8 Production and Returns of Social Capital

Evidence from Urban China

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PURPOSES

Social capital, or resources embedded in social networks, and its effect on attainment in the labor market has been extensively studied and documented in the literature (Lin 1999b). Initial evidence came from community studies (Lin, Ensel, and Vaughn 1981; Marsden and Hurlbert 1988). Attempts have been made to estimate this effect from national samples (e.g., De Graaf and Flap 1988; Angelusz and Tardos, forthcoming). This chapter makes a contribution to this growing literature with data from a national sample of urban residents in China. We examine the production of social capital, or what factors determine the variation of social capital among the sampled respondents; and the returns to social capital, or the effects of social capital on several attainment measures, including positions in the occupational hierarchy, supervisory responsibility, and wage. The chapter begins with a general introduction to social capital as a concept and theory, its measurements, and the processes of its production and returns that allow individuals to attain better jobs. Data from a recent survey conducted in a national sample of cities in China will be analyzed to illustrate these processes.

DEFINITION AND THEORY OF SOCIAL CAPITAL

In the broadest sense, social capital consists of elements of social structure (Coleman 1990). A more precise definition has been offered by Lin (1982, 1999a, 2001)[1] and Bourdieu (1983/1986)[2] as resources embedded in social networks. It may be measured operationally as the quantity or quality of resources, actual (i.e., mobilized) or virtual (e.g., perceived or accessed), embedded in one's networks.[3] A theory of social capital then follows this definition: *investment in social relations for expected returns* (Lin 2001). Investment in social relations produces social capital, which in turn generates expected returns. Social relations, in general, are dictated

by the positions of the actors in the hierarchical or stratification structure and by their locations in social networks. Within these structural constraints, actors make choices in the retention and reciprocal relations with certain others; these choices represent investments of each actor's time and efforts. Social capital, then, consists of resources embedded in such invested relations. Such capital is expected to generate returns. Empirical investigation and verification focuses on the extent of actual realization of any returns.[4]

Much empirical work has verified the instrumental returns to social capital in the labor market. Cumulative evidence confirms that open networks and diversity in social capital brings about better information (Granovetter 1973; Burt 1992), better control (Burt 1992), or more influence (Lin 1982) resulting in relative advantages on the job market (Flap 1991; Erickson 2001), and in economic organizations (see review in Burt 2000). Yet much of the research focuses on returns to social capital rather than the production of social capital (see exceptions in Flap 1999 and Flap and Völker 2004). This chapter attempts to integrate the study of the production and returns of social capital, using a nationwide survey of urban residents in China. The next section proposes a model for such an integrative study.

PRODUCTION AND RETURNS OF SOCIAL CAPITAL:
A DYNAMIC PROCESS

The theory of social capital not only captures both the social and capital elements but also reminds us that social capital must be viewed as both an endogenous and an exogenous variable in research. As an endogenous variable, it is necessary to investigate what factors lead to differential social capital—the production of social capital. As an exogenous variable, research must address the consequences that social capital may lead to—the returns to social capital.

Modeling the production and returns processes should recognize simultaneously the need to frame in concepts, applicable to multiple societies, and at the same time the need to reflect the reality of each society under study. An illustration of this process for urban China is presented in Figure 8.1. It depicts the hypothesized relations between a set of factors that lead to inequality of social capital, where social capital is the endogenous variable; as well as the attainment consequences of social capital, where social capital is the exogenous variable. We identify a number of contributing factors for the production of social capital. Two other types of capital, human capital and political capital, are included. The link between human capital and social capital has long been identified in the literature. For some, social capital is expected to facilitate human capital (Bourdieu 1983/1986; Coleman 1988). That is, broadened

social contacts and accessed resources provide further opportunities to access and accumulate human capital. Coleman's study of parental networks and school cohesion suggests such a link. Bourdieu speculates that networks among the elites afford further reproduction of human capital. At the same time, human capital may be expected to facilitate social capital. Increased human capital should provide better positioning in the labor market, thus providing more social ties to richer and more diverse resources. Further, human capital should also offer resources and opportunities to participate in social activities, including participation in voluntary organizations. The intricacy and reciprocal relationships between human capital and social capital, although complicated,[5] nevertheless anticipates that human capital will play a significant role in the production of social capital.

The link between political capital and social capital gains significance in any political economy, where political or party identity constitutes a capital in that its investment brings about valuable resources embedded in such connections. In the case of China, the one-party system and the long-standing command economy (Walder 1986; Bian 1994) have long dictated political influence in the attainment process. Although the command system has undergone changes in the past decade, since the mid-1990s the overwhelmingly urban work force has remained occupied in the public and state sector (state-owned enterprises contributed more than half of the GDP in 2004).[6] A significant portion of the labor force still prefers to work in this sector for the relative job security, wage, compensation, and pension that it offers.

The Communist Party apparatus penetrates beyond the public sector. It is active in large-scale private and joint venture enterprises as well.
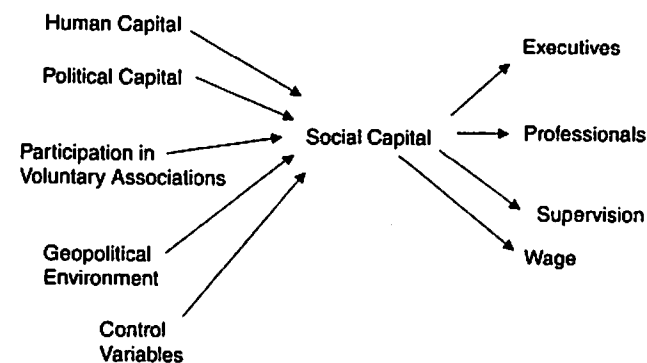

Figure 8.1   Production of and returns to social capital in the labor market.

Being a member of the Communist Party, therefore, ought to offer structural opportunities to access ties or other party members with better resources in the hierarchy. We also expect that the effect of political capital holds in other societies, where it finds different expressions.

Another factor is the emergence of civil engagement or networking in urban China. As China undergoes significant economic and social reforms, nongovernmental organizations have begun to emerge. Although the number remains limited and participation stays relatively low, these groups offer opportunities for connections to others that were previously not available. During the prereform period and even much of the early phase of the reform period (1978–early 1990s), networks for urban Chinese tended to be restricted to extended families, work units, neighborhoods, school ties, and political and governmental connections. However, as the economy diversifies and housing is privatized, movements into different economic sectors and more diversified work and residential settings have become possible. As a result, the contexts for networking have extended significantly, and awareness of and participation in nongovernmental associations and activities have increased. Such emerging connections should offer greater diversity in the individual's social capital.[7]

Finally, we explore the effect of the geopolitical forces in the ecological context. In most societies, cities assume geographic and political significance, due to their critical roles and locations in political, economic, and geographic hierarchies. In China, cities are clearly designated in three categories: those directly administered by the central government, those cities that are provincial capitals, and other cities. Beijing, Shanghai, Tianjin, and Chongqing are not only large in population, but also assume critically important political and/or economic significance in the northern, eastern, and central regions. They are under direct central government jurisdiction. All personnel and budget are under state control and allocation; as a result the cities are usually given priority in construction and developmental funding, and their workers enjoy higher rankings and benefits relative to their counterparts in other cities. Similarly, provincial capitals are focal administrative and political centers in different regions, and in most cases are the most important economic and financial hub of the province. Again, workers enjoy relative advantages in pay, bonuses, and other benefits (e.g., health services, housing, transportation) over workers in other cities in the province. The relative locations afford different opportunities to network with others with better power, wealth, and status—all valuable resources.

At the same time, the rise of the private sector and the penetration of foreign-invested capital and firms have complicated the previous orderly hierarchy among the cities. In the core (state-administered) cities, the penetration of foreign-invested capital and firms has gained momentum in the past decade, and provides a counterweight or alternative in the

labor market for workers. More and more, workers now have the option of moving to the foreign-invested sector, despite the security offered by the state sector, for higher wages and greater chances for mobility. In the provinces, the private, small-sized firms have become pervasive, although the public sector (the state and collective firms) still holds the advantage in firm size and employment opportunity. Self-employed enterprises are catching on. It is rather in the peripheral (other) cities, where the penetration of the foreign-invested firms is few in number and size, that the public sector remains the dominant force in the labor market. The question of how these complex forces—the state sector, the foreign-invested sector, and the private sector—interplay across the different types of cities deserves research attention, especially during this transforming period. Nevertheless, we would expect that the geopolitical locations provide a macrostructural source of inequality in social capital.

Having better social capital should subsequently enhance returns in the labor market. We expect this relationship to hold, even after other significant factors are accounted for. Here we also expect human capital, political capital, networking activities, and the geopolitical environment to be important factors. Although these resources contribute to the acquisition of social capital, we expect that social capital, once acquired, will add to returns beyond the contributions from these resources. That is, social capital has the capacity of reproducing itself—social ties enhance more social ties, and thus produce even richer and more diverse resources. This reproduction assumes a momentum unaccounted for by human, political, and regional capital, and adds to the returns in the labor market. In certain societies, social capital of a political nature may assume exceptional significance, as in the case of China. Connections to cadres in higher positions may afford access to greater political influence, which may contribute to labor market outcomes as well. Thus, the measurement of social capital must be dictated in each society by the relevant and valuable resources embedded in social networks.

We now turn to examining these processes with a national sample of currently or previously employed adults residing in urban China.

DATA

The targets of the survey were adults, ranging in age between 21 and 64, currently or previously employed, registered and residing in urban cities. The sampling plan was a multistage systematic probability sample. At the initial stage, households in all urban cities were sequenced. The basic unit of sampling at this stage was a clustering of 19 consecutive households. The desired sample size was determined to be 3,535 to provide adequate subsamples for possible subgroup (gender, region, and so on) analyses. An interval was thus established and a random start number was drawn.

Starting from the top of the list of all households by cities, clusters of households were sampled, resulting in 184 clusters from 167 cities.[8]

At the second stage, all qualified respondents in each sampled household were identified, and the one whose birth date was closest to June 30 was designated as the sample respondent. A personal interview was conducted by professional interviewers between November 2004 and March 2005. After up to three attempts with each designated respondent and further sampling from adjacent households, if previous households failed to yield respondents, the response rate was about 40 percent. The relatively low response rate was due to several factors. We held the sampled respondents rigidly and without replacement. Respondents who could not be contacted and interviewed after the initial attempt and follow-ups were counted as lost. We also found that more and more urban residents in China are becoming less willing to be interviewed, and we made no effort to force their participation. The effects of the low response rates are difficult to estimate. It is difficult to find the appropriate census data from the sampled cities for currently or previously employed adults, aged 21 to 64. However, as we show later in the article, comparison of sample characteristics with Chinese census data was made to whatever extent possible. Strong correspondence in key parameters assures us that the sample provides credible estimates for the population under study. To further ensure against possible sample biases, the study incorporated critical control variables in all analyses.

The total sample size was 3,529. The sample was, approximately, evenly distributed between men (49.4 percent) and women (50.6 percent). This is consistent with the Chinese census (51.5 percent of 2005 urban residents are men). The average age was 39. The average number of years of education was 11.4. This is a higher number than the 2004 one percent national survey data for the urban population, where the average number of years of education was 9.4 for urban residents aged six and over. However, because we are focusing on employed adults only, an elevation of education should be expected.

The median income was in the range of RMB$10,000–14,000 per annum.[9] The 2005 national survey showed a median of RMB$10,493 for urban residents. For sectors of work unit, our survey showed that 56.4 percent of the respondents were in the state sector, and 8.8 percent were in the collectives. The 2005 one percent national survey showed that the corresponding percentages were 57.9 and 7.1 respectively. We, therefore, conclude that the study sample of employed urban residents shows a high degree of representation of the national parameters. Table 8.1 presents some characteristics of the study sample.

Also note that about 7 percent of the respondents worked for work units in state-administered cities (i.e., Beijing, Shanghai, Tianjin, and Chongqing); another 12 percent in provincial capitals;[10] and the remaining respondents, 82 percent, in other local cities.

Table 8.1   Summary of Sample Characteristics (Percent or Mean)

	Total (N = 3,529)	Male (n = 1,743)	Female (n = 1,786)	Significance Test[a]
Age	39.3	39.6	39.0	0.06
Age [b]	29.1	29.0	29.2	0.57
Education				
Secondary or lower	29.4%	25.8%	32.9%	
High school	25.2	24.8	25.5	
Associate college	26.1	25.3	26.9	
College and graduate	19.1	23.9	14.5	
Previous job experience				
No previous job	55.3%	52.9%	57.6%	
Held a previous nonexecutive/professional job	32.0	33.3	30.7	
Held a previous executive/professional job	12.5	13.5	11.4	
Tenure (years)	10.2	10.7	9.7	0.00
Party member	21.9%	29.8%	14.1%	0.00
Voluntary organization participation	10.5%	11.5%	9.6%	0.06
Voluntary organization participation[b]	4.8%	5.1%	4.5%	0.47
Location of work unit				
State-administered city	6.7%	6.7%	6.8%	
Provincial capital city	11.6	10.3	12.8	
Other cities	81.7	83.0	80.4	
Sector of work unit				
State	56.4%	59.6%	53.2%	
Collective	8.8	6.9	10.7	
Shareholding	11.8	12.9	10.8	
Private	18.6	17.1	20.0	
Hong Kong/Macao/Taiwan	1.0	0.9	1.2	
Foreign/joint	1.1	1.2	1.0	
Other	2.3	1.5	3.1	
Present/last occupational group				
Executives	6.7%	10.0%	3.5%	

(continued)

Table 8.1   Summary of Sample Characteristics (Percent or Mean) *(continued)*

	Total (N = 3,529)	Male (n = 1,743)	Female (n = 1,786)	Significance Test[a]
Professionals	23.6	21.1	25.9	
Technicians	2.0	1.4	2.6	
Administrators	13.5	16.5	10.5	
Sales/service	26.8	20.2	33.2	
Workers	26.6	29.6	23.3	
Farmers	0.9	0.8	1.0	
Supervision in present/last job				
No supervision	75.7%	67.3%	83.9%	
Supervising someone who did not supervise	12.2	15.0	9.5	
Supervising someone who supervised	12.1	17.7	6.6	
Annual income of present/ last job				
(Chinese Yuan) Less than 6,000	24.1%	16.1	31.9%	
6,000–10,000	24.2	21.4	27.0	
10,000–14,000	21.3	22.6	20.1	
14,000–24,000	21.5	26.8	16.3	
24,000 and more	8.8	13.1	4.7	

[a]The significance levels for t tests on the equality of means for men and women. [b]At the time of finding the current/last job.

RESEARCH DESIGN

Following the previously explained articulation, we formulated two conceptual models: one for the production of social capital and another for the returns to social capital. To conserve space, the two models are integrated and presented in Figure 8.1. Human capital, political capital, networking activities, and the geopolitical environment (type of city where the work unit was located) are considered significant contributing factors for the production of social capital. It is conceivable that such relationships are reciprocal; for example, human or political capital enhances networking activities and networking activities enhance human and political capital.

We make no assumption or test of the casual patterns among them for the present study. They are simply considered exogenous to social capital.

For returns to social capital, we considered a variety of attainment variables including holding an executive or professional job, being a supervisor, and earning a higher wage. The measurements show that social capital was measured at the time that respondents were considering their current/ last job; thus a temporal sequence was imposed between social capital and the outcome variables. Not shown in the figure are direct effects from the ultimate exogenous variables (i.e., human and political capital, networking activities, and the geopolitical environment and control variables) on the outcome variables that are allowed in the analyses. We make no argument that effects of these variables are completely mediated through social capital. Instead, we expect them to exert direct effects on the outcome variables, while social capital contributes as added value to the returns, even after their direct and indirect effects through social capital are accounted for.

MEASUREMENT OF KEY VARIABLES

Social Capital

Social capital was measured using the position-generator items (Lin and Dumin 1986; Lin, Fu, and Hsung 2001). We asked each respondent, "Do you know anyone among your relatives, friends, or acquaintances that has one of the following jobs? ('Knowing' means that you and the person can recognize and greet each other. If you know several persons that have a particular job, please name the person that comes to mind first.)" A list of 21 jobs then followed: nurse, writer, farmer, lawyer, middle-school teacher, housemaid, janitor, personnel manager, administrative assistant, hairdresser, accountant, security guard, production manager, operator in a factory, computer programmer, receptionist, taxi driver, professor, policeman, hotel bellboy, and CEO in a large corporation (see the list in Table 8.2).

Two sets of these position-generating items were included in the survey: (a) the present time, to capture current social capital; and (b) prior to the time the respondent began their present/last job, to capture social capital prior to the current/last job. Detailed information (such as gender, relationship to the respondent, and so on) in regard to each accessed occupation was only obtained for the current social capital.[11] In this study, *only prior social capital was examined*, to ascertain with a degree of confidence the possible temporal sequence of social capital and current job attainment.

Three indexes were generated from the 21 occupations: (a) *extensity*— the number of occupations a respondent could access, (2) *upper reachability*—the highest occupational prestige score among accessed occupations, and (3) *range*—the difference between the highest and lowest accessed occupational prestige scores.[12] Table 8.2 shows the distribution of general social capital prior to the current/last job by gender.

Table 8.2   Position Generator and Differential Access to General Social Capital
(Prior to the Current/Last Job)

Position (Standard International Occupational Prestige Scale)	Respondent Accessing			
	Total (N = 3,529)	Men (n = 1,743)	Women (n = 1,786)	Significance Test[*]
Professor (78)	18.1%	22.0%	14.3%	0.00
Lawyer (73)	21.7	25.3	18.3	0.00
CEO (70)	23.6	27.1	20.2	0.00
Production manager (63)	26.0	29.7	22.3	0.00
Middle-school teacher (60)	62.3	64.4	60.2	0.01
Personnel manager (60)	33.4	36.8	30.1	0.00
Writer (58)	6.9	7.9	6.0	0.03
Nurse (54)	43.6	42.5	44.7	0.19
Computer programmer (51)	14.7	17.5	11.9	0.00
Administrative assistant (49)	14.8	17.5	12.1	0.00
Accountant (49)	54.6	55.1	54.1	0.55
Policeman (40)	38.4	44.5	32.4	0.00
Farmer (38)	68.3	70.2	66.5	0.02
Receptionist (38)	13.1	13.9	12.4	0.18
Operator in a factory (34)	36.2	39.3	33.1	0.00
Hairdresser (32)	24.8	22.4	27.0	0.00
Taxi driver (31)	32.7	36.0	29.4	0.00
Security guard (30)	29.8	34.5	25.2	0.00
Housemaid (23)	12.9	11.8	14.0	0.05
Janitor (21)	20.0	19.6	20.3	0.60
Hotel bellboy (20)	19.3	22.4	16.3	0.00
Summary Indices				
Extensity				
Mean	6.1	6.6	5.7	0.00
SD	4.4	4.6	4.1	
Range of scores	0–21	0–21	0–21	
Range				
Mean	33.3	34.9	31.7	0.00
SD	16.4	16.3	16.4	
Range of scores	0–58	0–58	0–58	
Upper reachability				
Mean	63.7	64.9	62.5	0.00
SD	11.8	11.7	11.9	
Range of scores	20–78	30–78	20–78	

[*]The significance levels for t tests on the equality of means for males and females

Table 8.3   Factor Structure of Access to General Social Capital (Prior to the Current/Last Job)

Factor	Sample (N = 3,529)	Men (n = 1,743)	Women (n = 1,786)
I	2.50	2.50	2.49
II	0.37	0.37	0.38
III	0.12	0.12	0.13
Factor loadings on Factor I [*]			
Upper reachability	0.898	0.898	0.896
Extensity	0.879	0.879	0.877
Range	0.959	0.958	0.958
Factor scoring on Factor I [*]			
Upper reachability	0.360	0.360	0.360
Extensity	0.352	0.352	0.352
Range	0.384	0.384	0.385

[*]Principal Component Analysis, minimal eigenvalue of 1 and varimax rotation

A factor analysis, as shown in Table 8.3 (principal component and varimax rotation), yielded a single factor solution. A factor score based on the three indexes was thus constructed for each respondent. We also performed the factor analysis for men and women separately. Because the factor solution and patterns were essentially the same, the same factor-scoring procedure was used for all respondents.

Political Social Capital

We also listed three types of cadres in the position generator—(a) the leading cadre in the work unit; (b) the leading cadre of the supervising work unit; and (c) the regular civil servant or worker—to represent political social capital in China. The rank scores assigned to the three political positions are: the leading cadre of the supervising work unit (3), the leading cadre in the work unit (2), and the regular civil servant or worker (1). Three indexes were generated from the three political occupations: (a) *extensity*—the number of political occupations a respondent could access, (b) *upper reachability*—the rank score of the highest accessed political position, and (c) *range*—the rank score difference between the highest and lowest accessed political occupations. Table 8.4 shows the distribution of political social capital prior to the current/last job by gender and a factor analysis based on

Table 8.4   Position Generator and Differential Access to Political Social Capital
(Prior to Current/Last Job)

Position (Rank Score)	Respondent Accessing Total (N = 3,529)	Men (n = 1,743)	Women (n = 1,786)	Significance Test[a]
Leading cadre of the supervising work unit (3)	29.6%	33.4%	25.8%	0.00
Leading cadre in the work unit (2)	53.6	58.1	49.2	0.00
Regular civil servant or worker (1)	44.1	47.6	40.7	0.01
Summary Indices				
Extensity				
Mean	1.3	1.4	1.2	0.00
S. D.	1.1	1.1	1.1	
Range of scores	0–3	0–3	0–3	
Range				
Mean	0.6	0.7	0.5	0.00
S. D.	0.8	0.8	0.8	
Range of scores	0–2	0–2	0–2	
Upper reachability				
Mean	1.5	1.7	1.4	0.00
S. D.	1.2	1.2	1.2	
Range of scores	0–3	0–3	0–3	
Factor Analysis				
I	2.75	2.76	2.74	
II	0.22	0.21	0.23	
III	0.03	0.03	0.03	
Factor loadings on Factor I[b]				
Upper reachability	0.940	0.941	0.937	
Extensity	0.990	0.990	0.990	
Range	0.942	0.945	0.937	
Factor scoring on Factor I[b]				
Upper reachability	0.342	0.341	0.343	
Extensity	0.360	0.359	0.362	
Range	0.342	0.342	0.342	

[a]The significance levels for t tests on the equality of means for men and women. [b]Principal
Component Analysis, minimal eigenvalue of 1 and varimax rotation

the three indexes. Men have a relative advantage over women in accessing better political social capital.

Again, as shown in Table 8.4, the factor analysis resulted in a single factor solution. A factor score was then generated to measure political social capital for each respondent. No differences in factor loadings and scoring are found between the male and female subsamples.

Human Capital

Two measures were used to indicate human capital: (a) education, measured on a four-level scale (secondary or lower, high school, associate college, and college and graduate); and (b) tenure, measured by the number of years the respondents have/had worked in their present/last jobs (this variable is then logged).

Political Capital

This is indicated by membership in the Communist Party (1 = *member* and 0 = *not a member*).

Previous Job Experience

We aggregated the respondents into three groups in terms of previous jobs: (a) no previous job, (b) previously held a nonexecutive/professional job, and (c) previously held an executive/professional job. "No previous job" was used as the reference (missing) category; the other two categories became dummy variables.

Location of Work Unit

The cities where the respondents currently work were categorized into three levels: state-administered cities (Beijing, Tianjin, Shanghai, and Chongqing); provincial capital cities; and others.

Participation In Voluntary Associations

In the questionnaire, we asked each respondent if she or he participated in any of a list of voluntary associations: (a) academic, cultural; (b) medical, health; (c) religious; (d) athletic; (e) social services; (f) international; (g) economic, commercial, business; (h) clans; (i) alumni; (j) professional; or (k) other public benefits. Each response was coded as a dummy variable (1 = *yes* and 0 = *no*) and a sum total was calculated. We noted that the extent of participation in voluntary associations in China was low, averaging less

than two participations. We thus decided to use a dummy variable, participation versus no participation.

Control Variables

The control variables included: (a) age (this variable is centered in this study) and (b) gender (1 = *male* and 0 = *female*).

Attainment Variables

Three attainment variables were considered here: (a) holding an executive/professional position, (b) having supervisory responsibility, and (c) earning a higher wage.

Holding an Executive or Professional Position

Each respondent's current/last job in the dataset was coded using 1995 Chinese Standard Classifications of Occupations (CSCO). As shown in Table 8.1, we categorized the jobs into seven occupational groups: (a) executives, (b) professionals, (c) technicians, (d) administrators, (e) sales/service, (f) workers, and (g) farmers. They were then grouped into three types of jobs: (h) executives, (i) professionals, and (j) other.

Being a Supervisor

Supervision was measured as a three-level ordered variable: 0 = *no supervision*; 1 = *supervising someone who did not supervise*; and 2 = *supervising someone who also supervised*.

Earning a Higher Wage

The final return variable is the annual income for the current/last job, which contained 27 categories. We adjusted the medians of the 27 income categories in accordance with the Consumer Price Index (CPI) published by the National Bureau of Statistics of China, standardized relative to 1990, that has an index weight of 100. We then took the logarithm of the CPI-adjusted medians.

Analytic Procedure

Following the model as specified in Figure 8.1, analyses were conducted in two phases. In the first phase, to account for the process of the production of social capital, the two measures of social capital—general social capital and political social capital—were used as the endogenous or dependent variables. The selected exogenous or independent variables

were entered into each equation, including measures for human capital (education levels, previous job experience); political capital (party membership); networking activities (participation in voluntary associations); and the geopolitical environment (city location of the work unit). Control variables, including age, age squared (to account for nonlinear effects), and gender (male) were also entered.

In the second phase, we examined the returns to social capital. Equations were constructed for returns in the labor market, including holding a professional or executive job, being a supervisor, and wage. Entered into each equation were all the exogenous variables mentioned previously for the first phase, as well as the two types of social capital—general social capital and political social capital. Tenure—number of years in the current/last job (logged)—was an additional variable entered as another measure of human capital. For the wage equation, types of jobs and supervision were entered to reflect the fact that wage is dictated by these career locations.

The equations constructed were dictated by the nature of each endogenous variable. For social capital and wage as interval variables, we employed the ordinary least squares equations. For types of jobs (being an executive or professional), we used the multinomial logit regression, with "other jobs" as the missing or reference group for comparisons. For supervision as an ordinal variable (with three levels), we conducted the ordinal logit regression analysis.

Because the data set is a cross-sectional one, causal attributions are tentative at best. We tried to frame various variables in time sequences in the measurements (e.g., age, participation in voluntary associations, and social capital were measured relative to the time of entering into the current/last job[13]). However, we could not rule out the possibility that some of the exogenous variables interact or reciprocate in relations. Of particular concern were the interactions between gender and other variables, as gender turned out to be significant in almost all equations. We were also interested in the interactions between types of cities and other variables; thus we explored the interactions between gender and types of cities with other exogenous variables for all equations by conducting additional separate analyses for men and women, and types of cities separately. By comparing the coefficients of each key exogenous variable between the male and female subsamples and among the three types of cities, we could estimate if a significant interaction existed. We would then report any significant comparisons.

In the case of comparisons across the three types of cities, uneven distributions of subsample sizes and limited subsample size for the core state-administered cities (about 7 percent) made significant tests unreliable. We examined the relative normalized coefficients and their corresponding standard errors and made substantive interpretations.

Table 8.5   Determinants of General Social Capital (Prior to the Current/Last Job) (Ordinary Least Squares Regression)

	General Social Capital
Age[a]	0.042***
Age squared[a]	-0.001***
Male gender	0.153***
Education (ref: Less than high school)	
High school	0.231***
Associate college	0.410***
Bachelor degree and above	0.650***
Previous job experience (ref: Previous job)	
No previous job	-0.218***
Had a previous executive/professional job	0.134**
Location of work unit (ref: Other cities)	
State-administered[b]	0.130**
Provincial capital	0.018
Party member	0.015
Participation in voluntary association[c]	0.414***
Constant	-0.971***
Observations	3300
Adjusted R²	0.11

*Significant at 10%. **Significant at 5%. ***Significant at 1%. [a]ATT: At the time when R acquired the current/last job. [b]State-administered cities: Beijing, Tianjin, Shanghai, and Chongqing

PRODUCTION OF SOCIAL CAPITAL: FINDINGS

General Social Capital

Table 8.5 shows the ordinary least-squaring regression model that predicts the differential access to prior general social capital. In these models, age and participation in voluntary associations have been adjusted to their statuses at the time when the respondent was looking for the current/last job. Table 8.1 shows the distribution of these variables prior to the present/last jobs.

The results show that access to general social capital (prior to current/last job) was significantly related to: (a) human capital (higher education and having a previous job, especially when the previous job was an executive or professional position); (b) being a man; (c) participation in voluntary organizations; and (d) working in state-administered cities.

Additionally, age (between the ages 21 to 64) has a general modest negative effect on access to general social capital (due to the negative function of Age Squared).

We also examined data on men and women separately, and found that the only factor that might interact with gender was previously holding an executive/professional job. When we entered the interaction between gender and previous executive/professional experience (both centered) into the equation in Table 8.5, it did not yield a significant effect.

When we conducted separate analyses for each type of city, we found that the effects of being a man and having previous executive experience were more salient in the state-administered cities, whereas the effects of both high school and college education, and previous job experience were more salient in the other cities. The only salient variable for provincial capitals was party membership. Again, these tentative findings support the earlier observation that general social capital is somewhat richer and perhaps more relevant in the state-administered cities and other cities, in comparison with that in provincial capitals.

Table 8.6   Determinants of Political Social Capital (Prior to the Current/Last job) (Ordinary Least Squares Regression)

	Political Social Capital
Age[a]	0.018*
Age squared[a]	-0.000
Male gender	0.093***
Education (ref: Less than high school)	
High school	0.261***
Associate college	0.532***
Bachelor degree and above	0.749***
Previous job experience (ref: Previous job)	
No previous job	-0.202***
Had a previous executive/professional job	0.091*
Location of work unit (ref: Other cities)	
State-administered[b]	0.088
Provincial capital	-0.016
Party member	0.234***
Participation in voluntary association[c]	0.080
Constant	-0.763***
Observations	3404
Adjusted R-squared	0.14

*Significant at 10%. **Significant at 5%. ***Significant at 1%. [a]ATT: At the time when R acquired current/last job. [b]State-administered cities: Beijing, Tianjin, Shanghai, and Chongqing.

Political Social Capital

Table 8.6 shows the Ordinary Least-squaring Regression model that predicts the differential access to prior political social capital. Results indicate that prior political social capital was significantly affected by (a) being older in age; (b) being a man; (c) human capital (higher education and having a previous job); and (d) being a party member.

We also estimated these models for men and women separately, and found that political social capital was similarly determined by these independent variables for men and women. Separate analyses for types of city suggested that the effects of being a man, having a high school education, having previous work experience, and participating in voluntary associations were more salient in the state-administered cities, yet the effects of college education and party membership were more salient in other cities. Now a pattern begins to emerge. For the state-administered cities, acquisition of political social capital seemed to rely more on human capital (education and previous work experience) and networking, but in the other cities education and political assets seemed to be more important. There was still no salient pattern for acquiring political social capital in the provincial capitals.

RETURNS TO SOCIAL CAPITAL: FINDINGS

As discussed earlier, three attainment variables were examined: (a) holding an executive/professional position, (b) having supervisory responsibility, and (c) earning a higher wage.

Having an Executive or Professional Position

Table 8.7 presents the multinomial logit equations that predict which respondents were more likely to hold an executive or professional position. The reference (missing) category is all other jobs. To summarize, the results show that having an executive position is determined by (a) being older in age; (b) being a man; (c) having a higher level of education and having a previous job, especially an executive/professional job; (d) being in the private sector; (e) being a party member; and (f) having better political social capital. Note that being in a state-administered city or a provincial capital provided no advantage to becoming an executive. Rather, it was being a man, having a college education, previous job experiences, being in the private sector, and having political assets (i.e., party membership and political social capital) that enhanced the probability of being an executive.

Also shown in Table 8.7 are the results for being a professional. We summarize that the chances of being a professional, compared to all other jobs, are related to: (a) being older; (b) being a woman; (c) having higher

Table 8.7   Multinomial Logistic Regression on Executive, Professional, and Other Types of Jobs (Reference Category: Other Jobs)

	Executive Jobs	Professional Jobs
Age	1.059***	1.024***
Age squared	1.000	1.001
Male gender	1.869***	0.593***
Education (ref: Less than high school)		
High school	1.130	4.121***
Associate college	2.586***	17.708***
Bachelor degree and above	3.706***	23.115***
Previous job experience (ref: Previous job)		
No previous job	0.451***	2.048***
Previous executive job	3.242***	6.199***
Tenure (logged)	1.002	1.269***
Location of work unit (ref: Other cities)		
State-administered[a]	0.636	0.383***
Provincial capital	1.040	0.936
Sector of work unit (ref: State)		
Collective	1.449	0.664*
Shareholding	0.977	0.549***
Private	2.073***	0.792
Hong Kong/Macao/Taiwan	0.371	0.408
Foreign	1.183	0.512
Other	2.434*	0.174**
Party member	2.714***	0.988
Participation in voluntary association	1.339	1.122
General social capital[b]	0.913	1.090
Political social capital[b]	1.394***	1.072
Observations	3252	
Likelihood ratio chi^2 (42)	1244.76	
Pseudo R^2	0.2460	

*Significant at 10%. **Significant at 5%. ***Significant at 1%.

[a]State-administered cities: Beijing, Tianjin, Shanghai, and Chongqing. [b]ATT: At the time when R acquired current/last job.

education; (d) having previous executive/professional experience; (e) working longer at the current/last job; (f) not working in a state-administered city; and (g) being in the state sector. Professional jobs were thus more likely to be held by women, and these jobs were more concentrated in the state sector. On the other hand, these jobs were distributed across all cities, not just those that are state administered.

We examined the samples for men and women separately, and entered a possible interaction between gender and being in a state-administered city (centered). It yielded no significant results. Comparisons across the three types of cities showed that the only salient factor for becoming an executive in the state-administered cities is party membership. In the other cities, salient factors included age, being a man, high school and college education, previous job experience, being a party member, and having better political social capital. In the provincial capital, becoming an executive was associated with age, college education, having previously been an executive, and having better political social capital. There appears to be a trend that both human capital and political assets were significant in provincial capitals and other cities. In the state-administered cities, only political assets made a difference.

For becoming a professional in the state-administered cities, high school and college education and having been an executive in a previous job had salient effects. In the other cities, becoming a professional was more saliently associated with being a woman, having high school or college education, and having previously been an executive. In the provincial capitals, becoming a professional was associated with being older, having college education, and having been an executive in a previous job. In other words, becoming a professional was associated primarily with better human capital, and was quite similar in all types of cities.

Being a Supervisor

Supervision, as an ordered dependent variable, calls for ordinal logistic regression. Before estimating such a model, the first step is to test the assumption of proportionality. It turned out that the approximate likelihood-ratio test of proportionality of odds across response categories ($\chi^2(21)$ = 61.03, Prob. > χ^2 = 0.0000) is significant, which means that the assumption of proportionality is violated. In this case, we used the generalized ordinal logistic regression, which relaxes the proportional odds assumption and allows the effects of the explanatory variables to vary with the point at which the categories of the dependent variable are dichotomized. Consequently, no assumption of proportional odds (ordinal regression model) needs to be made. Table 8.8 presents the results from the generalized ordinal logistic regression. Two pairs of comparisons are made here: supervision versus no supervision; and supervision level 2 versus supervision level 1 and no supervision.

Table 8.8 Generalized Ordinal Logistic Regression on Supervision[a]

	Any supervision (2) and (3) vs. none (1)	Supervision over two or more levels (3) vs. no supervision (1) or supervision over just one level (2)
Age	1.029***	1.058***
Age squared	0.999***	0.999
Male gender	2.191***	2.189***
Education (ref: Less than high school)		
High school	1.046	1.316
Associate college	1.677***	1.741***
Bachelor degree and above	1.740***	2.126***
Previous job experience (ref: Previous job)		
No previous job	0.506***	0.682***
Previous executive job	1.348**	1.231
Tenure (logged)	1.038	0.865**
Location of work unit (ref: Other cities)		
State-administered[b]	0.971	0.429***
Provincial capital	1.201	1.048
Sector of work unit (ref: State)		
Collective	0.901	0.989
Shareholding	1.180	1.454**
Private	1.877***	1.745***
Hong Kong/Macao/Taiwan	2.146*	1.604
Foreign	1.167	1.953
Other	1.712*	3.348***
Party member	2.236***	2.089***
Participation in voluntary association	1.207	1.347*
General social capital[c]	1.289***	1.443***
Political social capital[c]	1.057	1.042
Observations	3301	
LR $\chi^2(42)$	614.50	
Pseudo R^2	0.1265	

(continued)

Table 8.8   Generalized Ordinal Logistic Regression on Supervision* *(continued)*

*Significant at 10%. **Significant at 5%. ***Significant at 1%. ᵃSupervision: (1) = No supervision; (2) = Supervising someone who did not supervise; and (3) = Supervising someone who supervised. ᵇState-administered cities: Beijing, Tianjin, Shanghai, and Chongqing. ᶜATT: At the time when R acquired current/last job.

To summarize the results, being a supervisor is determined by: (a) being older; (b) being a man; (c) having a college education; (d) having had previous jobs, especially executive jobs; (e) being in a shareholding, private, Hong Kong–Macao–Taiwan, or other firm; (f) being a party member; and (g) having better general social capital. Again, note that being in a state-administered or provincial capital city did not increase the probability of being a supervisor.

Additional examination of the samples for men and women suggested a further possible interaction between gender and being in a state-administered city. When we added this interaction (centered) into the equation in Table 8.8, it did not yield a significant effect. Analyses for each type of city suggested that being a man; having a college education; having had previous jobs, especially having previously been an executive; and having better general social capital were all significant. In addition, in the other cities, age, tenure, and being a party member were also helpful. For the provincial capitals, party membership also mattered. Human capital and social capital is thus associated with being a supervisor in all cities, but in the noncore cities party membership helped as well.

Having a Higher Wage

Table 8.9 displaces the findings from the OLS regression on the annual income. All previously analyzed exogenous and endogenous variables are in the equation, including types of jobs (i.e., professional, executive, or other) and supervision. We can summarize that having a higher income is associated with: (a) being younger; (b) being a man; (c) having a higher level of education; (d) having had previous jobs, but not necessarily executive level; (e) tenure; (f) being a professional or executive in the current job; (g) being a supervisor; (h) being in the state, private, or foreign sector; (i) being in a state-administered or provincial capital city; and (j) having both better general and political social capital.

We again examined the samples of men and women separately, and entered the possible interaction between gender and party membership (variables centered) into the equation. The interaction was not significant. In comparing across cities (also reported in Table 8.9), we found that in the state-administered cities, being a man, having a high school education, working in a foreign or Hong Kong-Macao-Taiwan firm, having tenure, and having better social capital were all associated with better

Table 8.9   Ordinary Least-Squares Regression on Annual Income by Types of Cities*

	Whole Sample	Core Cities[b]	Provincial Capitals[b]	Other Cities[b]
Age	−0.007***	−0.160*	−0.295***	−0.066***
Age squared	−0.000***	−0.011	−0.004	−0.075***
Male gender	0.232***	0.246***	0.138***	0.149***
Education (ref: Less than high school)				
High school	0.075**	0.132*	−0.046	0.050**
Associate college	0.246***	0.003	0.096	0.158***
Bachelor degree and above	0.405***	0.128	0.197***	0.218***
Previous job experience (ref: Previous job)				
No previous job	−0.086***	0.029	−0.030	−0.074***
Previous executive job	0.015	−0.033	0.014	−0.001
Tenure (logged)	0.088***	0.200**	0.282***	0.087***
Location of work unit (ref: Other cities)				
State-administered[c]	0.460***	—	—	—
Provincial capital	0.113***	—	—	—
Sector of work unit (ref: State)				
Collective	−0.228***	−0.056	−0.015	−0.098***
Shareholding	0.078**	0.034	0.120***	0.016
Private	0.198***	0.112	0.177***	0.091***
Hong Kong/Macao/Taiwan	0.048	0.136**	0.039	−0.005
Foreign	0.448***	0.150**	0.015	0.054***
Other	0.035	0.057	0.045	−0.002
Party member	−0.003	0.101	−0.035	−0.003
Participation in volunteer association	0.060	0.105	0.102**	0.011
General social capital[d]	0.039***	0.146**	0.099*	0.030
Political social capital[d]	0.035**	0.011	0.079	0.047**
Job status				
Other job (reference)				
Professional	0.118***	0.007	0.034	0.058***
Executive	0.158***	0.061	−0.016	0.084***

(continued)

Table 8.9 Ordinary Least-Squares Regression on Annual Income by Types of Cities[a] *(continued)*

	Whole Sample	Core Cities[b]	Provincial Capitals[b]	Other Cities[b]
No supervision (reference)				
Supervision (level 1)[c]	0.218***	0.097	0.150***	0.092***
Supervision (level 2)[c]	0.280***	−0.032	0.136***	0.131***
Constant	7.944***	12.175***	9.654***	10.856***
Observations	3199	218	375	2606
Adjusted R^2	0.23	0.23	0.31	0.22

*Significant at 10%. **Significant at 5%. ***Significant at 1%. aLOG of CPI-adjusted median value of 27 income categories (base year: 1990). bStandardized coefficients are reported in the models for different types of cities. cCore (state-administered) cities: Beijing, Tianjin, Shanghai, and Chongqing. dATT: At the time when R acquired current/last job. eSupervision: Level 1 = supervising someone who did not supervise; Level 2 = Supervising someone who also supervised.

income. In the provincial capitals, being younger, being a man, having a college education, working in the shareholding or private sector, having tenure, being a supervisor, participating in voluntary organizations, and having better social capital were significant. For the other cities, the only salient factors were having a college education and having a professional/ executive job. Here we see that in the core cities and provincial capitals, wage was affected by human capital, networking, and social capital; whereas in other cities education and occupational positions seemed to be the only salient factors. We should note that another advantage in the core (state-administered) cities is that of working in a foreign/Hong Kong–Taiwan–Macao firm. In the provincial capitals, the private sector enjoys somewhat of an advantage in receiving better wages. No such advantage is apparent in the peripheral (other) cities.

SUMMARY AND DISCUSSION

As can be seen in the summary in Table 8.10, the data are quite rich and many interesting findings have emerged. We briefly summarize the effects of certain key variables, and comment on the general effects of geopolitics, as represented by the location of the work-unit cities.

First, significant factors for the production of general social capital include being older, being a man, having a high school education or higher, having previous job experience, being active in civic engagement or networking (participation in voluntary associations), and working in

Table 8.10   Summary of Findings

Predictor	Dependent Variable					
	General Social Capital	Political Social Capital	Professional	Executive	Supervision	Income
Age	−	+	+	+	+	−
Male	+	+	−	+	+	+
Education						
High school	+	+	+			+
Associate college	+	+	+	+	+	+
Bachelor degree and above	+	+	+	+	+	+
Job experience	+	+	−	+	+	+
Previous job as executive/ professional	+	+	+	+	+	
Tenure			+			+
Location	Core		Cap./ Other			Core/ Cap.
Sector		State	Private	Private/ share/HK		Private/ share/ foreign
Party member		+		+	+	
Participation in voluntary association	+					
General social capital					+	+
Political social capital				+		+
Professional						+
Executive						+
Supervision						+

*For age range 21–64.

state-administered cities. That is, human capital and networking activities contribute to the inequality in general social capital. It is also clear that inequality in general social capital is associated with being in a core city (a state-administered city). Political capital (being a party member) provides

no significant advantage. On the other hand, for political social capital (access to cadres at various levels) human capital is helpful, but being a party member is important as well.

What, then, are the effects on returns in the labor market of having differential general and political social capital, as well as human and political capital, networking activities, and residing in a geopolitically significant city? Consistent results show that general social capital enhances the chances of becoming a supervisor and having a better income, but political social capital promotes the chances of becoming an executive and having a better income.

The data suggest that, in China, there are different career paths and returns in the labor market. One path is to become a professional. Becoming a professional is affected more significantly by human capital (high school education, previous job experience), and not as significantly by social capital networking activities. This path is more open to women. Becoming an executive or supervisor not only requires better education (college) and previous job experience, but also political resources (being a party member). Further, social capital, either general social capital or political social capital, becomes significant. This path is more open to males. The inequality of gender is clearly reflected in these two types of careers. Note in Table 8.1 that, although both men and women had substantial college education, the men had a significant advantage in getting college degrees. In part, the paths chosen by men may thus be determined by their advantage in human capital. However, men additionally access better resources in their networks; these become added assets as they advance their careers in becoming an executive or supervisor. As shown in Table 8.9, either path seems to generate better wages, but again we note that having better social capital offers an additional advantage. It is thus not surprising that men continue to carry an advantage in achieving a better income.

Also note that, interestingly, it is college education that provides better returns, whereas even high-school education enhanced having better general social capital and political social capital. These different patterns suggest that social capital is acquired earlier on in one's educational experience, perhaps through the establishment of social connections during the high school years and beyond. It is also true that early experiences in civic engagement (participation in voluntary organizations) also help in acquiring better social capital. As one moves on in occupational careers, a high level of human capital (college education) becomes necessary for getting better jobs (e.g., becoming a professional, executive, or supervisor) and better pay.

Finally, some comments on the effects of the location of work units. Interpretations of the effects must go beyond merely statistical significance, as it is affected by subsample size. For example, in many cases the coefficients for the peripheral cities are statistically significant, simply because of the large subsample size. Rather, interpretations must be

based on the relative magnitudes of the normalized coefficients across the three types of cities. Being in a particular location does make a difference in terms of the production and returns of social capital. In this study, the significance of geopolitics is represented by the location of the work unit, specified in the three types of cities in China. State-administered cities are the core political and economic cities. They are designated by the central government for their geopolitical-economic significance and provided with enormous amounts of financial, economic, communication, educational, and other resources. Residents also receive greater benefits in better housing, transportation, communication, hospitals, education, and, most important, choices in jobs, work units, and benefits. Alternative economic opportunities are also provided by the penetration of foreign-invested firms (also those from Hong Kong, Taiwan, and Macao). At the second tier are the provincial capitals. These are core cities for the provinces, where regional resources are invested and concentrated. A thriving private sector is emerging that provides an alternative to the public sector. In comparison, the peripheral (other) cities do not see, as of yet, penetration of foreign-invested firms, nor a thriving and pervasive private sector. Instead, they still largely rely on the public sector (the state- and collective-work units) for employment in the labor market.

Interestingly, social capital per se does not significantly differentiate across the different types of cities. Workers in the peripheral cities enjoy as many and diverse connections as those in the core cities. It is the returns to social capital that differ among the locations. Using wage as the ultimate returns indicator, it was clear that the workers in the core cities and provincial capitals benefit from their social capital, whereas those in the peripheral cities do not. Penetration of foreign-invested firms in the core cities has enriched the labor market, and has also enriched the embedded resources in social networks for many workers. The opportunity for accessing better resources in their networks becomes an added advantage. These connections turn into an advantage in the return of wages. In the provincial capitals where foreign-invested firms are few, the rise of the private sector has also provided somewhat of an advantage for workers to access and use their social capital. It is the peripheral (other) cities that lack both foreign investment and a thriving private sector; this lack constrains the returns to social capital. The relative structural opportunities and constraints across the three types of cities are in sharp contrast.

NOTES

Development of the University of Santa Cruz do Sul, October 17–20, 2006, in Santa Cruz do Sul, Rio Grande do Sul state, Brazil. Data used in this chapter were drawn from the thematic research project "Social Capital: Its Origins and Consequences," sponsored by Academia Sinica, Taiwan, through its Research Center for Humanities and Social Sciences, and the Institute of Sociology. The principal investigator of the project is Nan Lin.

1. Lin (1982) defined it as "resources accessible through one's direct and indirect ties" (p. 132).
2. Bourdieu (1983/1986) defined it as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 248), and conceived it operationally as "the sum of resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network or more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu and Wacquant 1992, p. 119)
3. Although it is clear in the theoretical formulations that social networks are the basis for social capital, but not social capital themselves (Bourdieu 1983/1986; Lin 1982), subsequent statements have blurred the distinctions. Coleman (1988; 1990) states that "social capital inheres in the structure of relations between persons and among persons. It is lodged neither in individuals nor in physical implements of production" (1990, p. 302). Putnam (2000) equates social capital to features of social organization "such as networks, norms, and trust—that facilitate coordination and cooperation for mutual benefit." In his conceptual synthesis, Portes (1998) argues that social networks must be considered as the core of the concept. Elsewhere, Lin (1999a) has argued that a network-based theory of social capital provides the necessary theoretical foundation for a systematic development of the concepts and research programs.
4. Research programs investigate two types of expected returns: instrumental or expressive. Instrumental returns are gains of resources resulting from social relations and embedded resources, or for success and attainment in market competition; expressive returns are retention or preservation of resources, or for social solidarity. This chapter addresses instrumental returns in the labor market.
5. See, for example, Flap and Boxman's study (2001) of vocational graduates seeking their initial careers in the Netherlands, showing that social capital may be even more important than human capital as a resource in the entry into the labor market for such a labor group.
6. According to the McKinsey report (November 2004), the state and collective enterprises dominated critical and urban sectors of financial/banking, foreign trade, land development, large-scale construction projects, and the offerings on the stock market.
7. For some scholars (e.g., Putnam 2000), civil engagement or participation in voluntary associations is seen as social capital. However, from our perspective where social capital refers to embedded resources, civil engagement becomes network opportunities that may lead to greater or more diverse embedded resources (see Lin 2006).
8. The actual distribution of clusters is as follows:

Shanghai	5 clusters	95 households/respondents
Beijing	4 clusters	76 households/respondents
Chongqing	4 clusters	76 households/respondents

Tianjin	3 clusters	57 households/respondents
Wuhan	3 clusters	57 households/respondents
Shengyang	2 clusters	8 households/respondents
Guangzhou	2 clusters	38 households/respondents
Chendu	2 clusters	38 households/respondents
159 other cities	1 cluster each	19 households/respondents each.

9. The exchange rate at the time was about RMB (Chinese Yuan) $8.00 = US$1.00.
10. There are 27 provincial capitals in China. The study sample included respondents from 18 provincial capitals.
11. For each job, we asked each respondent (a) if they knew such a person, (b) the nature of their relationship with that person, (c) whether they knew that person through their spouse, (d) the sex of the person, (e) how long they had known each other (in number of years), and (f) how intimate they were to each other (very intimate, intimate, so-so, not intimate, and not at all intimate).
12. For occupational prestige, we applied the Standard International Occupational Prestige Scale constructed by Harry B. G. Ganzeboom and Donald J. Treiman (1996).
13. The variable, "political capital," was not adjusted to the time when the respondent took the current/last job, due to lack of information on the year when the respondent joined the Party.

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9   The Distribution and Return of Social Capital in Taiwan

Chih-Jou Jay Chen

INTRODUCTION

This chapter examines how social capital is distributed among individuals in a society, how it is accessed, and how and to what extent it affects status attainment. This study defines social capital as resources accessed through one's social networks. The cliché, "It's not what you know but who you know that matters" prescribes social networks as a panacea for many things, from everyday problems to securing better jobs. The nature and effects of social capital have been extensively studied in the literature in which empirical evidence was initially drawn from community studies before being extended to national samples (Lin 1999; Lin and Dumin 1986; Lin, Ensel, and Vaughn 1981; Marsden and Hurlbert 1988; De Graaf and Flap 1988).

This study is based on data from a national survey conducted in Taiwan in 2004, modifying the measurement methodology in advancing the concept of social capital, and thus contributing to this ever-growing field of study. The chapter begins with a review of social capital as a concept and theory, its conceptualization at the micro- and macrolevels, followed by its measurements and the many processes of its production and returns for individual attainment.

Social capital is in vogue in contemporary social sciences. Over the past two decades, it has come to prominence as a theoretical perspective that captures the contributions of social relations and presciently explains a wide variety of individual and collective behaviors, ranging from life chances and well-being of individuals to economic growth and political participation in societies (see reviews in Portes 1998; Woolcock 1998; Lin 1999, 2001a). Originally it was a concept that described the relational resources embedded in personal ties useful for the development of individuals in community social organizations (Jacob 1961; Loury 1977). That concept was then applied to a wide range of social phenomena, including family relations (Coleman 1988), social mobility and labor markets (Chen 2006; Lin, Ensel, and Vaughn 1981; Marsden and Hurlbert 1988), relations and performance of firms (Burt 1992), and public life in contemporary societies

Contexts of Social Capital

Social Networks in Markets,
Communities, and Families

Edited by Ray-May Hsung,
Nan Lin, and Ronald L. Breiger

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