residents of a particular place. In ancient times, it was an effective tool for taking a census of the population and controlling the mobility of people in the traditional Chinese states, thus augmenting the power of the emperor. This hukou system took the household as the key unit of registration and locked people in where they were born which helped imperial officials efficiently collect taxes and maintain political stability. In the socialist era, the hukou system was an effective means of social control for the Chinese socialist state to monitor population distribution and
regulate the allocation of food and other resources under the centrally planned economy. Originally, the *hukou* system divided the Chinese population into two categories based on two *hukou* types: rural *hukou* holders living in the countryside and urban *hukou* holders living in cities. As China urbanized, the sharp division between rural and urban *hukou* holders persisted as the *hukou* system restricted rural *hukou* holders from relocating to urban areas.

However, in response to market liberalization policies that accompanied the transition to a capitalist economy in the 1980s, the socialist state implemented reforms to the *hukou* system that eased restrictions on mobility and weakened the sharp rural-urban divide in the *hukou* system, resulting in a more nuanced and multidimensional *hukou* stratification. To capture these changes, we developed a new typology of *hukou* stratification that improves upon those in past research (e.g., Qian and Qian 2017; Stainback and Tang 2019). Our typology is shown in Figure 1. This typology is defined by four dichotomous dimensions: current place of residence (whether respondent resides in an urban or rural area); locality of *hukou* registration (whether respondent holds an urban *hukou* or rural *hukou*); *hukou* conversion status (whether or not respondent has converted to the local *hukou*); and migration status (whether or not respondent’s place of residence is the same as the locality of *hukou* registration). The intersection of these four dichotomous dimensions produces 16 \((2 \times 2 \times 2 \times 2)\) possible outcomes as depicted in Figure 1. However, seven of the outcomes are empty because they do not exist in reality.

Figure 1 conveys the percentage of workers in the nine resulting *hukou* categories as derived from the 2008–2015 Chinese General Social Survey.
In the urban context, there are five different hukou categories. Urban stayers (21.1%) who reside in cities, have retained the local urban hukou of their birth, and never moved out. Urban-urban converters (5.6%) are those who migrated from the urban hukou of their birth to another city and gained permanent residency by converting to the local urban hukou. Urban-urban migrants (4.3%) are those who migrated from the urban hukou of their birth to another city but have not gone through the conversion process to become permanent residents of that hukou. Rural-urban converters (3.7%) are those who migrated from the rural hukou of their birth to another city and established permanent residency in that city through the hukou conversion process. Rural-urban migrants (3.0%) are those who migrated from the rural hukou of their birth to an urban area but have not gone through the conversion process to become permanent residents of that hukou.

In the rural context, there are four hukou groups. Rural stayers (48.6%) are those who reside in a rural region, have retained the local rural hukou of their birth, and never moved out. Rural-urban stayers (1.8%) are those who reside in the rural hukou of their birth, but whose hukou status has changed from rural to urban due to reclassification in the new hukou reform after 2010. This policy change unifying rural and urban hukou has so far affected only a relatively small number of rural citizens in some provinces. Rural-rural converters (6.6%) are those who migrated from the rural hukou of their birth to another rural region and gained local permanent residency by converting to the local rural hukou. Rural-rural migrants (5.4%) are those who migrated from the rural hukou of their birth to another rural area but have not gone through the conversion process to become permanent residents of that hukou.

As the hukou system favors urban hukou holders over rural hukou holders, the urban-rural hukou division remains the most fundamental socioeconomic cleavage in the hukou system (Chan 2009; Chan and Zhang 1999). Despite greater rural-to-urban migration, rural hukou holders remain inferior to urban hukou holders. Moreover, the hukou system also facilitates segmented urban labor markets and socioeconomic disparities (Wang, Guo, and Cheng 2015; Zhan 2011). Without local hukou, rural migrant workers are more likely to suffer from educational deficiencies that restrict access to occupations with higher pay, especially in the state sector. This occupational segregation, in turn, becomes the leading contributor to earnings differentials between rural migrants and urban locals (Zhang and Wu 2017). Overall, the hukou system maintains its function of population control and continues to reinforce inequalities in transitional China (Chan 2019). Therefore, we derive the following hypothesis about the effects of hukou on earnings in transitional China:
Hypothesis 1: Owing to the state’s enduring institutional influence on the Chinese economy, *hukou* stratification will significantly influence workers’ earnings, net of other personal attributes and work-related characteristics.

**Class structure and earnings**

In the last half century, China’s class structure has undergone a major transformation, evolving from a simple system of three socialist strata (cadres, workers, and peasants) in the pre-reform era to a hybrid class system mixing capitalist features with aspects of the previous socialist class system. The Chinese market-oriented reforms and the expansion of the private sector changed property relations and generated a class structure with striking similarities to that of other capitalist societies (Bian 2002). Previous research has adopted multiple approaches to understand the class dynamics and earnings in transitional China. Some research on urban China applies Goldthorpe’s neo-Weberian class theory to the Chinese context (Zou 2015) while others have adapted Wright’s neo-Marxist class framework to explain class-based earnings inequality (Li, Qin, and Chen 2012; Lin and Wu 2009). Lin and Wu (2009) compared different class schema and concluded that a modified neo-Marxian class approach (albeit one that incorporated *hukou*) best captured the evolving class structure in transitional China. They also demonstrated that class has become the major source of earnings disparities among Chinese workers.

We build upon these contributions to develop a new class typology for transitional China which combines class relations forged in the emerging capitalist economy with the enduring class remnants of China’s socialist past. This typology extends Wright’s (2000, 2005, 2015) 12-class framework for Western capitalist societies by adding two legacy classes from the pre-reform era: party-state cadres and peasants. Figure 2 shows the percentage of workers in the 14 class categories of the new class typology from the 2008 to 2015 CGSS.

Wright’s class scheme centers around three major dimensions of differentiation in capitalist class systems—ownership of property, possession of skill assets, and possession of organization assets. Differentiation by ownership separates owners from non-owners, yielding three class categories in the owner group stratified by size of establishment. *Capitalists* are those who own property and employ 10 or more workers. *Small employers* are those who own property and employ between two and nine workers. *Petty bourgeoisie* are those who own property and employ no more than one worker beyond those who are family members. The ownership classes of capitalists, small employers, and petty bourgeoisie comprise about 1.0%, 2.8% and 10.7% of the working population, respectively.
Non-owners encompass various gradations of wage laborers and are allocated among nine categories based on variations in their possession of skill assets (low, medium and high) and organization assets (low, medium and high). Because of data limitations in the CGSS dataset, we modified Wright’s original operationalization of these two concepts, utilizing variables relating to whether or not these non-owners: (a) have a college degree, (b) work in managerial or professional occupations, (c) supervised other workers, and (d) are supervised by others. Based on these criteria, we derived nine non-ownership classes. Expert managers are those who have college degrees, are in managerial or professional occupations, and supervise other workers. Expert supervisors are those who have college degrees, are in managerial or professional occupations, supervise other workers and are also supervised by others. Expert workers are those who have college degrees, are in managerial or professional occupations, and are supervised by others. Semi-skilled managers are those who either have college degrees, or are in managerial or professional occupations, and supervise other workers. Semi-skilled supervisors are those who either have college degrees, or are in managerial or professional occupations, supervise other workers and are also supervised by others. Semi-skilled workers are those who either have college degrees, or are in managerial or professional occupations, and are supervised by others. Unskilled managers are those who neither have college degrees, nor are in managerial or professional occupations, and supervise other workers. Unskilled supervisors are those who neither have college degrees, nor are in managerial or professional occupations, supervise other workers and are also supervised by others. Unskilled workers are those who neither have college degrees, nor are in

![Figure 2. Modified Wright’s class scheme with 14 positions in transitional China, 2008–2015.](image-url)
managerial or professional occupations, and are supervised by others. Unskilled workers or what Marxists call the traditional proletariat have become the largest class category in China accounting for 34.7% of the working population. The other non-ownership classes range in size from expert managers at 0.04% to unskilled supervisors at 10.3%.

In addition, we identify a holdover class from the socialist era, the party-state cadres. In the pre-reform era, cadres broadly included government and party officials, professionals, managers in state-owned enterprises, institutions, and social organizations, and all other public personnel who held administrative positions. This broad cadre class is slowly fading away as a result of market transformation and giving way to a narrower group of high-ranking political elites who still wield bureaucratic power in resource distribution. We operationalize this party-state cadre class as those who are in managerial occupations in government or party agencies or state-owned social organizations who supervise other workers. This dwindling political elite accounts for about 0.5% of workers in China.

In addition to party-state cadres, peasants, or agricultural laborers in the agricultural sector, are another legacy class from the socialist era. Unlike farm workers in capitalist societies, peasants in China neither own the land nor work as wage laborers. Moreover, they are not employees in the state sector. Therefore, Chinese peasants are not fully incorporated into either the market sector or state sector; rather, as a holdover from China’s agricultural heritage in the socialist era, they represent a somewhat anomalous position in modern capitalist class relations. Peasants are the second largest class category in China, comprising 28.1% of the working population.

Based on the centrality of class in the landscape of social inequality in transitional China, we expect that:

Hypothesis 2: Owing to the increasing penetration of capitalist markets into the Chinese economy, class structure will significantly influence workers’ earnings, net of other personal attributes and work-related characteristics.

Uneven development between inland and coastal regions

In general, China’s Inland and Coastal regions are differentiated from each other by geographical location, cultural heritage, and levels of economic development. Historically, the Coastal region benefited from more fertile agricultural land than the Inland region. In recent decades, advantages of the Coastal region have been augmented by industrialization, urbanization, and greater access to global markets. For instance, the
Coastal region exceeds the Inland region in attracting foreign direct investment and exporting manufactured goods, especially since China’s entry into the WTO (Han, Liu, and Zhang 2012). Additionally, in the Coastal region, local governments have encouraged entrepreneurialism and growth by providing incentives to stimulate market flexibility and innovation, while inefficient heavy industries and state-owned enterprises continue to dominate in the Inland region (Hao and Wei 2010). All these factors have contributed to explosive economic growth in the Coastal region, which contributes to the widening disparity in wealth and earnings inequality between the Inland and Coastal regions.

Table 1 presents data on the degree of marketization in China based on the marketization index by Wang, Fan, and Zhu (2017). Using marketization scores for each of China’s 31 provinces, we devised national averages, averages for the Inland and Coastal regions, and the Inland-Coastal differences for the years 2008–2015. Higher values on the index indicate higher degrees of marketization on a 10-point scale. As shown in Table 1, the national average for the marketization index increased steadily, indicating an intensification of market transformation throughout China. Table 1 shows that both Inland and Coastal regions experienced increasing levels of marketization during this short span of years, although the Coastal region maintained consistently higher levels. In addition, the Coastal region’s level of marketization increased at a faster rate during this period as displayed by the Inland-Coastal difference in the index which grew from 2.32 in 2008 to 2.93 in 2015. This divergence likely contributes to a regional difference in workers’ earnings.

Due to the uneven pace of market transformation and economic development in the Inland and Coastal regions, we propose two additional hypotheses on regional differences in the effects of hukou and class on earnings. With respect to hukou, previous research has exclusively focused on its influence in the major cities in Coastal China. For example, Wang, Guo, and Cheng (2015) found that the hukou system in four large cities (Beijing, Tianjin, Shanghai, and Guangzhou) in the Coastal region generated substantial labor market segmentation between locals and non-locals, resulting in lower wages for migrants. On the one hand, the literature
suggests that the *hukou* system exerts a significant impact on earnings in the Coastal region and confirms the continued importance of the state in the transitional period as the state-centered theory argues. On the other hand, a paucity of empirical research on *hukou* in the Inland region invites questions about *hukou*’s impact on earnings in Inland China compared to Coastal China. Since the expansion of the capitalist market has proceeded more slowly in Inland China, the state’s role is expected to be more prominent in the Inland region. Therefore, we hypothesize:

**Hypothesis 3:** Because the state’s institutional influence is likely to be stronger in the Inland region than in the Coastal region, *hukou* stratification will exert significantly greater influence on workers’ earnings in the Inland region, net of other personal attributes and work-related characteristics.

With respect to class, there is also a paucity of empirical research on the regional differences in the effect of class structure on earnings. China’s market transformation over the past 40 years has established a diversified and sophisticated class system in both Inland and Coastal regions. Therefore, it stands to reason that class should exert a significant effect on earnings in both regions. However, due to the unevenness of capitalist development and market expansion in the two regions, class’s effect on earnings is likely to vary across regions. Therefore, from the market-centered perspective, class is more likely to exert a greater influence on earnings in the Coastal region due to higher degrees of economic openness and marketization. In this light, we suggest the following hypothesis:

**Hypothesis 4:** Because the penetration of the capitalist market is likely to be stronger in the Coastal region than the Inland region, class stratification will exert significantly greater influence on workers’ earnings in the Coastal region, net of other personal attributes and work-related characteristics.

**Data and methods**

In this article, we use the Chinese General Social Survey (CGSS), an ongoing nationally representative survey of the adult population of mainland China. The CGSS has been conducted annually or biannually since 2003 and is internationally recognized as the authoritative source for measuring social attitudes, public opinion, and quality of life in China. Since 2008, the CGSS has employed a full ensemble of work-related variables which makes the current research possible. In this study, we use the CGSS for the years 2008, 2010, 2011, 2012, 2013, and 2015 to conduct a pooled, cross-sectional analysis of workers’ earnings in contemporary China. The six waves of CGSS yield an initial sample of 57,574 respondents from urban and rural areas in 31 Chinese provinces and other
jurisdictions (hereafter, provinces) in mainland China. After restricting the analysis to persons who are working and had valid data for the dependent variable, the total sample for this study includes 31,146 respondents.

**Dependent variable**

The dependent variable *logged real annual earnings* is the natural logarithm of individual earnings from work in the previous year measured using the Chinese currency yuan and standardized by 2014 values. In 2014, the exchange rate was 1 Chinese Yuan Renminbi = .163 US dollars. We utilize the Consumer Price Index (CPI) from the National Bureau Statistics of China to adjust for inflation and use the natural logarithm transformation to correct for the positive skew in the earnings distribution.

**Key independent variables**

**Hukou Stratification**

We conceptualize the contemporary hukou system with a set of dummy variables representing the nine hukou categories shown in Figure 1: urban stayers, urban-urban converters, urban-urban migrants, rural-urban stayers, rural-urban converters, rural-urban migrants, rural-rural converter, rural-rural migrants, and rural stayers which is the reference category.

**Class structure**

Building upon Wright’s (2000, 2005, 2015) scheme, we conceptualize the class structure in transitional China using a typology that includes 12 capitalist classes and two legacy classes from the socialist era. As shown in Figure 2, this yields a set of dummy variables representing 14 class categories: capitalists, small employers, petty bourgeoisie, expert managers, semi-skilled managers, unskilled managers, expert supervisors, semi-skilled supervisors, unskilled supervisors, expert workers, semi-skilled workers, unskilled workers, party-state cadres and peasants. Unskilled workers are the reference category.

**Control variables**

We include several control variables to account for alternative explanations of earnings. To control for the effects of time, we create dummy variables for 2008, 2010, 2011, 2012, 2013, and 2015, which is the reference category. We also create dummy variables to represent the 31 provinces in the CGSS and use Beijing as the reference category.
Second, we also include sociodemographic characteristics, including gender, age, education, marital status, and political party affiliation. *Gender* is measured as a dummy variable with women = 1, men = 0. *Age* is computed by subtracting the respondent’s birth year from the survey year. We also include a curvilinear term *age squared* because the relationship between age and logged earnings is typically nonlinear. *Married* is a dummy variable coded as married = 1, and else = 0. Education consists of a series of dummy variables: *elementary school and below*, *middle school*, *junior college*, and *college and above* with *high school* as the reference category.

Third, we include several workplace affiliation variables. We capture a key feature of *danwei*, or the Chinese work unit which, in its own right, has been shown to be a major source of social stratification in China (Wu 2013). The ownership of work unit is measured with dummy variables: *collective*, *foreign*, *private*, and *other* with *state-owned* as the reference category. *Logged employer size* is the natural logarithm of the number of employees in the respondents’ workplace. *Logged work hours* measures the average number of hours worked per week. Also, in addition to regular employment which encompasses the self-employed as well as employees with fixed employers and official contracts, transitional China has experienced the growth of various forms of nonstandard employment typical of other capitalist societies. These measures have not been fully incorporated into previous research on Chinese stratification. Thus, we create a classification for nonstandard work with dummy variables: *contractors*, *casual laborers*, *freelancers*, and *standard employment* which is used as the reference category. *Union member* is a dummy variable identifying those belonging to labor unions = 1, and else = 0. *Communist party member* is a dummy variable identifying those belonging to the Communist party = 1, and else = 0.

**Methods**

Several variables in the analysis have missing data, ranging from 0.03% to 18.85% for individual variables. To address this, we performed multiple imputations using the MICE (multiple imputation by chained equations) method of multivariate imputation (Royston and White 2011; White, Royston, and Wood 2011). After 20 imputations using Stata’s -ice- package, each missing cell was filled with estimated values based on observed values in the dataset. The MICE method helps retain a maximum number of cases in the analyses (Royston 2005).

To assess the effects of *hukou* stratification and class structure on Chinese workers’ earnings, we estimated several ordinary least squares (OLS) regressions controlling for years and provinces. We first used the total sample of workers in China to examine overall patterns of earnings
attainment. Then, we conducted identical analyses in the Inland and Coastal subsamples \(^{11}\) to compare the outcomes in the two regions.

In order to facilitate parsimonious interpretation of the models, we used sheaf coefficients, a statistical procedure estimated by Stata’s -sheaf-coef- package (Buis 2009). Sheaf coefficients summarize the effects of a set of dummy variables with a single coefficient that approximates a standardized coefficient (Heise 1972; Whitt 1986). Since both hukou and class are categorical, each represented by several dummy variables, sheaf coefficients greatly facilitate estimation of their overall effects on earnings. Instead of relying on multiple coefficients for each dummy category, sheaf coefficients summarize the overall effect with a single coefficient. Moreover, because sheaf coefficients can be interpreted as standardized coefficients, we report standardized coefficients for all variables in the table so that the overall effects of hukou and class can be directly compared with all other covariates. We also use sheaf coefficients for all other covariates (education, ownership of work unit, and nonstandard employment) measured with multiple dummy variables.

Because the total effects of hukou and class on earnings are partially mediated by other covariates, we used the Karlson–Holm–Breen (KHB) method to decompose the total effects of hukou and class into their direct and indirect effects with respect to each mediator (Karlson, Holm, and Breen 2012).

**Analysis**

Table 2 presents summary statistics for all variables used in the analysis in the total sample, the Inland subsample, and the Coastal subsample after applying sample weights to make them representative of the Chinese population. In 2008–2015, real average annual earnings were 24,880.36 yuan (4,055.50 U.S. dollars) in the total sample; 15,933.10 yuan (2,597.10 US dollars) in the Inland subsample; and 40,216.01 yuan (6,555.21 US dollars) in the Coastal subsample. Thus, the average earnings of workers in Coastal China were 2.5 times as much as in Inland China. Clearly, China’s economic development has favored the Coastal provinces.

Difference of means tests confirmed statistically significant differences between the Inland and the Coastal regions for almost every variable in the table. Notably, the distribution of hukou-stratified groups varies by regions. Rural stayers and rural-rural converters appear in higher proportions in the Inland region, while the other seven hukou categories are larger in the Coastal region. This largely reflects the direction of migratory flows from Inland China to the more urbanized and developed Coastal region. Most class categories also reveal a significant Inland-Coastal divide. The petty bourgeoisie and peasant classes display larger
Table 2. Summary statistics for variables in the regression analysis of earnings in China, 2008–2015.

| Variable                        | All          | Inland region | Coastal region | Diff. in means |
|---------------------------------|--------------|---------------|----------------|----------------|
| Real annual earnings\(^a\)      | 24,880.360   | 15,933.100    | 40,216.010     | 94,478.900     |
| Hukou stratification           |              |               |                |                |
| Urban stayer                   | .211         | .168          | .283           | .451           |
| Urban-urban converter          | .056         | .021          | .072           | .258           |
| Urban-urban migrant            | .043         | .114          | .080           | .271           |
| Rural-urban stayer             | .018         | .114          | .025           | .157           |
| Rural-urban converter          | .037         | .129          | .071           | .256           |
| Rural-urban migrant            | .030         | .145          | .046           | .209           |
| Rural stayer                   | .486         | .607          | .279           | .448           |
| Rural-rural converter          | .066         | .268          | .044           | .205           |
| Rural-rural migrant            | .054         | .163          | .100           | .300           |
| Class structure                |              |               |                |                |
| Capitalist                     | .010         | .006          | .016           | .126           |
| Small employer                 | .028         | .021          | .041           | .198           |
| Petty bourgeoisie              | .107         | .320          | .092           | .289           |
| Expert manager                 | .0004        | .012          | .001           | .027           |
| Semi-skilled manager           | .002         | .044          | .002           | .046           |
| Unskilled manager              | .002         | .030          | .003           | .056           |
| Expert supervisor              | .019         | .096          | .036           | .186           |
| Semi-skilled supervisor        | .040         | .167          | .058           | .234           |
| Unskilled supervisor           | .103         | .276          | .137           | .343           |
| Expert worker                  | .020         | .112          | .032           | .176           |
| Semi-skilled worker            | .036         | .171          | .047           | .212           |
| Unskilled worker               | .347         | .460          | .419           | .493           |
| Party-state cadre              | .005         | .071          | .005           | .069           |
| Peasant                        | .281         | .485          | .112           | .315           |
| Sociodemographic Variables     |              |               |                |                |
| Female                         | .413         | .493          | .406           | .491           |
| Age                            | 44,309       | 45,850        | 41,668         | 42,466         |
| Age squared                    | 2,130,834    | 1,229,688     | 1,891,652      | 1,100,769      |
| Married                        | .810         | .367          | .760           | .427           |
| Education                      |              |               |                |                |
| Elementary school and below    | .342         | .495          | .188           | .391           |
| Middle school                  | .295         | .462          | .271           | .444           |
| High school                    | .185         | .362          | .238           | .426           |
| Junior college                 | .087         | .232          | .137           | .344           |
| College and above              | .091         | .212          | .166           | .372           |
| Workplace Affiliation Variables|              |               |                |                |
| Ownership of work unit         |              |               |                |                |
| State-owned                    | .186         | .361          | .240           | .427           |
| Collective                     | .050         | .196          | .066           | .248           |
| Private                        | .413         | .480          | .505           | .500           |
| Foreign                        | .016         | .064          | .037           | .189           |
| Other ownership                | .335         | .497          | .152           | .359           |
| Logged employer size           | 2,711        | 2,053         | 3,559          | 2,318          |
| Logged work hours              | 3,833        | 3,528         | 3,834          | .432           |
| Nonstandard employment         |              |               |                |                |
| Standard employment            | .874         | .343          | .890           | .313           |
| Contractor                     | .015         | .111          | .016           | .126           |
| Casual laborer                 | .098         | .317          | .074           | .261           |
| Freelancer                     | .012         | .101          | .016           | .126           |
| Union member                   | .131         | .286          | .201           | .401           |
| Communist party member         | .232         | .411          | .259           | .438           |

\(^a\)In the regression analysis, we used logged real annual earnings as the dependent variable.
\(^\dagger\)Difference of means for workers in the Inland and Coastal regions is statistically significant at \(p < .05\).
\(^\circ\)Reference categories.
proportions in the Inland region. In contrast, the Coastal region yields significantly larger shares of capitalists, small employers, expert and unskilled managers, supervisors and workers at all skill levels. However, there are no significant differences between regions among party-state cadres and semi-skilled managers.

Among the sociodemographic characteristics, a disproportionately larger percentage of persons living in the Inland region are older, women, and married persons, while more residents of the Coastal region are younger, male and unmarried. Also, workers in the Coastal region are more likely to be higher-educated. With regard to workplace affiliation variables, a higher proportion of Coastal workers are employed in state-owned, collective, private, and foreign-owned workplaces, while workers in the Inland region are more likely to be employed in workplaces as “other” types of ownership. There are no significant differences in work hours between the workers in the two regions, but workers in the Coastal region are more likely and work in larger workplaces. Workers in the Coastal region are more likely to be engaged in standard employment, as contractors, and as freelancers, while workers in the Inland region are more likely to be casual laborers. Finally, workers in the Coastal region are more likely to be union members and members of the Communist party.

Table 3 displays the results for the full sample obtained from four OLS regression models. Model 1 includes only hukou stratification; Model 2 includes only class structure; Model 3 includes both hukou stratification and class structure; and Model 4 includes hukou stratification, class structure, and all other covariates. All four models include controls for 31 provinces and six years, but these effects are omitted from the table. This stepwise procedure enables us to identify separately the total effects of hukou (Model 1) and class (Model 2), their net effects controlling for each other (Model 3), and their net effects after controlling for all covariates (Model 4).

Model 1 shows the overall effect of hukou stratification on workers’ earnings. Hukou stratification, combined with the effects of province and year, explains 42.2% of the variance in earnings. The sheaf coefficient of hukou indicates a standardized effect of .393 controlling for the effects of provinces and years. All hukou-stratified groups except rural-rural converters have significantly higher earnings than the reference category of rural stayers. Model 2 reveals the overall effect of class structure on workers’ earnings. Here, 51.0% of the variance in earnings is explained by class structure, combined with province and year. The sheaf coefficient indicates that class structure has a standardized effect of .498, substantially higher than hukou. Except for peasants, most class positions have significantly higher earnings than the reference category of unskilled workers.
Table 3. Ordinary least squares (OLS) regression determinants of workers’ logged real annual earnings in China, 2008–2015 (N = 31,146).\textsuperscript{a,b,c}

| Variable                        | 1                     | 2                     | 3                     | 4                     |
|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                 | b                     | Beta                  | b                     | Beta                  | b                     | Beta                  |
| Hukou stratification           |                       |                       |                       |                       |                       |                       |
| Urban stayer                   | 1.438                 | .111***               | 1.382                 | .107***               | 1.173                 | .099***               |
| Urban-urban converter          | .912                  | .117***               | .862                  | .111***               | .760                  | .098***               |
| Urban-urban migrant            | .223                  | .053***               | .227                  | .054***               | .277                  | .066***               |
| Rural-urban stayer             | .424                  | .006                  | .174                  | .003                 | -.031                 | -.005                 |
| Rural-urban converter          | .500                  | .017***               | .410                  | .014***               | .269                  | .009**                |
| Rural-urban migrant            | .585                  | .019***               | .559                  | .018***               | .417                  | .014***               |
| Rural-rural converter          | 1.122                 | .119***               | .943                  | .100***               | .442                  | .047**                |
| Rural-rural migrant            | .659                  | .106***               | .538                  | .081***               | .287                  | .043**                |
| Party-state cadre              | .328                  | .077***               | .277                  | .065***               | .171                  | .040**                |
| Peasant                        | .797                  | .119***               | .618                  | .067***               | .165                  | .018**                |
| Female                         |                       |                       |                       |                       | -.973                 | -.339                 | -.788                 | -.275                 | -.447                 | -.156***              |
| Age                            |                       |                       |                       |                       | -.376                 | -.144***              |
| Age squared                    |                       |                       |                       |                       | -.001                 | -.638***              |
| Married                        |                       |                       |                       |                       | .117                  | .035***               |
| Education                      |                       |                       |                       |                       | -.108                 | -.078***              |
| Collective                     |                       |                       |                       |                       | -.391                 | -.144***              |
| Private                        |                       |                       |                       |                       | -.154                 | -.054***              |
| Foreign                        |                       |                       |                       |                       | .195                  | .043**                |
| Other                          |                       |                       |                       |                       | .309                  | .069**                |
| Logged employer size           |                       |                       |                       |                       | .030                  | .053***               |
| Logged work hours              |                       |                       |                       |                       | .122                  | .047***               |
| Nonstandard employment         |                       |                       |                       |                       | -.096                 | -.008**               |
| Contractors                    |                       |                       |                       |                       | .011                 | .131***               |
| Casual laborers                |                       |                       |                       |                       | .031                  | .011                  |
| Freelancers                    |                       |                       |                       |                       | .131                  | .013***               |
| Union member                   |                       |                       |                       |                       | .113                  | .010                  |
| Communist party member         |                       |                       |                       |                       | .140                  | .037***               |
| Constant                       | 9.994                 | 10.587                | 10.170                | 9.167                 |
| Adj. R-squared                 | .422                  | .510                  | .531                  | .623                  |

\*p < .05; **p < .01; ***p < .001 (two-tailed tests)

\textsuperscript{a} Standardized regression coefficients; \textsuperscript{b} Standardized regression coefficients/sheaf coefficients.

\textsuperscript{c} Sheaf coefficients are underscored, italicized, and bold-faced.

Reference categories: hukou stratification—rural stayer; class structure—unskilled worker; education—high school; ownership of work unit—state-owned; non-standard employment—standard employment.
Model 3 includes hukou and class together in the same model. The inclusion of class increased the adjusted $R^2$ by 25.8% from .422 in Model 1 to .531 in Model 3 and reduces the standardized effect of hukou by 49.4% from .393 in Model 1 to .199 in Model 3. On the other hand, including hukou increases the adjusted $R^2$ by only 4.1% from .510 in Model 2 to .531 in Model 3, and reduces the standardized effect of class by just 16.7% from .498 in Model 2 to .415 in Model 3. Overall, these results indicate that, while both hukou and class are relevant to explaining workers’ earnings, class is much more fundamental to the process in the total sample. In other words, class cuts into the effect of hukou much more than hukou diminishes the effect of class.

Model 4 shows the full model adding all the other covariates. The inclusion of sociodemographic and workplace variables increases adjusted $R^2$ by 17.3% from .531 in Model 3 to .623 in Model 4. All hukou-stratified groups including rural-rural converters now have significant earnings advantages over the reference category of rural stayers. Compared to Model 3, the standardized effect of hukou further decreases by 47.7% from .199 to .104 controlling for all other variables. Compared to Model 1, the net effect of hukou shrinks by 73.5% in Model 4, but it remains a significant determinant of workers’ earnings as Hypothesis 1 predicted. The inclusion of the covariates further reduces the standardized effect of class by 36.9% from .415 in Model 3 to .262 in Model 4, but class remains significant and robust, which supports Hypothesis 2. Compared to Model 2, the net effect of class shrinks by 47.4% in Model 4, which is much smaller than the shrinkage of hukou. Beyond supporting Hypotheses 1 and 2, the results in Model 4 also indicate that the effect of class structure on workers’ earnings is approximately 2.52 times stronger than that of hukou stratification.

Among other covariates, gender is significantly related to earnings with female workers earning about 31.3% ($=e^{-0.376-1}$) less than males. The curvilinear effect of age on earnings is significant: earnings increase with age, but the rate of increase decreases later in the career. Being married is significantly and positively related to earnings compared to not being married. Married workers earn about 12.4% ($=e^{0.117-1}$) more than unmarried workers. Also, the sheaf coefficient for education shows a substantial, significant effect on earnings of .186 that is greater than that of hukou stratification, but less than class. Education show a steep gradient of effects with persons with elementary school or below being substantially disadvantaged and those with college or above being very advantaged.

Among the workplace affiliation variables, ownership of work units has a standardized effect of .027. Those working in foreign-owned firms receive a significant earnings advantage while working in collective-owned
firms are disadvantaged compared to the reference category of state-owned workplaces. These results support the claim of market transition theory that the privileges of government and party agencies and state-owned work units of the socialist era are largely diminished in the transition toward a market economy. Logged employer size and logged work hours are each positively associated with workers’ earnings. Nonstandard employment has a standardized effect of .056 on earnings with contractors and casual laborers earning significantly less than workers in standard employment. Union membership is also positively related to earnings. Finally, Communist party members receive significantly higher earnings than non-party members, which echoes those who contend the state retains significant influence even as China moves toward capitalism (Bian and Logan 1996; Parish and Michelson 1996; Walder 1996).

Table 4 presents separate analyses for workers in the Inland and Coastal regions. In order to conserve space and facilitate interpretation, Table 4 reports only standardized coefficients for continuous variables and sheaf coefficients for the categorical variables. In order to assess Hypotheses 3 and 4, we use difference of slopes tests to indicate when their effects are significantly different by region.

Consistent with results in the full sample shown in Table 3, Models 1 and 5 in Table 4 show that hukou is a significant determinant of earnings in both Inland and Coastal China. The standardized effect of hukou on earnings is .401 in the Inland region and .389 in the Coastal region with no statistically significant difference between the two regions. Moreover, including the effects for provinces and years, hukou stratification explains 29.8% of the variance in earnings in the Inland region and 38.1% in the Coastal region.

Similarly, Models 2 and 6 show that the effect of class structure on earnings is strong and significant in both regions. The standardized effect of class on earnings is .514 in the Inland region and .527 in the Coastal region with no statistically significant difference in these effects. Along with province and year, class explains just 39.4% of the variance in earnings in the Inland region but 50.2% in the Coastal region.

Models 3 and 7 show results when hukou and class are included in the model simultaneously. Both variables play a significant role in earnings attainment in both regions, but collectively they explain less variance in the Inland region (41.9%) than the Coastal region (52.4%). Adding class diminishes the sheaf coefficient of hukou in the Inland region by 50.1% from .401 in Model 1 to .200 in Model 3 and reduces the effect of hukou in Coastal China by 48.6% from .389 in Model 5 to .200 in Model 7. However, the magnitudes of the hukou effect are roughly the same in the Inland and Coastal regions, which tentatively fails to support Hypothesis 3 before including all other covariates. The inclusion of hukou diminishes
| Variable                      | Inland region | Coastal region |
|-------------------------------|---------------|----------------|
|                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **Hukou stratification**     | .401*** | .200*** | .114*** | .389*** | .200*** | .091***,† |
| **Class structure**          | .514*** | .422*** | .277*** | .527*** | .457*** | .288*** |
| Female                        | -399 −.161*** | −.344 −.148*** |
| Age                           | .038 .403*** | .057 .624***,† |
| Age squared                   | −.001 −.630*** | −.001 −.757***,† |
| Married                       | .126 .038*** | .091 .034*** |
| Education                     | .169*** | .037*** | .038*** |
| Ownership of work unit        | .021 .034*** | .034 .070***,† |
| Logged employer size          | .132 .057*** | .092 .035***,† |
| Logged work hours             | .066*** | .056*** |
| Nonstandard employment        | .241 .056*** | .042 .015*,† |
| Union member                  | .052 .017* | .088 .034*** |
| Communist party member        | 8.734 9.298 9.138 8.676 10.061 10.590 10.197 8.943 |
| Adj. R-squared                | .298 .394 .419 .534 .381 .502 .524 .621 |

*p < .05; ***p < .001 (two-tailed tests).
†Difference of slopes for workers in Coastal China and Inland China is statistically significant at p < .05.
ab — unstandardized regression coefficients; Beta — standardized regression coefficients/sheaf coefficients.
bSheaf coefficients are underscored, italicized, and bold-faced.
cThe effects of years and provinces are included in all models but not shown.
Reference categories: hukou stratification—rural stayer; class structure—unskilled worker; education—high school; ownership of work unit—state-owned; non-standard employment—standard employment.
the effect of class in Inland China by 17.9% from .514 in Model 2 to .422 in Model 3, and by 13.7% in Coastal China from .527 in Model 6 to .455 in Model 7. The significance of the difference of slopes test further confirms that class is a more influential determinant of workers’ earnings in the Coastal region. These results provide tentative support for Hypothesis 4, but a fuller examination requires inclusion of additional covariates.

Models 4 and 8 are full models that include all other covariates. The adjusted $R^2$ in the Inland model (.534) is much lower than in the Coastal model (.621) indicating a better fit for the Coastal region. After taking all other controls into account, the effect of *hukou* decreases by 71.6% from .401 in Model 1 to .114 in Model 4 among the Inland provinces and by 76.6% from .389 in Model 5 to .091 in Model 8 among the Coastal provinces. In spite of the considerable reduction, *hukou* stratification remains significant in both regions. The difference of slopes test indicates that *hukou* has a significantly stronger impact on workers’ earnings in the Inland region than the Coastal region which provides support for Hypothesis 3.

Moreover, when all the covariates are added to the model, the effect of class is reduced by 47.1% from .514 in Model 2 to .272 in Model 4 in the Inland region and by 45.4% from .527 in Model 6 to .288 in Model 8 in the Coastal region. But the impact of class on earnings remains significant in both regions. Although the magnitude of the sheaf coefficient in the Coastal region of .288 is greater than that of the Inland region of .272, the difference in these two coefficients does not rise to conventional levels of statistical significance. Therefore, while the direction of the difference is as expected and the t-test is above 1.00, Hypothesis 4 is not supported in the full model.

Further experimentation with Models 4 and 8 indicated that the lack of a statistically significant difference in the class coefficient between the Inland and Coastal region is due to the inclusion of the ownership of work unit variable. When that variable is dropped from the models, support for Hypothesis 4 is evident. That is, we find that the class effect in the Coastal region rises to .297 and the class effect in the Inland region declines to .250, a statistically significant difference at $p < .001$. This raises the important point of mediating variables which we will discuss below.

On balance, the findings lend some support to both market transition theory and the power persistence thesis. On the one hand, the effect of the *hukou* system is greatly diminished in the highly marketized Coastal region, which bespeaks a decline of state power suggested by market transition theory. On the other hand, as the power persistence thesis argues, the *hukou* system as a part of the state apparatus persists in its influence on earnings in the less marketized Inland region.
Among the covariates, gender and marital status show no significant differences by region. However, age and age squared signal a significantly sharper increase in earnings with each year of experience in the Coastal region, but the rate of increase also declines at a significantly faster rate later in the career in the Coastal region. Education is a major determinant of earnings in both Inland and Coastal China. In both regions, the effect of education is the second strongest variable in the model—stronger than hukou, but weaker than class. Moreover, education has a significantly greater impact on earnings in the Coastal region with a sheaf coefficient of .231 compared to .169 in the Inland region. In other words, there are higher earnings returns to education in the more marketized Coastal region. There is no significant difference by region in the effect of ownership of work unit. However, the positive effect of logged employer size on earnings is significantly greater in the Coastal region, while the positive effect of logged work hours is larger in the Inland region. Nonstandard employment has a significantly stronger impact in the Inland region with a standardized effect of .066, compared to a standardized effect of .045 in the Coastal region. Finally, union membership has a significantly stronger positive effect in the Inland region, while Communist party membership shows a greater positive effect in the Coastal region.

The analysis thus far suggests that both hukou and class have strong direct effects on earnings, but a substantial portion of their total effects take the form of indirect effects that are mediated by other covariates. In order to more thoroughly probe the role of mediating effects, we used the Karlson–Holm–Breen (KHB) method to decompose the total effects of hukou and class into direct and indirect effects attributable to each mediator (Karlson, Holm, and Breen 2012). In this way, the KHB method helps disentangle the relative contribution of each mediator’s role in passing on the effects of hukou and class on earnings indirectly.

Table 5 addresses the mediating effects of all covariates on the association between hukou and class on earnings. Panels A, B, and C show the results for the Total, Inland, and Coastal samples, respectively. In each panel, we present sheaf coefficients associated with the total, direct, and indirect effects of hukou and class on earnings with respect to each mediator, along with the confounding percentage, which is the percentage of the total effect operating indirectly through each mediator. In Panels A, B, and C, the total effects for hukou are shown as the sheaf coefficients shown in Table 3, Model 1; Table 4, Model 1; and Table 4, Model 5, respectively. Similarly, the total effects for class correspond with the sheaf coefficients shown in Table 3, Model 2; Table 4, Model 2; and Table 4, Model 6, respectively.

In Panel A, we present results for the national sample of China. Referring to the confounding percentage, the largest mediators for hukou
Table 5. Sheaf coefficients assessing mediating effects of all covariates on the association between *hukou* and earnings and class and earnings in total, inland and coastal samples, using the KHB method.a

| Panel | Sample | Hukou stratification | Total effect | Indirect effect | Direct effect | Confounding percentage |
|-------|--------|-----------------------|--------------|----------------|---------------|-----------------------|
| **Panel A. Total sample** | | | | | | |
| Female | Age and age squared | Married | Education | Ownership of work unit | Logged employer size | Logged work hours | Nonstandard employment | Union member | Communist party member | All covariates |
| | | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 |
| Total effect | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 | .393 |
| Confounding percentage | 1.129 | 18.866 | -988 | 48.400 | 38.627 | 16.755 | .886 | .387 | 7.579 | 2.012 | 73.473 |
| **Panel B. Inland sample** | | | | | | | |
| Female | Age and age squared | Married | Education | Ownership of work unit | Logged employer size | Logged work hours | Nonstandard employment | Union member | Communist party member | All covariates |
| | | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 |
| Total effect | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 | .401 |
| Confounding percentage | 1.378 | 18.729 | -1071 | 46.890 | 39.821 | 17.669 | 1.522 | .189 | 9.775 | 1.973 | 71.453 |
| **Panel C. Coastal sample** | | | | | | | |
| Female | Age and age squared | Married | Education | Ownership of work unit | Logged employer size | Logged work hours | Nonstandard employment | Union member | Communist party member | All covariates |
| | | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 |
| Total effect | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 | .389 |
| Confounding percentage | .781 | 19.072 | -732 | 51.232 | 35.611 | 15.839 | -.649 | 2.121 | 6.100 | 2.157 | 76.690 |

*aAll models control for years and provinces.*
on earnings are education (48.4%), ownership of work unit (38.6%), age and age squared (18.9%), and logged employer size (16.8%). Overall, 73.5% of the total effect of hukou on earnings is mediated by all covariates. By comparison, the largest mediators for class on earnings are education (30.5%), ownership of work unit (18.0%), age and age squared (16.3%), and logged employer size (12.3%). Overall, 47.4% of the total effect of class on earnings is mediated by all covariates.

In Panel B, we present results for the Inland region sample. We see that the largest mediators for hukou on earnings are education (46.9%), ownership of work unit (39.8%), age and age squared (18.7%), and logged employer size (17.7%). Overall, 71.5% of the total effect of hukou on earnings is mediated by all covariates. By comparison, the largest mediators for class on earnings are education (31.0%), age and age squared (18.0%), ownership of work unit (16.7%), and logged employer size (11.8%). Overall, 47.0% of the total effect of class on earnings is mediated by all covariates.

In Panel C, we present results for the Coastal region sample. Here, the largest mediators for hukou on earnings are education (51.2%), ownership of work unit (35.6%), age and age squared (19.1%), and logged employer size (15.8%). Overall, 76.7% of the total effect of hukou on earnings is mediated by all covariates. By contrast, the largest mediators for class on earnings are education (28.6%), ownership of work unit (17.0%), age and age squared (13.4%), and logged employer size (10.1%). Overall, 45.3% of the total effect of class on earnings is mediated by all covariates.

A number of conclusions can be drawn from the KHB analysis. First, the same block of four covariates emerge as the key mediators for both hukou and class across all three samples, although the rank order of their mediating effects varies slightly. Moreover, education emerges as the key mediating factor for both hukou and class across all three samples. Second, the impact of individual mediators as well as all mediators taken as a whole is consistently larger for hukou than for class. In particular, the mediating effects of education and age between hukou and class are notably larger for hukou than for class. Third, the gap in the mediating effects of education and age between hukou and class is larger in the Coastal region, but the gap in the mediating effects of ownership of work unit and logged employer size is larger in the Inland region. Thus, different dynamics are in play for human capital variables versus structural features of the labor market.

Discussion and conclusions

China has experienced a massive transformation in social stratification over the past several decades. As China moves towards capitalism and marketization, the longstanding hukou system which splits the Chinese
population into rural and urban residents has begun to change, lifting some of the restrictions on mobility between rural and urban areas. While the current hukou system is less rigid than in the past, hukou continues to play an important role in shaping earnings (Chan 2019). Alongside changes to the hukou system, China’s growing market economy has led to large-scale changes in class differentiation, affecting the lives of millions of laborers across industrial sectors. Moreover, the uneven pace of market transformation in China has led to considerable disparities between Inland and Coastal provinces. The large-scale changes in hukou and class stratification across regions thus raise the questions: Is earnings distribution in transitional China more shaped by hukou or class? How do the effects of hukou and class on workers’ earnings vary by regions?

To answer these questions, we conducted an empirical analysis of the effects of the hukou system and class structure on workers’ earnings in the entire nation as well as the Inland and Coastal regions. Using six waves of the Chinese General Social Survey in 2008–2015, we developed a nine-category scheme to measure hukou stratification (five in urban areas, four in rural areas) and a 14-category typology for class structure (12 classes from Wright’s scheme for capitalist market systems and two socialist legacy classes).

The findings have revealed important implications for understanding the dynamic process of stratification and earnings in transitional China. Overall, the results demonstrate that the hukou system and class structure work independently and jointly to determine workers’ earnings in transitional China. More specifically, the persistence of the hukou system remains a major determinant of earnings in transitional China, attesting to the continuing influence of the state and supporting the state-centered perspective. The emerging class system ranks ahead of education and hukou as the strongest determinant of earnings. This finding attests to the rising influence of the ongoing market transformation and supports the market-centered perspective.

Moreover, the findings about the varying effects of hukou and class on earnings across regions shed light on the changing stratification dynamics in transitional China. Hukou and class are both strong determinants of earnings in both the Inland and Coastal regions, but hukou has a relatively stronger effect in the Inland region where the market transformation has had the least impact. The findings confirm features of both the market-centered and state-centered perspectives. On the one hand, the significantly stronger net effect of hukou stratification on earnings in less marketized Inland China echoes the persistent power of the state as the hukou system serves to maintain state hegemony and plays a significant role in determining workers’ earnings. On the other hand, a weaker impact of hukou on earnings in highly marketized Coastal region echoes the state’s declining influence as argued by the market-centered perspective.
The regional comparison of class’s effect on earnings requires a more nuanced interpretation. Even though the magnitude of the sheaf coefficient for class is larger in the Coastal region than we expected, the difference with the Inland region does not rise to conventional levels of statistical significance. We noted that this effect becomes statistically significant when ownership of work unit is dropped from the model, suggesting that differences in the class effects are mitigated by rather sharp differences in patterns of ownership between regions (see Table 2). So, one interpretation is that as marketization increases the economic divergence of the two regions, sharper class differences will emerge in the future. But an alternative interpretation is equally plausible. The relatively large effect of class on earnings in the Inland region might suggest that market liberalization has taken hold in the Inland region to a larger extent than expected, establishing class as a major axis of stratification. Ultimately, only the passage of time and the opportunity to extend this analysis into the future will resolve this question.

Ultimately, the results of our study support aspects of both state-centered and market-centered perspectives on China’s market transformation and provide a new way to understand the intervening roles of state and market mechanisms in the transitional period. The future of China’s market transition will remain under the regulation of the state even as it rides the changing tides of domestic and global markets. On the one hand, the state’s “heavy hand” will continue to give Chinese state capitalism a distinctive character compared to Western capitalism. On the other hand, the Chinese economy faces greater challenges and uncertainties as it begins to encounter limits to future growth (Whyte 2020). This suggests that the delicate balance between state and market forces will require ongoing adjustment and recalibration and that the twin pillars of the Chinese stratification and their implications for earnings inequality will command the attention of scholars for years to come.

Notes

1. Muntaner et al. (2003, 953) used a similar strategy to adapt Wright’s scheme to define the class structure in Spain, offering the following explanation: “Professionals, managers, and technicians, military officials with a bachelor’s degree or above are considered experts, professionals, managers, and technicians without a bachelor’s degree, craftsmen, and clerks with a bachelor’s or above are considered semi-skilled, the rest are considered unskilled.”

2. The majority of peasants live in rural China. Approximately 83.7% of peasants are rural stayers, 12.2% are rural-rural converters, 0.56% are rural-rural migrants, 1.7% are urban stayers, 0.5% are urban-urban converters, 0.07% are urban-
urban migrants, 0.04% are rural-urban converters, 0.6% are rural-urban migrants, 0.6% are rural-urban stayers, and 0.02% are rural-urban converters.

3. See Bian and Li (2012) for a discussion of the sample design and data availability of the CGSS.

4. China has 33 provincial-level administrative divisions, including 22 provinces, four municipalities, five autonomous regions, and two special administrative regions. The two special administrative regions—-Hong Kong and Macao—are not included in the CGSS.

5. The CGSS reports respondents’ earnings from the previous year. So, earnings reported in the 2008 survey, for example, reflect workers’ earnings in 2007.

6. The CPI measures the cost of a standard basket of goods and services. CPI values were as follows: 2007 = 104.8; 2009 = 99.3; 2010 = 103.3; 2011 = 105.4; 2012 = 102.6; and 2014 = 102.0.

7. The 30 province dummies include: Tianjin, Hebei, Shanxi, Inner Mongolia, Liaoning, Jilin, Heilongjiang, Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, Henan, Hubei, Hunan, Guangdong, Guangxi, Hainan, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Gansu, Qinghai, Ningxia, and Xinjiang.

8. Although we preferred a measure of annual hours worked to match with annual earnings, such a measure or was not available in the CGSS.

9. Graham, Olchowski, and Gilreath (2007, 212) recommend using 20 imputations for 10–30% missing information, 40 imputations for 50% missing information, and 100 imputations for 90% missing information if a researcher tolerates a 1% power falloff.

10. Cases with imputed dependent variable values were dropped from the analysis, and thus, the final sample size remains 31,146.

11. The 21 provinces in the Inland region include Heilongjiang, Jilin, Inner Mongolia, Shanxi, Henan, Hunan, Hubei, Anhui, Jiangxi, Guangxi, Hainan, Shaanxi, Chongqing, Sichuan, Yunan, Guizhou, Ningxia, Qinghai, Xinjiang, and Tibet. The remaining 10 Coastal provinces include Beijing, Tianjin, Hebei, Liaoning, Shandong, Shanghai, Jiangsu, Zhejiang, Fujian, and Guangdong.

12. These results are consistent with recent research that shows a significant difference in occupational-prestige scores of urban-to-urban migrants compared to rural-to-urban migrants (Ou and Kondo 2013).

13. Before including them in the same model, we sought to ascertain the association between these hukou and class. We first calculated the Pearson’s Chi-squared test of independence and determined that there is a significant association between hukou and class at $p < .001$. Next, to measure the strength of association, we calculated Cramer’s V as .207. However, there is no consensus as to how to interpret the strength of association of Cramer’s V. Most “rule-of-thumb” interpretations classify .207 as a weak to moderate association. However, Cohen (1988) suggests that a Cramer’s V of .207 with 8 degrees of freedom is large. Nevertheless, there is strong evidence that hukou and class are quite distinct mechanisms of stratification. We determined that the magnitude of Cramer’s V was biased upward by substantial overlap between the peasant class and several rural categories of hukou, particularly rural stayers. When peasants were removed from the analysis, Cramer’s V fell to .113. Also, when peasants were removed from
the analysis, several of the key findings of this analysis came into sharper focus. On balance, this leads us to conclude that none of the findings we report are an artifact of an unduly high association between *hukou* and class.

14. Recent research suggests that women’s labor force participation increased sharply since about 2003 due mainly to a surge in the cost of living (e.g., housing, education, and healthcare) in urban China (Wu and Zhou 2015). However, this has not been accompanied by a commensurate equality in earnings with men.

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