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Social Capital and Economic Integration of Migrants in Urban China*

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Abstract

Based on data from a 2005 survey conducted in Shanghai, China, this research examines the role of social capital in income inequality between rural migrants and urbanites. We find strong income return on social capital, in particular on social capital from strong ties. We also observe a great disparity in social capital possession between rural migrants and urban local residents. Although social capital from strong ties seems to be more important for rural migrants than for urbanites, local ties and high-status ties do not seem to benefit rural migrants. Hence, migrants not only suffer severe social capital deficits but also capital return deficits. Given the strong income returns on social capital and the substantial differences in access to and return on social capital between migrants and urban residents, social capital is consequently found to explain a large part of the income inequality between the two groups. Overall, our findings reveal macro-structural effects on the role of social capital in labor market stratification. In China, the lack of formal labor market mechanisms continues to create both a strong need for and opportunities for economic actions to be organized around informal channels via social relations. Yet, the long-standing institutional exclusion of migrants caused by the household registration system has resulted in pervasive social exclusion and discrimination which have substantially limited rural migrants' accumulation and mobilization of social capital. Under these conditions, social capital reinforces the economic inequality between migrants and urban residents in China. Such empirical evidence adds to our understanding of the role of social capital in the economic integration of migrants and in shaping intergroup inequality in general.

Keywords

social capital; income inequality; migration; China

INTRODUCTION

Previous research across many societies has documented an income gap between immigrants and the native-born population in the destination country (or the local population in the setting of internal migration). Two main approaches have been put forward to explain the economic gap between immigrants and the natives. One approach focuses on the individual characteristics and behaviors of workers and employers and attributes the gap to

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immigrants' lower human capital and the discriminatory practices of employers (Friedberg, 2000; Démurger, Gurgand, Li, and Yue, 2009; Hall, Greenman, and Farkas, 2010). The institutional approach, in contrast, emphasizes the structural constraints on the economic mobility of immigrants associated with labor market arrangements (e.g., labor market segmentation) and state institutions (Constant and Massey, 2005; Fan, 2008).

However, these approaches have overlooked the role of social capital in the labor market stratification. Social network scholars argue that the social resources embedded in social relations, referred to as social capital, have important implications for the status attainment and mobility process (Lin, 2001). Through social connections, individuals obtain valuable job information and are connected to economic opportunities beyond their original repository; social connections may also provide tangible assistance or exercise social influence to help individuals navigate the labor market and overcome structural barriers (Bian, 1997; Granovetter, 1995; Lin, 2001).

Research on the social networks and economic integration of immigrants has demonstrated the important role of social capital in the employment and earnings of immigrants by improving the effectiveness of the job search process and providing crucial information about good jobs (Aguilera and Massey, 2003). This line of research especially highlights the positive impact of co-ethnic networks in job searching and protecting immigrants from labor market discrimination (Sanders, Nee, and Sernau, 2002). However, immigrants' overreliance on co-ethnic networks is sometimes thought to isolate them from the resources available in the mainstream economy. It is argued that economic integration might be better facilitated by connections to natives, who can assist immigrants by providing a bridge to the mainstream labor market (Nee, Sanders, and Sernau, 1994; Fong and Ooka, 2002). However, there is little empirical evidence on whether, under conditions of stringent institutional barriers and social discrimination, social capital, particularly that embedded in immigrants' social connections to the native population, would help to narrow the economic gap between immigrants and natives.

This query echoes a recent call for research attention to be given to the role of social networks in exacerbating or ameliorating social inequality (DiMaggio and Garip, 2012). Inequality in social capital is linked to socioeconomic inequality through two mechanisms, namely differential access to social capital and differential returns on social capital, both of which are argued to be influenced by both individual characteristics and structural factors (Lin, 2001). The first mechanism—social capital is unequally distributed among different social groups in a society—is well documented (Lin and Erickson, 2008); but the second mechanism receives much less attention (Smith, 2005). Overall, how social capital accounts for intergroup economic inequality is not well understood.

The present study aims to examine these very questions by studying rural migrants and local residents in Shanghai, the largest metropolis in China. The rapid economic growth in China since the market reforms has generated a massive influx of rural-to-urban migrants. In the meantime, the household registration system that has been implemented since the late 1950s has segregated rural and urban Chinese into two different classes of citizens (Solinger, 1999). As a result, rural migrants are often marginalized in the urban labor market and disproportionately engaged in low-pay and low-status jobs (Fan, 2008; Guo and Iredale, 2004; Wang, Zuo, and Ruan, 2002). The wage gap between rural migrants and local residents becomes even more pronounced when working time is taken into consideration (Xing 2008). Rigid institutional constraints further lead to social discrimination and residential segregation, thereby limiting rural migrants' opportunities to develop enduring social relationships with urban residents (Li 2011; Situ and Liu, 1996).

With these institutional and social barriers as the background, we address several issues: What is the role of social capital in economic inequality between rural migrants and urban residents? How can this economic inequality be understood in terms of the differential access to and the different returns on social capital of the two groups? In particular for migrants, can social ties, both those with urban residents and with other migrants, help improve the economic outcomes of migrants, thereby narrowing the gap between migrants and local residents? Through examining economic inequality between locals and migrants with the social capital lens, we hope to add to the literature on the economic integration of migrants in the host society. Furthermore, we hope to add to the inequality literature by moving beyond the individual-versus-structural dichotomy of explanations and instead, directing our attention to the joint forces of individual characteristics (e.g., personal attributes), institutional factors (e.g., household registration system), and social network features (e.g., social capital) in the reproduction of social inequality.

SOCIAL CAPITAL AND LABOR MARKET INEQUALITY

Traditional explanations of labor market inequalities are mainly based on individual attributes, in particular human capital (Mincer, 1974). This view is contested by the dual labor market perspective, which emphasizes the importance of structural obstacles in inhibiting the disadvantaged from obtaining complete market privileges (Piore, 1979). Nevertheless, explaining economic inequality as a function of human capital and job structures often leaves much of the gap unexplained. A growing strand of research has attempted to explain the remaining gap in terms of social capital.

Two conceptualization approaches have been proposed for understanding social capital. Coleman (1988) and Putnam (1993) conceptualize social capital as the emergent properties of social networks—such as trust and reciprocity—that provide the social control and solidarity that facilitate “coordinated actions” and the pursuit of “shared objectives” and thus enhance collective well-being. Another perspective, proposed by Lin and associates (1982, 2001), conceptualizes social capital as the resources instrumental for social actions, such as information and influence, that are directly or indirectly accessed through interpersonal ties. The distribution of resources is depicted as a hierarchical structure. In terms of social ties, people in high-ranking positions (upper reachability) are likely to command better resources for instrumental actions than those in the lower ranks. Access to social connections in diverse positions (network extensity) increases the variety of available resources, and this enables an individual to penetrate different social networks beyond his or her immediate social milieu. Social connections to people in positions that span the hierarchical structure, which reflect the richness of a person’s resources (network range), facilitate the attainment of higher status jobs. We adopt Lin’s conceptualization because our focus is on the hierarchical structure of social ties.

Social capital has been found to be consequential for labor market outcomes. Studies on job seekers find that social contacts provide useful job information and exert influence on employment decisions, thus enhancing job search outcomes (Lin and Erickson, 2008). Also, employers prefer to hire those referred to them by high-status people because they are considered to be more reliable and because they may bring useful resources with them (Erickson, 2003). In short, people rich in social capital may have a better job to begin with. Their social capital may give them a further advantage in promotions and pay rises. Social networks are also found to facilitate self-employment through the provision of material support, market information, and referrals to further resources. These resources help entrepreneurs to identify business opportunities, foster new ideas, reduce uncertainty, and minimize the cost of self-employment (Allen, 2000).

Research suggests that the value of social resources depends on the strength of the relationship. Strong ties, such as ties with family and close friends, imply trust and obligation and thus may provide the reliable information and strong influence needed in the labor market (Bian 1997). Weak ties, such as ties with acquaintances, can serve as bridges that link individuals to diverse social circles and give them access to nonredundant information and other valued resources not present in their own social circle (Granovetter, 1995; Lin, 2001; Burt, 2001).

However, as with almost any other resources in a society, social capital tends to be unequally distributed by virtue of social class, race and ethnicity, gender, and other attributes (social capital deficit; Lin and Erickson, 2008). This is partly due to macrostructural constructions that provide unequal contact opportunities to members of different groups and is also reinforced by the principle of homophily, the general tendency of people to form networks with members from their own social group (McPherson, Smith-Lovin, and Cook, 2001). Therefore, whereas high-status individuals are likely to have networks that are large and diverse and composed of high-status people, low-status individuals are often found in small, homogeneous networks with low-status people. Take the U.S. for example: Ethnic minorities and the underclass lack regular and sustained contact with individuals who have strong attachments to mainstream institutions, and this has given rise to their undesirable labor market position (Wilson, 1987; McDonald, Lin, and Ao, 2009).

Besides their social capital deficit, people in disadvantaged groups may also face a social capital return deficit: that is, a given quantity of social capital may generate differential returns as network mobilization strategies, agent efforts, and institutional responses differ for different social groups (Lin, 2001). An example is the disadvantages of Blacks in the U.S. labor market, which are not only attributed to deficiencies in access to social capital but also to deficiencies in their networks (Smith, 2005). Blacks are more likely to have access to networks characterized by pervasive distrust and great reluctance in providing assistance and information, and this results in a limited flow of network resources.

Despite the extensive research on the social capital effect on labor market outcomes, its impact on intergroup inequality is not well understood. DiMaggio and Garip (2012) propose that social networks reduce intergroup inequality when the flow of assistance occurs between “status-dissimilar individuals” (e.g., between high-status and low-status individuals), especially in situations where labor markets are less institutionalized and social discrimination is tolerated. Furthermore, when members of a social group are deemed to be outsiders in a social system (e.g., immigrants), social connections to people with high institutional legitimacy (e.g., insiders of a social system or mainstream social groups) are particularly important (Burt 1998; Kanas, van Tubergen, and van der Lippe, 2011). Access to and return on social capital constitute important mechanisms in the reduction or reproduction of social inequality.

Social Capital and Immigrants’ Labor Market Integration

With respect to immigration, not only do social networks influence migration decisions (Massey and Espinosa, 1997), they are also related to migratory outcomes such as settlement patterns, assimilation, and transnational links (Durand et al., 1996). As for labor market outcomes, immigrants’ employment and earnings remain contingent on their social capital even after accounting for a wide range of demographic and socioeconomic factors. Social capital has a positive effect on immigrants’ occupations and earnings by improving the effectiveness of the job search process to yield formal sector and high-paying jobs (Aguilera and Massey, 2003; Amuedo-Dorantes and Mundra, 2007). For example, relatives and friends can provide useful job information to migrants and information on interview

preparations and wage negotiations. Social ties may also help channel immigrants into jobs with higher wages and better working conditions, such as those in the formal sector. In comparison to documented migrants, undocumented immigrants tend to rely more on social capital because they are structurally blocked from many labor market resources (Aguilera and Massey, 2003).

Because of their marginality in the mainstream labor market, immigrants often pursue alternative opportunities for upward mobility through self-employment (Nee et al., 1994). One pivotal element for entrepreneurship is social capital, which helps the establishment and operation of businesses by providing commercial information, administrative assistance, and reliable partners for business practices. These processes evolve into ethnic social institutions in which reliance on social solidarity within the ethnic networks enables immigrant entrepreneurs to dominate certain niches and to gain competitive advantages in the broader economy (Waldinger, 1994).

Immigrants' social networks are often mostly composed of co-ethnic immigrants. It is argued that such overreliance on co-ethnic networks increases social exclusion and lack of acceptance; that is to say, if immigrants confine themselves to a predominantly co-ethnic social network, this will reduce their chances of participating in the mainstream economy and in social activities in the wider society and thus limit their potential for upward mobility (Nee et al., 1994; Fong and Ooka, 2002). However, very few studies have specifically examined the relative importance of the social capital embedded in connections to other immigrants and that embedded in connections to natives for immigrants' economic integration.

THE CHINESE SETTING

The present study seeks to fill this gap in the literature by examining the role of social capital in intergroup inequality between migrants and the native population in the Chinese context. To provide background information about the research site, below, we review studies on the role of social capital in the labor market process in China and the labor market experience of Chinese rural migrants.

Social Capital and the Labor Market Process

The major structural carrier of social capital in China is *guanxi*. *Guanxi* is defined as "a dyadic, particular and sentimental tie that has the potential of facilitating favor exchanges between the parties connected by the tie" (Bian, 2006: 312). G*uanxi* connects two individuals with strong obligations towards each other. The basis of these obligations can be cultural norms (e.g., kinship ties), affection, or repeated favor exchanges.

Guanxi has played an extremely important role in the social and economic life in China. Before the market reforms, the labor market was hierarchically controlled by the state and jobs were assigned by authorities. In order to get a good job, a person needed to mobilize social networks to influence the job-assigning authorities. Direct influence through strong ties was thus more critical than information channeled through weak ties (Bian, 1997). This explains why, unlike in western societies, strong ties are mobilized more often than weak ties.

In the face of deepening market reforms, some scholars have questioned the importance of *guanxi*. As formal economic structures become more routinized, economic practices tend to become more rationalized and people are increasingly free to explore economic opportunities. Some have argued that this trend results in a diminishing reliance on *guanxi* (Guthrie, 2002). However, others maintain that the significance of *guanxi* has not declined

and may have even increased under the market reforms. This argument is corroborated by empirical research. For example, Bian and Huang (2009) show that more than 10 years after the market reforms began in 1978, still 75% of job changers used personal connections to facilitate their job change and those who used *guanxi* were more likely to move into higher-paid jobs. The persistence of *guanxi* is argued to be due to China's under-developed labor markets, which are marked by institutional holes and great uncertainties. Formal mechanisms are either not readily available or ineffective. People have thus continued to rely on personal connections to get things done. Also, as market competition has intensified, people tend to more heavily resort to *guanxi* in order to gain the edge in the competition (Bian and Huang, 2009). Several studies have found further evidence that not only job seekers but also employers remain motivated to use *guanxi* (Knight and Yueh, 2008). The explanations include the inefficient mechanisms for verifying the qualifications of a potential employee and, perhaps more importantly, the expected benefits to be gained from favor exchanges. Furthermore, some scholars have argued that *guanxi* carries greater importance for the self-employed than for the wage earners given the high uncertainty in the Chinese business environment, especially in the areas of property rights, credit allocation, and legal regulations of business operations (Yueh, 2009). To overcome these institutional constraints, social networks, particularly personal connections to people in key positions in the political and market institutions, have to be mobilized to obtain business resources such as startup capital, business licenses, access to reliable suppliers and distributors, and financial credits (Fong and Chen, 2007; Yueh, 2009).

Migrants in Chinese Cities

Since the early 1980s, hundreds of millions of rural migrants have left their homes for the better economic opportunities in urban areas. The flow of rural migrants has skyrocketed from about 30 million in 1989, to 80 million in 2001, and to 230 million in 2011 (National Population and Family Planning Commission of China, 2012). Nationwide, rural migrants account for 20% of the urban working population (Xing, 2008). More than 80% of rural migrants have some family members in the city where they work and about 20% migrated to the cities with their entire nuclear family (Li, 2008).

Profound social and economic segregation has been observed between rural migrants and urban residents. Migrants are disproportionately engaged in undesirable and poorly paid jobs that are shunned by urban residents, such as construction and service jobs (Yang and Guo, 1996). They are also formally excluded from many jobs, especially those in the state sector that provide income security and good benefits (Meng and Zhang, 2001). Although their earnings are much higher than what they would earn from farm work, the wages of rural migrants are 80% of what urban residents earn. To compensate for their low wages, migrants work extremely long hours (58 hours per week compared with 43 hours for local urban workers; Meng et al., 2010). Thus, the hourly wages of rural migrants are just 64% of what urban residents earn, when we take the working time into consideration (Xing 2008).

A clear residential segregation between migrants and local residents has been observed, with rural migrant families often living in rental housing in the neighborhoods where migrants congregate (Chen et al., 2011). Some migrants live in cramped temporary housing such as dormitories and shelters on construction worksites (Chen et al., 2011). Furthermore, until some recent (but slow) changes, migrants have been denied access to urban welfare provisions such as subsidized housing, healthcare, unemployment and pension benefits, and education for their children (Meng et al., 2010).

The fundamental reason behind migrants' second-class citizen status is the *hukou* system, instituted since 1958 to create a dual economy to facilitate industrialization in urban areas. Under this system, a person is given either an "agricultural" or "nonagricultural" *hukou*

status at birth and geographical mobility was severely restricted. Although restrictions on rural-to-urban migration have been relaxed since the economic reforms and nowadays many rural migrants work in cities, it is still extremely difficult, if not impossible, for rural migrants to change their rural *hukou* status to an urban one (Solinger, 1999). Without an urban local *hukou* status, rural migrants encounter numerous structural constraints in the labor market and in gaining access to welfare (Wang, Zuo, and Ruan, 2002).

In addition to the institutionalized discrimination, migrants face pervasive social prejudice and discrimination from urban residents. Residential and occupational segregation limit the opportunities for rural migrants to make friends with local people. Rural migrants are often negatively stereotyped as being poor, dirty, ignorant, and prone to violence (Solinger, 1999). They are frequently blamed for the increasing crime rates and social instability in the cities, and many were subjected to random identification checks on the streets until recently (Whyte, 2010). In many respects, the life circumstances of rural migrants bear a great resemblance to those of illegal immigrants in industrialized societies (Roberts, 1997). The acceleration of market reforms since the mid-1990s has further intensified the tension between rural migrants and urban residents. As a result of substantial economic restructuring, a large number of state-owned enterprises were shut down, restructured, or privatized. Millions of urban workers were laid off, and some of them had to compete with migrants for jobs in the private sector, leading to increased competition between the two segments of the population (Garnaut et al., 2005).

Living under these structural and social environments, many rural migrants exploit entrepreneurial opportunities to achieve a desirable livelihood, with over one quarter of rural migrants being self-employed (Davis, 1999; Giulietti, Ning, and Zimmermann, 2011). The majority of these migrants are small-scale business owners with fewer than eight employees. However, self-employed migrants also face strong structural obstacles given their marginalized outsider status in cities and restricted access to instrumental social resources.

The central government has made some recent efforts to improve the living and working conditions of migrants. For example, in 2008, the New Labor Law was implemented to protect the rights of migrant workers. Various attempts have also been made to reform the *hukou* system (Chan, 2009). The success of these measures, however, is limited, and the *hukou* system has remained largely intact (Chan and Buckingham, 2008).

RESEARCH QUESTIONS

Little work has been conducted on the relationship between social capital and the migrant-local economic gap in China. The existing work has focused on the role of social networks in enhancing the propensity to migrate and is largely based on data gathered before 2000 (Zhao, 2003). Using data from a survey conducted in 2005, the present study seeks to examine this relationship by answering the following questions.

First, we expect to find large disparities in the quantity and quality of social capital between migrants and urbanites, with migrants lacking extensive and influential social connections. Second, we study whether there is a positive income return on social capital for migrants and locals in a transitional China marked by rising institutional uncertainties and market competitiveness. For the same reason, we examine whether strong ties play a more important role in achieving better labor market outcomes than weak ties and whether this is especially evident in the case of migrants, who are excluded from many formal institutions in urban areas.

In addition, we study whether migrants garner greater benefits from ties with urbanites and people in high-status positions by testing the following two competing hypotheses. On the

one hand, one may expect additional benefits to be gained from local and high-status connections. Establishing connections with the mainstream population can benefit migrants because these ties are more powerful and resourceful than ties with other migrants or low-status people. Information and assistance from migrants and low-status people is likely to lead to low-paid and low-status jobs since these people are more likely to occupy such jobs and less likely to exert influence on employers.

On the other hand, rural migrants may receive limited returns from their ties to urbanites and high-status people given the substantial institutional and social discrimination against migrants. Migrants' ties with urbanites may be characterized by prejudices and a reluctance to assist, leading urbanites to have doubts about the competence of migrants and what migrants have to offer in return or to worry about the damage done to their own reputation by helping migrants.

If social capital is positively related to income and if there is inequality between migrants and urbanites in terms of access to and return on social capital, social capital is expected to explain a large part of the income inequality between the two groups. We expect that the income gap between these two social groups would be reduced when social capital is taken into account.

DATA AND METHODS

Data

Shanghai is a suitable location for the purpose of this study. Located on the central eastern coast, Shanghai is the largest city in China, with a population of over 20 million. It is an important economic center with large state enterprises and a booming private sector. Shanghai is also one of the major migration destinations in China. In the past few decades, the number of migrants has risen substantially, from 0.26 million in 1981 to nearly 5 million by 2007, accounting for more than one quarter of the city's population. Today, two out of every five employed laborers in Shanghai are migrants (Ruan, 2009).

Shanghai is also a setting where rich data on migration and social capital are available. We used data from a survey conducted in Shanghai in 2005 that incorporated detailed information on labor market experiences and social capital for both locals and migrants. The survey, developed and administered by researchers from Shanghai and Hong Kong, adopted a stratified multistage cluster sampling strategy. We sampled people who were aged 16 to 60 (the typical working age range in China) at the time of interview. We selected 7 out of the 18 city districts to represent the inner city (city center), the outer city (new districts and suburbs), and the districts in between (central ring). Using the probability of 8 per 10,000 and following the procedure of probability proportional to size (PPS), 36 neighborhood committees (*juweihui*) were chosen. Within each selected neighborhood committee, around 50 local resident households were randomly selected, resulting in a targeted sample size of 2,012. Within each selected household, the Kish table was used to select the respondent (aged 16–60) to be interviewed face-to-face. Out of the 2,012 interviews attempted, 1,835 were completed, yielding a response rate of 91.2%.

The sampling of the migrant population followed a similar PPS procedure within the selected neighborhoods. Migrants were defined as adults aged 16 and above who had stayed in Shanghai for over a month for work purposes (other than travel, short-term work assignments, hospital visits, family visits, and education-related stays). Based on a 2003 survey of the migrant population conducted by the Shanghai city government and our targeted migrant sample size of 2,800, we used a probability of 5.2%. In 29 of the 36 neighborhood committees selected, both local residents and migrants were interviewed. In

addition, local residents and migrants were separately interviewed in 14 different neighborhoods. If factories or other collective dwelling units (e.g., dormitories, where many migrants reside) were within the neighborhood, they were also included in the sampling frame. Out of the 2,974 migrant interviews attempted, 2,816, or 94.72%, were successful. We compared the distributional data from this survey to the data from the 2000 census and other regional studies conducted in early 2000s. The comparisons yielded consistent patterns.

It should be acknowledged that because this study was limited geographically to Shanghai, its implications in terms of providing a general understanding of the Chinese urban labor market should not be overstated. Nevertheless, Shanghai is a major migration destination with considerable market opportunities and relatively open policies toward migrants (Qian and Li, 2010). As discussed below, the fact that we still observed social capital deficits and return deficits for migrants suggests that these findings are likely to apply to many other parts of China.

Measures and Methods

The labor market outcome we examined is income. Information on monthly income was collected directly from survey respondents and measured by average monthly cash income, including wages, bonuses, and subsidies. For the self-employed, information on net income rather than gross income was collected. We focused on monthly income, which is a more accurate measure in China because many workers, especially migrants, are not paid an hourly rate but by piecework (Solinger, 1999).

One main explanatory variable is migration status, which distinguishes urbanites (those with local Shanghai hukou) and rural migrants (those with nonlocal rural hukou). As for social capital, we used the position generator method to measure an individual's links to various social locations (Lin and Dumin, 1986). The position generator method is a useful way of gauging the structural dimensions of an individual's networks in terms of positional extensity, status ceiling, and class composition. This methodology involves presenting the respondent with a variety of occupational positions at various status levels. The respondent is then asked whether any of his or her relatives, friends, or acquaintances hold such positions. Usually, three indexes are generated: (1) extensity: the number of occupations a respondent could access, which represents the size and diversity of his or her network; (2) upper reachability: the highest occupational prestige score among the accessed occupations; and (3) range: the difference between the highest and lowest accessed occupational prestige scores. The position generator methodology has been shown to be a reliable and valid measure of social capital (Lin and Erickson, 2008). Compared to other methods such as the name generator method, it is less biased toward strong ties, although it makes little reference to specific events.

The position generator method has been proven to be a useful network device in Chinese society (Lin and Erickson 2008). The critical consideration is the choice of occupations, which should represent occupations with prestige levels from the very high to the very low. We used position generator items that have been adapted to the Chinese setting (Bian, 2008). We selected 18 items (18 occupations) from the classification of over 500 three-digit coded job titles used in the Chinese census. These occupations cover a wide range of jobs with varying levels of occupational prestige (scientist, college professor, legal staff, engineer, physician, government official, school teacher, manager, business professional, clerk, police, nurse, chauffeur, chef, industrial worker, salesperson, waiter, and domestic worker).

Based on these occupations, we created three summary indices: extensity, upper reachability, and range. Because these indices are highly correlated, we followed earlier work in using factor analysis (with principle component and varimax rotation) to summarize these dimensions. As expected, this analysis yielded a single-factor solution. We then constructed a factor score as a composite social capital measure and rescaled it to between 0 and 1 to facilitate interpretation. As an additional analysis, we also evaluated the separate roles of network extensity and the average prestige of the accessed networks (Campbell, Marsden, and Hurlbert, 1986) to assess whether diverse networks and high-prestige networks have a greater influence in the labor market. Importantly, because the position generator questions are specific about whether the connection is with relatives, friends, or acquaintances, we constructed separate measures that distinguish strong social ties (relatives and friends) and weak social ties (acquaintances). In the survey, we also asked whether the ties in each occupation category involved local urban residents. This allowed us to create a measure of social capital with urbanites, which we refer to as local social ties.

To examine the net effects of social capital, we adjusted for the differences between migrants and urbanites in terms of both demographic traits, such as age, gender, and marital status, and productivity-related characteristics, including level of education, whether a respondent received job training, and work experience (years in present job). The inclusion of these variables follows the human capital model proposed by Mincer (1974). To take account of the Chinese context, we included an indicator of political capital: Communist Party membership. We also addressed the issue of occupational segmentation by controlling for respondents' occupations and placement in different ownership sectors. We differentiated four occupational categories: professional/managerial/clerical, commerce, service, and manual. We also distinguished between three ownership sectors/types: state-owned, nonstate-owned, and individual-owned (self-employed). We did not separate domestic and foreign private enterprises due to lack of information.

We used ordinary least squares (OLS) regressions with log transformed monthly income as the dependent variable, controlling for the rich set of variables discussed above. The regression coefficients can be read as the percentage change in income with changes in the covariates. The analytic sample consisted of respondents employed or self-employed at the time of the survey. The analyses were weighted to represent the local and the migrant population in 2005. We first performed a sequence of regressions with and without the social capital measure to study its overall impact on income and its importance in explaining the income inequality between migrants and urbanites. We then estimated separate models for migrants and urbanities and compared the estimates to study the relative role of social capital for each group. In these stratified analyses, we reached our conclusions by conducting statistical tests of the differences. As an additional analysis, we performed Blinder-Oaxaca decomposition, which allowed us to determine the amount of the migrant-local difference in terms of income associated with social capital deficits and capital return deficits. The procedure and results are discussed in detail below. In the analytic sample, the amount of missing data was relatively small. The analysis was based on complete cases after deleting less than 5% of the cases with any missing data.

Since the data were cross-sectional, endogeneity may be an issue. We were unable to definitively pin down whether (a) social capital helps an individual to achieve higher income, (b) higher economic status offers an individual better opportunities to enrich his or her networks, or (c) the homophily principle leads to both higher income and more resourceful networks, as suggested by empirical evidence from the U.S. (Mouw, 2006). Yet, in a recent study, Chen (2012) shows that social capital has some genuine effect on labor market outcomes after adjusting for endogeneity. Given the unavailability of appropriate data to verify the causal effect of social capital, we adjusted for a rich array of factors that

may be related to the production of social capital. We also conducted sensitivity analyses using information on respondent's length of migration since endogeneity may be less problematic for more recent migrants. This analysis yielded consistent findings and increased our confidence that the results were not entirely driven by endogeneity. Our observation of a significant association between social capital and income inequality between rural migrants and urban residents provides an empirical ground for the verification of the causal effect in future research.

RESULTS

Descriptive Statistics

Table 1 shows the substantial differences between urban residents and rural migrants in terms of demographic and socioeconomic characteristics. Migrants are, on average, younger, less educated, less likely to be party members, and largely concentrated in nonprofessional occupations and nonstate sectors. In Shanghai, less than 7% of migrants are employed in the state-owned sector compared to almost 43% of local Shanghainese. This reflects the persistence of the *hukou* system that denies the majority of migrants access to the state sector. As a result of the restructuring of state-owned enterprises since the mid-1990s, a large number of urbanites have entered the private economic sector, leading to increasing competition between the two populations. The economic reforms have also clearly generated considerable self-employment opportunities, which have been taken up by many migrants. We can see that the percentage of migrants who are self-employed is more than seven times greater than the corresponding figure for urbanites. With respect to income, there is an unambiguous income gap, with local residents earning almost 18% more per month than migrants. All of the local-migrant differences are significant at the 0.001 level.

Differential Access to Social Capital between Rural Migrants and Local Residents

Turning to the measures of social capital, the top panel of Table 2 reports the 18 occupations, the corresponding prestige score, and the proportion of respondents with connections to each occupational category. Except for ties with industrial workers, there are substantial disparities in the structure of social networks between urbanites and migrants. Migrants seem to have limited access to medium and high prestige occupations but are more likely to know someone in occupations concentrated at the lower end of the hierarchy.

The summary indices in Table 2 confirm our expectation regarding migrants' capital deficits. The social capital of migrants is much less in terms of extensity (diversity) and has a much lower status than the social capital of urbanites. This finding held when we distinguished local social capital (social capital with urbanites) and social capital from strong ties (relatives and friends). Migrants are much less likely to establish social ties with local urban residents, and the mean prestige of local social capital is significantly lower for migrants than it is for urbanites. This means that even if migrants have ties to local people, those locals tend to have a relatively low status. The only aspect for which the difference by migration status is negligible is social capital from weak ties (acquaintances).

The factor scores at the bottom of Table 2 can be seen as a summary of the above findings. With respect to general social capital, the local-migrant ratio is 1.64 (0.64/0.39). This is largely driven by the substantial disparity in social ties with local people, with a local-migrant ratio of almost 3 (0.53/0.18). These results clearly demonstrate the strong social segregation encountered by migrants which renders them less likely to establish social ties with local people and people of high status. To evaluate whether the results are due to migrants' shorter length of stay in the city, we carried out an additional analysis to examine the network structures between urbanites and long-term migrants (those who have lived in

Shanghai for over five years). The gap slightly decreases but remains substantial and statistically significant.

We also studied the relationship between social capital possession and migrant status in a regression framework (Appendix A). Migration status clearly matters. In fact, it has the largest effect on an individual's social resources even after other crucial determinants, such as human capital and political capital, are controlled for. These results are in agreement with earlier work in other societies that indicate that individuals with high socioeconomic status are likely to be embedded in networks that are larger, more diverse, and more influential than those of low-status individuals. With regard to the social capital gap between migrants and locals, the local social capital gap is almost double the general social capital gap. We also separated the analysis by urbanites and migrants (general social capital), and for migrants, we included an additional variable of whether the respondents speak the Shanghai dialect. There are some variations by migration status. Language and education are more important predictors of migrants' social capital than of locals' social capital. For both groups, occupation and political capital play a crucial role in building social relationships.[1]

Social Capital and Income Inequality between Rural Migrants and Local Residents

Table 3 presents the results from the income regression. In Model 1, we see that age, gender, marital status, education, and work experience all play a crucial role in income attainment, which is consistent with previous studies. There are also substantial differences by occupational status: people holding professional and clerical jobs earn much higher incomes than those in commerce, service, and manual jobs. With respect to economic sectors, the self-employed appear to earn more than wage earners. After controlling for differences in human capital, political capital, and sorting into different occupational categories, migrants still earn almost 9% less than urbanites. This finding points to the enduring income inequality facing migrants.

However, when social capital is taken into account (Models 2–5), the income gap is greatly reduced (by at least 40%) and becomes insignificant. These findings confirm our expectation of social capital's role in explaining income inequality. Several reasons may account for the disappearance of the income gap between the two groups after controlling for social capital. One is the unequal access to social capital between migrants and urbanites, as shown in Table 2. Another reason is the positive relationship between social capital and economic returns, which is clearly revealed in Table 3. Take Model 2 for example: net of many other factors, individuals with the highest level of general social capital are expected to earn almost 24% more than those with the lowest level of social capital. A similar finding is demonstrated in Model 3, but the coefficient is halved because the range of this measure is smaller—it only captures connections with local people. Moreover, we find that social capital from strong ties, not weak ties, matters (Model 4). In other words, the strong relationship between social capital and income we observed is largely driven by a close and trusted circle of relatives and friends. This is consistent with previous research showing a continuing reliance on informal channels through strong ties in today's Chinese labor market (Bian and Huang, 2009).

We also assessed the respective roles of network extensity (measured by the number of occupations one is connected to through relatives, friends, or acquaintances) and prestige (degree of connection to high-status people) in Model 5 and concluded that both seem to matter in urban China. The extensity of networks has important economic payoffs, with an

[1]We also included the language variable in the income regressions. It does not significantly predict income or change the overall results and is thus not included in the final income regressions.

increase in extensity raising monthly income by over 2%. The scale of the coefficient for this extensity measure is different from that of the other social capital measures in models 2–4, which are based on factor scores ranging from 0 to 1. Having connections with someone in a high-prestige occupation also garners a greater amount of economic benefits. A 10-point increase in average network occupational prestige score is associated with a 2% increase in income. This is what we would expect because ties located higher in the occupational hierarchy are more likely to be resourceful and influential.[2], [3]

A third reason for the ability of social capital to explain the income gap may be related to social capital return deficits. Turning to Table 4, we notice some differences in the relative role of social capital for rural migrants and urbanites. With respect to general social capital, there is little difference between the two groups (Model 1), which demonstrates the general importance of social capital in urban China. But, the roles of strong ties (Model 3) and the extensity of ties (Model 4) are significantly stronger for migrants than for urban residents. This is consistent with the immigration literature, which finds that social capital is particularly crucial for disadvantaged social groups (e.g., undocumented immigrants) because they are structurally excluded from a wide variety of formal mechanisms in the labor market. The return on local social capital, however, is smaller and only marginally significant for migrants (Model 2). This result provides some evidence that migrants face capital return deficits.[4] Model 4 similarly shows that having high-status social connections, as measured by mean prestige, matters for urbanites but not for migrants. This difference is highly significant between the two groups. These findings suggest that having ties to locals or to high-status people (who are more likely to be locals) does not guarantee the effective mobilization of such ties. This may be partly due to the pervasive social discrimination experienced by rural migrants, which further shapes the relationship between migrants and local residents. Local residents or high-status people may not be willing to assist rural migrants because they may consider migrants to be less trustful or competent and may be concerned about their own reputation when helping migrants.

We conducted an additional analysis and found pervasive prejudices toward migrants, even among locals who have extensive ties with migrants. This helps to explain the capital return deficits facing migrants. Specifically, we used nine statements that asked about attitudes toward migrants (e.g., “Migrants should have equal employment opportunities to locals” and “The large number of migrants substantially intensifies the pressures in the labor market”). We converted the response categories so that that the response to each statement ranged

[2]We focus on the comparison between urbanities and rural migrants because they present the most marked contrast. Urban-origin migrants constitute a much smaller group. Compared to rural migrants, urban migrants are better educated, tend to have better jobs (many migrate due to job assignment), and face less discrimination. We conducted corresponding analyses comparing urban migrants with local residents. The results show that social capital plays an important role in the earnings process; however, there is no significant income gap between urban migrants and urbanities to begin with.

[3]To examine the variations in the explanatory power of social capital for the migrant-local income disparity, we estimated a series of models for each of the four educational levels. In these models, we examine how much of the migrant-local difference in income is explained by general social capital. The proportions are, respectively, 48% for those with lower than middle school education, 76% for those with middle school education, 32% for those with high school education, and only 4% for those with at least some college education. These results suggest that the explanatory power of social capital decreases with education starting at the middle-school level. It becomes very small for those with at least some college education. This might be related to our finding that it is social capital embedded in strong ties, not weak ties, that is making a difference in income attainment. The strong ties of migrants are likely to be ties to other migrants. As most of the migrants have a low education (Table 1, only 11% have a high school education) and are located in the lower strata of the labor market, migrants with better education should get very limited help from fellow migrants who are worse off than themselves. Further, the kind of jobs obtained by migrants with better education may be very different from that by migrants with less education and thus, the effectiveness of social capital in income attainment may also be different. However, due to the small number of migrants with some college education (0.8% or 15 people), our findings should be taken with caution.

[4]We conducted a similar analysis for urban-origin migrants and found that they do not seem to face social capital return deficits. For local social capital, the coefficient is large and significant for urban migrants (β=0.248; s.e.=0.086), even more so than that for locals. For mean prestige of social capital, the coefficient is also large and significant (β=0.002; s.e.=0.001). Together with footnote 2, these findings strengthen our argument that the local-migrant inequality mainly lies in the structural constraints inflicted by the rural-urban divide.

from 1 (strongly against migrants) to 5 (strongly supportive of migrants), with 3 being a neutral response to the statement, and summed up all nine statements. We compared the mean score by ties with migrants among local urban residents, measured by a dichotomous indicator of whether the local resident's mean prestige of ties is below or above 50 (below 50 indicates close ties with migrants as most occupations with a prestige score under 50 are predominately occupied by migrants[5]). The expectation was that locals who have extensive ties with migrants tend to hold more favorable attitudes toward them. This, however, is not the case. The attitude score is not significantly different for locals with extensive ties with migrants and those with limited ties with migrants (30.9 vs. 30.6, respectively). While inter-group interactions would supposedly reduce prejudice and discrimination, this is not the case for the relationship between rural migrants and urban residents in China. The social relationships of urban residents with rural migrants do not induce a more positive attitude among the former towards the latter. This suggests that urban residents tend to hold generally biased views about rural migrants.

Another explanation for migrants' capital return deficit with respect to local ties may be attributable to the fact that the mean prestige of local social capital is significantly lower for migrants than for urbanites (Table 2). This implies that the local contacts of rural migrants tend to occupy low-prestige jobs and therefore may not have sufficient resources to offer. It is also possible that the structural obstacles faced by rural migrants are so powerful that even high-status locals cannot help migrants to overcome them in order to obtain high-status and high-paid jobs. In short, it is probable that the local contacts of migrants are simply unable to provide valuable help.

The findings presented in Table 4 reveal the complexity of social capital access and mobilization in urban China. On the one hand, given their more tenuous labor market conditions and the substantial institutional barriers they face, migrants depend more on social ties with relatives and friends than the locals do, but these strong ties mostly consist of ties with other migrants who face similar limitations. On the other hand, people who are resourceful, such as locals and high-status individuals, are not usually accessible to migrants and even if they are, they may not provide valuable assistance.[6]

Such capital return deficits, together with the unequal distribution of social resources, contribute to the disadvantaged labor market outcomes of migrants. These results are strengthened by the findings from the Oaxaca (1973) decomposition analysis (Table 5). The idea of decomposition is to examine the relationship between the outcome differences and variations in endowments (different characteristics of the two groups) and their returns (different coefficients of the two groups). Specifically, this strategy allows for separating the proportion of income difference between migrants and urban residents attributable to two factors: (1) the different characteristics of the two groups along the dimensions of variables controlled for in the regression model, and (2) the different rate of return for these given characteristics between the two groups.

The decomposition equation is formulated as follows:

$$\overline{Y}_A - \overline{Y}_B = \overline{X}_A \beta_A - \overline{X}_B \beta_B = (\overline{X}_A - \overline{X}_B)\beta_B + \overline{X}_A(\beta_A - \beta_B) \quad (1)$$

[5]We did not have other information that allowed us to separate ties with migrants.

[6]We conducted an additional analysis restricting the sample to urbanities and recent migrants (arriving in Shanghai within 5 years) because recent migrants are arguably less susceptible to the endogeneity issue. The analysis yielded very similar results to those in Table 3 and Table 4, suggesting that the results are quite robust.

The first term on the far right-hand side of the equation indicates how variations in the average characteristics of migrants and locals contribute to the income gap between the two groups (differential endowments). The second term shows how variations in the effects of various characteristics between migrants and locals contribute to the income gap between the two groups (differential returns). Here we focus on the results pertaining to social capital. Thus, the first term reflects the degree of capital deficits, and the second term reflects the degree of social capital return deficits.

The results show that differences in general social capital alone explain a very large part of the income disparity between migrants and locals (26%), whereas differences in returns on general social capital contribute to a small part of the income gap (3.7%). However, when we examine the role of local social capital, we see that both social capital deficits (differences in characteristics) and social capital return deficits (differences in coefficients) explain a quite comparable (and large) part of the income gap between migrants and locals. Specifically, the decomposition results mean that equalizing access to local social capital between the two groups would be expected to reduce the migrant-local income gap by almost 14%. Also, if the economic returns on local social capital for migrants are similar to those for locals, the between-group income gap would be expected to decrease by 8.5%. This decomposition analysis provides further evidence for the role of capital deficits and return deficits (especially with respect to local social capital) in shaping the migrant-local gap in economic well-being.

DISCUSSION AND CONCLUSION

In the present study, we adopt the social capital perspective to examine local-migrant economic inequality in urban China and demonstrate the important role of social capital in reinforcing intergroup income inequality between rural migrants and local residents. Consistent with previous studies, we find that social capital, especially social capital from strong ties, has continued to operate in the labor market attainment process in China. However, there is a great disparity in social capital possession between rural migrants and urban local residents, with migrants being less likely to form diverse and high-status social ties and less likely to form ties with urbanities. In addition to a social capital deficit, rural migrants also encounter a social capital return deficit, as we find that local contacts and high-status contacts matter for locals but not for migrants in terms of income attainment. In other words, even if rural migrants establish ties with local residents, these ties may not be instrumental.

Given the strong income returns on social capital and the substantial differences in access to and return on social capital between migrants and urban residents, it is not surprising that social capital explains a large part of the income inequality between the two groups. As a matter of fact, when social capital is taken into account, the income gap between the two groups is reduced by 40% or more and becomes statistically insignificant. An examination of the relative contributions of differential access to and return on social capital to income inequality reveals that 14% of the income gap is due to differential access to local social capital and over 8% to differential return on local social capital.

We also explored variations in the role of social capital across economic sectors and found that its role is more pronounced in the private sector, especially the self-employment sector, where formal mechanisms are least established and uncertainties are the greatest (results are not shown but are available upon request). Hence, the role of social capital in explaining income inequality between migrants and urbanities is also greater in the private sector.

To sum up, the present study sheds light on the relative importance of different dimensions of social capital for migrants' economic integration. Social capital from strong ties seems to

be more important for rural migrants than for urban residents. For migrants, strong ties tend to be formed within the migrant group. This finding is consistent with previous research in Western societies that shows that reliance on social solidarity in ethnic networks is beneficial to immigrants (Waldinger, 1994; Sanders et al., 2002). It may be true that social ties with other migrants connect migrants to a rather restricted set of people who themselves lacked access to the full range of resources available in a booming economy. Nevertheless, we cannot deny the possibility that if a migrant keeps moving on to better jobs, even if just by a small margin each time, cumulatively, this process will lead to upward mobility and reduce the income disparity between migrants and natives (Sanders et al., 2002).

However, what our study also reveals is that whereas one would think that establishing ties with the mainstream population (the natives or high-status people) could be perceived as a strong signal of integration, for rural migrants in China, ties to local residents have marginal impact and ties to high-status people do not matter at all. This suggests that the economic benefits of mainstream connections are conditioned by the institutional environment. In China, the institutional barriers against migrants and the subsequent social discrimination hinder migrants' efforts to establish effective relationships with local residents or high-status people, who generally carry more resources and influence. In the end, it is mostly migrants' ties with migrant communities that are instrumental for their employment. While this finding provides some evidence for migrants' capital return deficits, it should not be taken as suggesting that migrants should not integrate with the mainstream population. In the long run, social integration would be a forward step for migrants, although one cannot assume that such mainstream connections will always guarantee benefits.

Overall, the present study has made two important contributions to the literature. First, it extends the migration research on the economic inequality between locals and migrants by arguing that the economic disadvantages suffered by migrants are a result of their restricted access to and unfavorable return on social capital in the labor market. Instead of focusing on the individual or structural factors, this social capital perspective highlights the joint actions of stigmatized individual attributes and structural constraints in limiting the capacity of rural migrants to accumulate and mobilize social capital to advance their labor market positions. The unequal access to and return on social capital in turn reinforces the positional advantages of urban residents and reproduces the economic inequality between the two social groups.

Second, the findings provide some answers to DiMaggio and Garip's (2012) enquiry about the role of social networks in exacerbating or ameliorating social inequality. We argue that two conditions are crucial for social capital to play a role in shaping inter-group economic inequality. One is the functionality of social capital in the labor market, which varies in different societies and across different historical times and the other is the inequality in access to and return on social capital. The former is affected by the characteristics of the structure of a labor market, whereas the latter is affected by the social stratification structure of a society. In China, the lack of formal labor market mechanisms continues to create a strong need for and opportunities for economic actions to be organized around informal channels via social relations and networks. Yet, the long-standing institutional exclusion of migrants caused by the *hukou* system has subsequently resulted in pervasive social exclusion and discrimination and is, in fact, reinforced by such daily practices. This has greatly limited the accumulation and mobilization of social capital by rural migrants. Under these circumstances, social capital has effectively reinforced and reproduced the economic inequality between migrants and urban residents in China.

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Table 1

Characteristics of urban residents and rural migrants, 2005, Shanghai.

	Urban residents	Rural migrants
Age*, *a*	39.9	30.9
Male*	57.9	46.3
Currently married*	81.9	75.8
Education*		
lower than middle school	5.7	27.2
middle school completed	35.3	60.9
some or completed high school education	35.9	11.2
college or above	23.1	0.8
Received training*	42.9	12.5
Length of stay in Shanghai (years)*, *a*	38.8	4.4
Tenure in current job (years)*, *a*	11.1	3.6
Party member*	22.0	7.5
Occupation*		
Professional/clerical	39.1	3.4
Commerce	7.9	33.0
Service worker	19.3	25.3
Manual labor	33.7	38.3
Sector*		
State-sector employee	42.9	6.8
Nonstate-sector employee	53.1	63.1
Self-employed	4.0	30.0
Monthly income (yuan)*, *a*	1,784	1,514
N	1,196	1,874

*Difference by migration status is significant at the 0.001 level.

*a*Means are shown for continuous variables. For all other categorical variables, percentages are presented.

Table 2

Position generator and differential access to social capital, 2005, Shanghai.

Position (prestige score)	Total (N=3,070)	Urban residents (N=1,196)	Rural migrants (N=1,874)
Scientist (95)	5.6%	13.0	0.9***
College professor (91)	9.2	17.4	4.0***
Legal staff (86)	9.5	19.2	3.4***
Engineer (86)	17.8	26.2	12.4***
Physician (86)	19.7	35.4	9.7***
Government official (80)	12.4	24.4	4.7***
School teacher (77)	26.4	44.3	14.9***
Manager (71)	27.1	39.9	18.9***
Business professional (64)	12.6	19.9	8.0***
Clerk (53)	17.4	32.5	7.7***
Police (52)	20.0	35.4	10.3***
Nurse (48)	11.5	21.2	5.3***
Chauffeur (25)	40.1	52.9	31.9***
Chef (24)	29.3	25.2	31.9***
Industrial worker (20)	48.2	46.4	49.4
Salesperson (15)	23.0	25.4	21.5*
Waiter/waitress (11)	25.7	16.5	31.5***
Domestic worker (6)	9.5	5.4	12.2***
Summary indices			
General social capital			
Extensity			
Mean (S.D.)	3.6 (3.0)	5.0 (3.6)	2.8 (2.2)***
Range			
Mean (S.D.)	37.7 (30.9)	50.3 (28.1)	29.8 (29.8)***
Upper reachability			

Position (prestige score)	Total (N=3,070)	Urban residents (N=1,196)	Rural migrants (N=1,874)
Mean (S.D.)	57.6 (32.9)	74.5 (25.3)	46.7 (32.4)***
Mean prestige			
Mean (S.D.)	39.1 (22.9)	49.3 (20.0)	30.3 (20.6)***
Local social capital			
Extensity			
Mean (S.D.)	2.1 (2.9)	4.0 (3.6)	1.0 (1.6)***
Range			
Mean (S.D.)	22.0 (29.6)	41.0 (31.2)	11.3 (22.5)***
Upper reachability			
Mean (S.D.)	38.8 (39.4)	62.4 (35.3)	25.0 (34.8)***
Mean prestige			
Mean (S.D.)	28.8 (29.0)	41.8 (25.6)	18.8 (26.8)***
General social capital (strong ties)			
Extensity			
Mean (S.D.)	2.5 (2.5)	3.8 (3.0)	1.7 (1.7)***
Range			
Mean (S.D.)	24.7 (29.5)	41.4 (29.8)	14.1 (23.8)***
Upper reachability			
Mean (S.D.)	43.7 (35.2)	66.3 (31.2)	28.8 (29.1)***
Mean prestige			
Mean (S.D.)	32.4 (25.2)	44.9 (23.8)	21.5 (20.2)***
General social capital (weak ties)			
Extensity			
Mean (S.D.)	1.4 (2.0)	1.5 (2.5)	1.4 (1.7)
Range			
Mean (S.D.)	15.8 (26.2)	16.5 (27.6)	16.0 (25.7)
Upper reachability			
Mean (S.D.)	30.7 (35.9)	32.1 (38.6)	30.3 (34.1)
Mean prestige			
Mean (S.D.)	21.9 (27.0)	22.7 (29.2)	21.5 (24.6)

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Position (prestige score)	Total (N=3,070)	Urban residents (N=1,196)	Rural migrants (N=1,874)
Factor scores (range 0–1)			
General social capital	0.49 (0.31)	0.64 (0.26)	0.39 (0.30)***
Local social capital	0.31 (0.34)	0.53 (0.33)	0.18 (0.27)***
General social capital(strong ties)	0.35 (0.32)	0.55 (0.30)	0.22 (0.26)***
General social capital(weak ties)	0.24 (0.30)	0.25 (0.32)	0.24 (0.29)

Note: Difference by migrant status is indicated as follows:

*** p value < 0.001;

** p value < 0.01;

* p value < 0.05.

Table 3

OLS regressions of monthly income (log), 2005, Shanghai. (N=3,070; test statistics in parentheses)

	Model 1	Model 2	Model 3	Model 4	Model 5
Rural migrants (ref. urban residents)	−0.088** (−3.263)	−0.046 (−1.690)	−0.050 (−1.766)	−0.019 (−0.694)	−0.033 (−1.227)
Age (ref. 15–25)					
26–35	0.011 (0.325)	0.012 (0.347)	0.013 (0.370)	0.007 (0.196)	0.015 (0.458)
36–45	−0.095* (−2.448)	−0.098* (−2.568)	−0.095* (−2.464)	−0.102** (−2.674)	−0.098** (−2.590)
46–60	−0.195*** (−4.190)	−0.200*** (−4.331)	−0.194*** (−4.186)	−0.203*** (−4.390)	−0.191*** (−4.176)
Male (ref. female)	0.210*** (10.635)	0.207*** (10.586)	0.209*** (10.614)	0.207*** (10.607)	0.200*** (10.228)
Married (ref. not married)	0.097** (3.328)	0.091** (3.112)	0.094** (3.155)	0.084** (2.867)	0.078** (2.728)
Education (ref.<middle school)					
Middle school completed	0.110*** (4.074)	0.100*** (3.768)	0.110*** (4.138)	0.102*** (3.866)	0.104*** (3.917)
Some or completed high school education	0.233*** (6.466)	0.219*** (6.098)	0.235*** (6.571)	0.218*** (6.131)	0.214*** (5.970)
College or above	0.547*** (9.997)	0.528*** (9.548)	0.550*** (10.092)	0.524*** (9.538)	0.517*** (9.359)
Received training (ref. no training)	0.119*** (4.880)	0.104*** (4.274)	0.112*** (4.601)	0.096*** (3.962)	0.097*** (4.015)
Tenure in current job	0.009*** (6.177)	0.009*** (6.251)	0.009*** (6.426)	0.009*** (6.375)	0.009*** (6.302)
Party member (ref. not party member)	0.036 (1.096)	0.030 (0.931)	0.034 (1.062)	0.023 (0.727)	0.029 (0.894)
Occupation (ref. professional/clerical)					
Commerce	−0.323*** (−7.090)	−0.307*** (−6.878)	−0.310*** (−6.846)	−0.301*** (−6.863)	−0.291*** (−6.529)
Service worker	−0.293*** (−8.253)	−0.271*** (−7.712)	−0.283*** (−8.009)	−0.265*** (−7.597)	−0.245*** (−7.037)
Manual labor	−0.338*** (−10.472)	−0.316*** (−9.922)	−0.327*** (−10.198)	−0.302 (−9.482)	−0.288*** (−9.125)
Ownership type (ref. state employee)					
nonstate sector employee	0.039 (1.504)	0.037 (1.424)	0.040 (1.527)	0.037 (1.427)	0.038 (1.474)
self-employed	0.760*** (12.955)	0.751*** (13.192)	0.753*** (13.037)	0.751*** (13.341)	0.758*** (13.371)
General social capital		0.239*** (6.803)			
Local social capital			0.114*** (3.461)		
General social capital (strong ties)				0.280*** (7.662)	
General social capital (weak ties)				0.046 (1.453)	

	Model 1	Model 2	Model 3	Model 4	Model 5
General social capital (extensity)					0.022*** (6.187)
General social capital (mean prestige)					0.002*** (3.607)
Constant	6.924*** (114.425)	6.788*** (111.727)	6.856*** (111.378)	6.783*** (112.128)	6.793*** (113.525)
R-square	0.38	0.40	0.39	0.41	0.41

*** *p* value < 0.001;

** *p* value < 0.01;

* *p* value < 0.05.

Table 4

The role of social capital for monthly income (log) by migration status, 2005, Shanghai.

	Model 1		Model 2		Model 3		Model 4	
	Urban residents	**Rural migrants**	**Urban residents**	**Rural migrants**	**Urban residents**	**Rural migrants**	**Urban residents**	**Rural migrants**
General social capital	0.242^{***a} (4.498)	0.230*** (5.793)						
Local social capital			0.123$^{** b}$ (2.921)	0.088^{+} (1.911)				
General social capital (strong ties)					0.269^{***b} (5.762)	0.324*** (6.163)		
General social capital (weak ties)					0.025 ^{a} (0.593)	0.074 (1.840)		
General social capital (extensity)							0.019^{***c} (4.723)	0.040*** (6.187)
General social capital (mean prestige)							0.002^{***c} (3.234)	0.001 (0.469)

*** p value < 0.001;

** p value < 0.01;

* p value < 0.05;

$^{+}$ p value < 0.1.

Note: Other covariates, the same as those in Table 3, are not shown in this table. Test statistics are shown in parentheses.

^{a} The difference in the coefficient of social capital measure is insignificant.

^{b} The difference in the coefficient of social capital measure is marginally significant at the 0.1 level.

^{c} The difference in the coefficient of social capital measure is significant at the 0.05 level.

Table 5

Blinder-Oaxaca decomposition of difference in monthly income between migrants and urban residents, 2005, Shanghai.

Monthly income	Migrants (1) vs. urban residents (0)
General Social Capital	
Due to difference in characteristics	26.1%
Due to difference in coefficients	3.7%
Local Social Capital	
Due to difference in characteristics	13.8%
Due to difference in coefficients	8.5%

Note: Decomposition results of other predictors, the same as those in Table 3, are not shown in this table.

Appendix A

Determinants of general and local social capital, 2005, Shanghai. (standard errors in parentheses)

	Total (general social capital)	Urban residents (general social capital)	Migrants (general social capital)	Total (local social capital)
Rural migrants (ref. urban residents)	−0.176*** (0.016)			−0.329*** (0.019)
Age (ref. 15–25)				
26–35	−0.002 (0.020)	−0.039 (0.031)	0.041+ (0.023)	−0.010 (0.023)
36–45	0.013 (0.022)	−0.019 (0.033)	0.062* (0.027)	0.004 (0.026)
46–60	0.023 (0.026)	−0.013 (0.035)	0.055 (0.038)	−0.007 (0.032)
Male (ref. female)	0.012 (0.011)	0.012 (0.015)	0.020 (0.014)	0.010 (0.014)
Married (ref. not married)	0.024 (0.018)	0.035 (0.023)	−0.038 (0.023)	0.029 (0.021)
Education (ref. <middle school)				
middle school completed	0.038* (0.017)	−0.024 (0.037)	0.064*** (0.017)	−0.008 (0.018)
some or completed high school education	0.054** (0.021)	−0.015 (0.037)	0.104*** (0.026)	−0.023 (0.024)
college or above	0.075** (0.025)	0.003 (0.040)	0.222*** (0.067)	−0.021 (0.032)
Received training (ref. no training)	0.061*** (0.013)	0.057*** (0.015)	0.082*** (0.022)	0.057*** (0.016)
Occupation (ref. professional/clerical)				
Commerce	−0.049* (0.020)	−0.025 (0.031)	−0.077* (0.038)	−0.076** (0.025)
Service worker	−0.092*** (0.018)	−0.067** (0.021)	−0.123** (0.039)	−0.089*** (0.023)
Manual labor	−0.094*** (0.018)	−0.117*** (0.021)	−0.066+ (0.038)	−0.101*** (0.022)
Tenure in current job	−0.000 (0.001)	−0.000 (0.001)	0.003 (0.002)	−0.003*** (0.001)
Party member (ref. not party member)	0.023 (0.015)	0.036* (0.017)	−0.055* (0.027)	0.013 (0.020)
Speak Shanghai dialect			0.208*** (0.020)	
Constant	0.579*** (0.029)	0.664*** (0.045)	0.360*** (0.042)	0.589*** (0.035)
N	3070	1196	1874	3070

*** p value < 0.001;

** p value < 0.01;

* p value < 0.05;

+ p value < 0.1.