Human Capital, Social Capital, Ethnic Capital and Employment Outcomes

Research Question

Why minorities, especially Hispanics and African Americans, seem to be less advantaged than the Whites on the labor market? Numerous writers have been addressing this question from various angles. Three of the most common explanations are: there exists some stereotype of or discrimination against a certain racial group; there is the uneven distribution of educational resources, or human capital, among different ethnic groups; and, with the growing interest in social capital research in social sciences, the quality and quantity of personal networks possessed by individuals or various ethnic groups on average also has gained lots of attention.

Past research has focused on how the first factor—say, discrimination or stereotype issue would hurt the minorities, and how the second and third factors, say, human and social capital would help individuals to land jobs. However, few works really look at how these factors work together; especially how human and social capital interact with each other. It might be interesting to ask: do these two kinds of capital act independently, additively, complementarily, or in some other ways? And how does this interaction effect, if any, influence different ethnic groups' employment possibilities, and what implications we can get from it?

Human Capital, Social Capital, and Ethnic Capital

We cannot talk about economic outcomes without referring to the concept of capital. Capital can be defined any tangible or intangible inputs that are used by individuals to produce goods and services. In this paper, I intend to look at three forms of capital, human capital, social capital, and the so-called ethnic capital, to see how they intervene or mediate the processes of labor market and how they influence the economic outcomes for different ethnic groups. Thus, it is worthwhile to briefly review the basic concepts of these forms of capital.

Marx probably is one of the earliest social theorists who systematically developed the notion of capital (1933/1849; 1995 /1867, 1885, 1894; Brewer, 1984). In his conceptualization, capital it is part of the surplus value generated and pocketed by the capitalists; on the other hand, it represents an investment (in the production and circulation of commodities) on the part of the capitalists, with expected returns in a

marketplace. Capital thus is both a product of a process and an investment process. This classical definition views capital as “circulating capital”, which circulates in the process of creating other goods or services, and includes raw materials, intermediate goods, inventories and various kinds of manufacturing facilitations.

Perhaps one of the most important developments in the economics of education in the past four decades has been the idea of “human capital”. It actually a breakthrough to extend the concept of physical capital which is embodied in productive equipments to include the knowledge and capabilities possessed by human beings (see Schultz 1961; Becker 1964). Just as physical capital is generated by changes in materials to for tools that facilitate production, human capital is created by changes in persons that bring about skills and competences that make them able to act in some productive ways (Coleman, 1988). Nowadays the most simple and popular definition of human capital is just the knowledge or skills acquired through formal education or on-the-job training.

Social capital, on the other hand, is a more broad and ambiguous concept. The first contemporary analysis of social capital can be traced to Pierre Bourdieu, who defined Social capital 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 or recognition”(Bourdieu 1986). His treatment of the concept is instrumental, focusing the benefit accruing to individuals by involving in personal relations or participation in social groups. Succeeding authors also, more or less, focus on the facilitating role of social capital, regard it beneficial to human actions, being the actions expressive or instrumental (see Coleman, 1990; Lin, 2001;Lin, Cook and Burt, 2001).

Social capital is not theoretically assumed to be beneficial to individuals’ instrumental goals, but also empirically found to be so. Researchers find it helps to explain access to employment, mobility through occupational ladders, and entrepreneurial success. Researchers also are interested in which type(s) of social relations help most in the instrumental processes. Granovetter(1974), for example, credits the success in landing jobs to weak ties, and coins the famous term “strength of weak ties” to refer to the information or indirect influences one could get outside the immediate circle of family members and close friends. Burt(1992) further elaborates this notion and develops the concept of “structural holes”, arguing that “bridge”, a specific position accrued from non- redundant networks, could benefit from this strategic network position and also can pass valuable information to their contacts. Lin’s work is also closer to this

version of social capital, but focuses more on the quality and quantity of resources that a tie contains.

Opposite to this approach, which treats social capital a resource arisen from networks with “holes”, some other researchers actually view the closure of networks as the source of benefit. For example, Coleman argues that the major reason social relations could facilitate actions is that networks, especially dense or closed social structures, usually carry high levels of obligations, expectations and trustworthiness, and thus could generate norms and effective sanctions(Coleman,1988;1990). Among the many authors devoted to the research of social capital, some of them also put more emphasis on the macro or aggregate side of social capital, such as Putnam(2000); Coleman’s perspective usually are regarded as macro oriented, too.

The micro, or individualized, concept of social capital is more appropriate for the purpose of this paper. Thus I would just define social capital as “resources linked to possession of personal networks that one can mobilize to help the instrumental goals.”

Ethnic Capital might be an even vaguer notion; various authors have different definitions. Actually, according to the classical and common definition, capital is referred as the result of investment, but in this paper, when I talk about “ethnic capital”, I would overlook this usual trait of capital and define it as “the inherent trust or advantage arising from simply belonging to a certain ethnic group”.

Gap in the Literature

Though there are tons of studies on human capital and social capital and there are also some works on the effect of either form of capital on minorities’ economic outcomes, few researches ever looked at the interaction relationship between human and social capital and its implication for racial inequality in the labor market. Actually, most studies in social sciences tend to treat the two forms of capital as competing models; even if they do look at both forms of capital at the same time, many of them either treat both as two of the “background factors” that may influence individuals’ outcomes, or, see one form of capital as the effect or the result of the other, focusing on the causation between human and social capital.

For example, Economist Loury argues that one’s investment in productive skills depends on one’s position in the social structure, due to imperfect capital markets for educational loans, social externalities mediated by residential location and peer associations, and psychological processes that shape a person’s outlook on life. As a

result, familial and communal resources—that is, a form of social capital—explicitly influence a person's acquisition of human capital. Some important part of racial inequality, in this view, is seen to arise from the way that social segregation along racial lines makes an individual's opportunities to acquire skills depend on previous and contemporaneous skill attainments by others in the same social group (1977,1998). Therefore, according to his argument, for minorities, inferior social capital is more or less inherited from the previous generation, and thus is a product of "negative ethnic capital"; moreover, the inferior social capital would affect the individuals' acquisition of human capital, and this inequality in accumulation of human capital would further induce racial inequalities.

Loury's observation indeed has important theoretical implications, especially when most mainstream economists tend to play down the role of social capital and other social structural factors. However, he only considers the causal relationship between ethnicity, social and human capital, and he believes that the poor human capital of minorities is from their (or their parent's) poor social capital. This perspective is doubtless true, but I believe that it is still not the full story. Similarly, Coleman treats human capital as one possible result of the mediating function of social capital; that is, social capital can step in the process of creation of human capital, and different amount or quality of social capital could result in different educational outcomes. So for Coleman, human capital can be, at least part of, the result of the operation of social capital.

However, this paper suspects that, besides competition, causation or pure complementation, there are some other relationships existing between human and social capital, and one possibility is a trade-off relationship. The basic argument is pretty straightforward. That is, almost all people are equipped with some form of human and social capital; when looking for jobs, individuals tend to maximize their benefit by making some combination of their "capital portfolio", that is, to utilize different amount of capital of each forms based on their endowment. For different people, employing different forms or amount of capital would generate different levels of benefit, because of the difference in quality and quantity of capital portfolio. This notion is kind of comparable to the so-called "comparative advantage"—when the opportunity cost of producing commodity A is lower for an entity than producing B, then it is more beneficial to both the entity and to the society as a whole if the entity specializes in producing A. Likewise, individuals tend to substitute one form of capital for another if there is obvious difference in the amount or quality between two forms of capital. So I would hypothesis that, for different people with different

endowments, the relative pay-off to utilizing either form of capital would be different. And since capital itself is a notion related to accumulation and reproduction, I would further suspect that, the relative return in investment in either form of capital would also be different for various people, depending on the portfolio that a person already has.

Also, since members of different ethnic groups usually posses different amount of capital, or at least have different opportunities during the process of capital formations, this paper also speculates that the trade-off relationship between human and social capital, if any, would have different implications for different ethnic groups.

Based on the above discussions, I derive several hypotheses:
H1: Minorities, on average, have less human and social capital than Whites do.

H2: Both human and social capital can somewhat compensate the ethnic disadvantage for minorities in terms of employment outcomes; that is, given the same level of human and social capital, the disparities in employment rate and average earnings among different ethnic groups would be significantly reduced.

H3: For people with different levels of human capital and social capital, the relative returns of investing in or mobilizing these two forms of capital would be different. That is, if a person has lower amount in either form of capital, then the relative pay-off of investing in another form of capital would be higher, compared to his or her counterpart who does not have the discrepancy in two forms of capital.

Data and Methods

Data Source

The Los Angeles Study of Urban Inequality serves the need of this paper better than other widely available surveys such as the U.S. Census or the Current Population Survey (CPS), because it contains some valuable information regarding personal network characteristics which are not available in CPS. LASUI actually is part of a more extensive survey project, Multi-City Study of Urban Inequality, 1992-1994. The original survey covers four metropolitan areas: Atlanta, Boston, Detroit, and Los Angeles. But for the purpose of looking at the economic outcomes of various ethnic groups, this paper only utilizes the LA survey, because Los Angeles not only boasts a motley of ethnic groups, but also posses a highly diversified labor market; these unique characteristics make it especially suit my goal.

Methods

Two sets of model are employed in this paper, to get a fuller picture of the relationship between various forms of capital and employment outcomes. First, I use logistic regression to see how different forms of capital would affect people's chances to get a job. So the dependent variable of this model is employment status, that is, whether a person is employment or not.

Besides employment status, income is another common measure of economic outcome. Therefore, I construct the second model, where the dependent variable is the logarithm of hourly wage. The reason to use hourly wage instead of yearly earnings is that the former controls for the issue of working hours at the same time, and thus is regarded as a more precise way to measure the return to investment.

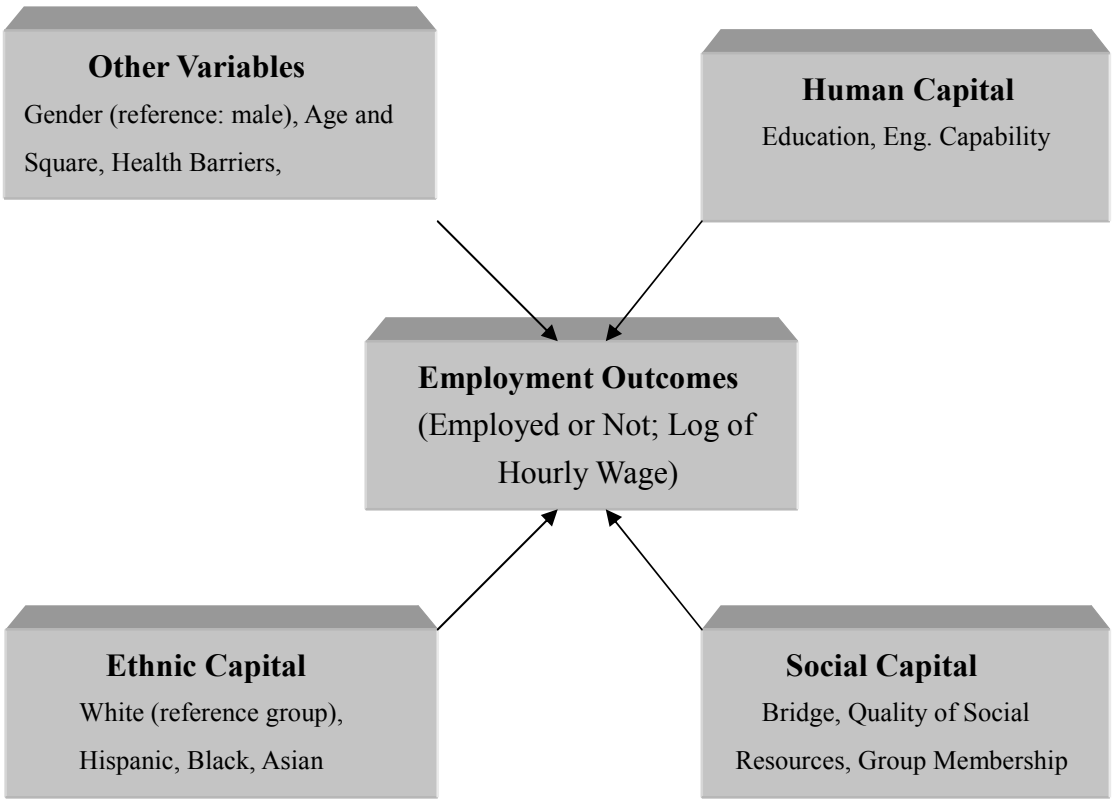
Measures of Human and Social Capital

I measure human capital in two ways: educational achievement, which is a typical measure of human capital, and English proficiency, which is especially important to be included here because of the ethnically diversified characteristic of the LA area. The educational achievement used in this paper is a zero-to-four scale, where zero stands for "less than high school", one refers to "high school", two is "junior college", three means "bachelor", and four represents "graduate school".

I construct three measures for social capital: bridge, quality of social resources, and group membership. Bridge, or weak tie, is a dummy variable defined as "having at least one contact in one's personal network who is not the respondent's family member, relative or close friend", and the reference category is "not having bridge". The notion of this measure is from Granovetter and Burt's argument, that weak ties are more helpful in passing non-redundant information.

Quality of social resources is a variable composed of two components: contacts' educational level, and contacts' working status. The former is defined as "the number of contacts who have received at least some college education", and the latter is "number of contacts who have steady job". The crobach's alpha for these two variables is higher than .6, so I combined these two into one measure, and this is a zero-to-six scale. The third measure of social capital, group membership, is defined as "the level of respondent's participation in social groups or organizations", and this is a zero-to-seven scale. The models and corresponding variables are illustrated in following diagram.

Employment Status Model



Descriptive Statistics and Bivariate Relationships

(1) A Brief Profile

The basic descriptive statistics for the sample are summarized in table 1. Among all valid cases, 32.3% respondents report their ethnicity origin as Hispanics; 25.8% are Blacks; 22% are non-Hispanic Whites, and 19.9% are Asians. Since American Indian and other ethnicity are relative minority here, I would not include them in the following analysis.

There are 51.2% female respondents in my sample, the average age is 37.8. The average wage for all respondents is 13.2, and average educational level is 1.49, which means that the mean level of education is somewhere between high school and junior college. Also, there are 12.4% people have some form of health barrier or physical disability, and 9.1% have previous involvement with criminal justice system. The proportion of employed is almost eighty percent. This paper uses a different measure of employment status: "employed" is defined as people who are either working full-time, part-time, or just temporarily laid off or on maternity leave, while people who indicate that they are either unemployed, homemaker or permanently disabled

are categorized as "unemployed", regardless of whether they are currently looking for job or not.

Table 1 Demographic Characteristics

Variable	Proportion of N	Mean Value
White	22.0%	
Hispanic	32.3%	
Black	25.8%	
Asian	19.9%	
Female	51.2%	
With Health Barrier	12.4%	
Criminal Records	9.1%	
Employed	79.4%	
Age		37.8
Hourly Wage		13.2
Educational Level (0-4 scale)		1.49
Sample size: 2483		

(2) Distribution of Human Capital, Social Capital and Employment Outcomes for Various Ethnic Groups

As table 2 shows, Asians and Whites have the highest educational achievements, while Hispanics have the lowest. One-way ANOVA test reveals that there is no significant between Whites and Asians, in terms of education, but these two groups indeed have significantly higher educational level than other two ethnic groups do. Also, when looking at mean hourly wage, there is no significant difference between Asians and Whites, but Blacks and Hispanics' wages are significantly lower than the former two groups'. When it comes to employment rate, Asians enjoy the highest employment rate, and it follows Whites and Hispanics, while Blacks are the most disadvantaged in terms of proportion of employed.

As for social capital measures, Whites enjoy the highest social capital, on all three measures, than any other ethnic group does, as summarized in table 3; this is true even after we control for educational level. That is, within every educational level, Whites has more and better social capital than other ethnic groups do.

Table 2 Average Educational level, Hourly Wage and Proportion Employed, for Four Major Ethnic Groups

	White	Hispanic	Black	Asian

Mean Education	2.08	0.72	1.42	2.15
Mean Wage	18.12	8.41	11.59	17.72
% Employed	82.12%	77.79%	70.71%	90.08%

Table 3 Social Capital Measures for Four Major Ethnic Groups

	Quality of Social Resources (0-6 scale)	**Group Membership (0-7 scale)**	**Bridge (0 or 1)**
White	**3.07*** **	**1.7*** **	**30%*** **
Hispanic	**1.49**	**.81**	**13.15%** **
Black	**1.9***	**1.22** **	**16%**
Asian	**1.61**	**.84**	**6.4%** **

Asterisk: at least greater than one other cell; *p<.1, **p<.05, ***p<.001

Results from the Employment Status Model

(1) Logistic Regression Results

I slit the employment status model into three sub-models. The first model only includes racial variables; that is, Hispanic, Black and Asian, where Whites is the reference group. In this step, both Hispanic and Black have significant negative effect on the probability of being employed.

And then I put some common demographic variables, such as age and gender, as well as barrier variables. Now, not only the effect of all three ethnic variables turns out to be negative, but the magnitude is also enlarged. This probably means that, ignoring human and social capital, Whites indeed enjoy some positive "ethnic capital". But, in the third model, I further include human capital and social capital measures; among them, educational achievement, bridge, social resources and group membership are all significantly positive. It's noteworthy that the negative effect of ethnicity disappears. That is, after controlling for education and social capital variables, being a Hispanic or Asian actually helps the probability of being employed. These results are summarized in table 4.

Table 4 Logistic Regression Results

Variables	**Model 1**	**Model 2**	**Model 3**
Hispanic	**-.272 (.761)** **	**-.595 (.552)*** **	**.527 (1.69)*** **
Black	**-.673 (.510)*** **	**-.508 (.601)*** **	**-------**

Asian	**-------**	**-.234 (,792)***	**.389 (1.476)****
Age		**-.045 (1.05)*****	**.034 (1.035)***
Age Square		**-.001 (.999)*****	**-------**
Female		**-1.42 (.242)*****	**-1.40 (.246)*****
Health		**-1.53 (.217)*****	**-1.49 (.225)*****
Criminal		**-1.26 (.283)*****	**-1.06 (.345)*****
English			**-------**
High School			**.798 (2.222)*****
J. College			**1.31 (3.695)*****
Bachelor			**1.29 (3.622)*****
Grad School			**1.21 (3.365)*****
Bridge			**.456 (1.578)*****
Resource			**.157 (1.169)*****
Membership			**.098 (1.103)*****
-2 Log Likelihood	**3964.634**	**3443.352**	**3188.695**

*** p<.001, **p<.05, *p<.1

(2) Effects of Human Capital and Social Capital on Employment Status

As table 4 shows, having a high school diploma would increase the odds ratio of being employed by 222.2%; going to junior college would enhance this odds ratio by 369.5%, compared to not completing high school education. If a respondent has a bridge in his or her personal network, the likelihood of being hired would be increased by 157.8%; possessing good social resources, 116.9%; participating in some form of social organizations, 110.3%.

For a White male who is 37.8 years old and has mean values on all characteristics, the probability of being employed is about.88. However, the effects of human and social capital actually are different for different groups of people.

For a typical person, if his educational level moves from “less than high school” to “junior high school”, then the probability of being employed would be enhanced by .18, from .74 to .92. But for a person who has inferior social capital (the quantity and quality of social capital falls in the lower quartile), the improvement in probability is going to be .24 (from.63 to .87), which is higher than that for a typical person. As for a person with previous involvement with criminal justice system, the increase in employment probability given the same amount of improvement in education is .30, and for those with health barrier, this increase in probability is .33, which is even huger.

We can observe similar pattern for the effect of social capital. For a typical person, if everything being equal except that his social capital is enhanced from the lower to the upper quartile, then his chance of being employed will be raised from .80 to .92, so it is a .12 improvement in probability. But, for a person with poor human capital (did not complete high school education), the probability will be increased by .24, from .63 to .87; this actually is twice of that for people who have average educational achievements.

Therefore, the relative pay-off due to the improvement in any kind of capital would be higher for people who do not have superior capital in both forms. That is, the marginal utility arises from the improvement in both human and social capital would be much higher for those disadvantaged people. The differences in effects of human and social capital on employment probability for different groups of people are summarized in appendix.

Hourly Wage OSL Model Results

I also split my second set of model into four sub-models. In the first step, only racial variables are included; in the second stage, other demographic variables are introduced. And then, human and social capital variables step into the model. At last, I add some interaction terms in my model, to see if there is any interaction between ethnicity and different forms of capital.

When only racial variables are included, all three ethnic groups are significantly disadvantaged in terms of hourly wage, compared to Whites. In the second sub-model, Hispanics and Blacks still get lower pay than whites do, but the gap was reduced. In the third model, both human and part of my social capital measures are significant; English capability, Education, group membership and quality of social resources all have positive effect on earnings.

After added the interaction terms (interaction between human capital and ethnicity, as well as interaction between social capital and ethnicity), the negative effect of "Hispanic" disappears, and the only significant racial variable is Black. It noteworthy and probably a little bit surprising that, there are positive interactions between racial variables and human capital, but negative interactions between ethnic variables and social capital. These results reveal that, the return to social capital is greater for Whites than for minorities, while the relative pay-off to human capital is more substantial for minorities, especially Blacks and Asians. The coefficients for these

four sub-models can be seen in table 5.

Table 5 Log Hourly Wage OLS Model

Variables	Model 1	Model 2	Model 3	Model 4
Hispanic	**-.655*** **	**-.108***	**-.138****	**------**
Black	**-.352*** **	**-.107*** **	**-.147****	**-.232**
Asian	**-.126*** **	**------**	**------**	**------**
Age		**.025*** **	**.023*** **	**.022*** **
Age Square		**.000*** **	**.000*** **	**.000*** **
Sex= Female		**-.208*** **	**-.216*** **	**-.217*** **
English Fluency		**.341*** **	**.313*** **	**.333*** **
Education (0-4)		**.175*** **	**.149*** **	**.111*** **
Health Limits		**-.079****	**-.073****	**-.075****
Criminal		**-.085***	**-.075***	
Membership			**.042*** **	**.053*** **
Bridge			**------**	**.066*** **
Social Resource			**.021*** **	**.035*** **
Edu*Hisp				**------**
Edu*Black				**.111*** **
Edu*Asian				**.059***
S Capital*Hisp				**-.096****
S Capital*Black				**-.107****
S Capital*Asian				**-.105****
R Square	**.134*** **	**.325*** **	**.338*** **	**.344*** **

***p<.001, **p<.05, p<.1

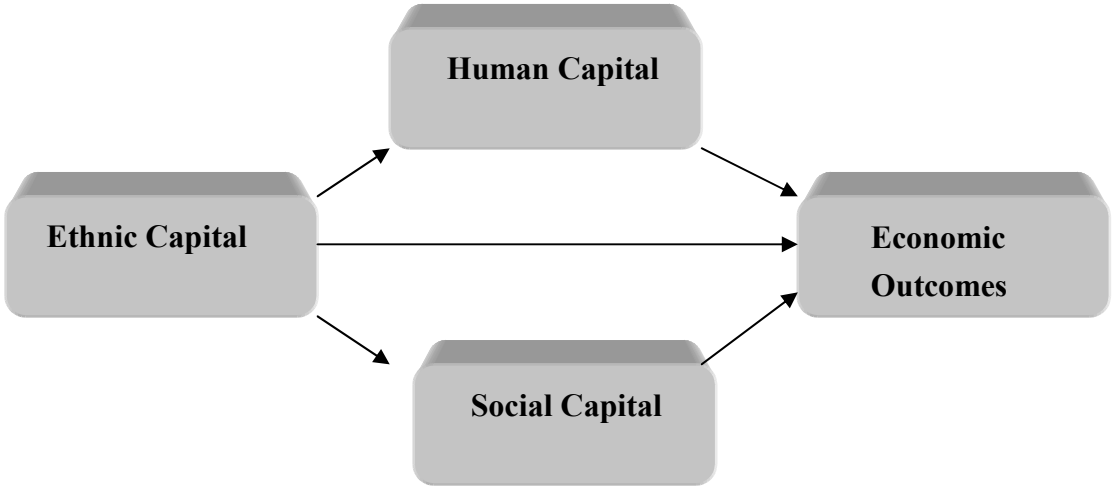
Conclusions and Discussions

The basic descriptive statistics show that, on average, Hispanics and Blacks have lower level of human capital than Whites do; though Asians have slightly higher educational level than Whites do, the difference is not statistically significant. As for social capital, Whites have much higher level of social capital on all three measures, and this is true even after controlling for education. So ethnic capital is truly related to

the generation of other two forms of capital, which is in line with my first hypothesis.

The second hypothesis is also supported by the data. Both sets of models show that, human capital and social capital indeed are beneficial for employment outcomes, and could help to reduce inequality in labor market. That is, both forms of capital could mediate the effects brought about by ethnic capital, and the disadvantage faced by minorities in the labor market could at least be reduced to a lower degree if their human and social capital being improved; the probability of being employed would be either equal to or higher than that for Whites, and the earnings gap between Whites and other ethnic groups would also be decreased a lot.

The simplified form of the whole process is shown in the following diagram.



However, the effect of these two forms of capital is different for different groups of people. From the first set of models, we can see that the marginal benefit for improvement in either form of capital is greater for people who do not have superior capital in both forms. And, in reality, these disadvantaged people usually are the minorities, especially Hispanics and Blacks. They often have less human capital, poorer health condition, greater chances to get involved in criminal justice system and less access to good social resources.

Actually, poorly- educated minorities are usually even worse off than Whites with the same amount of education, because, as we already seen, Whites enjoy much better social capital than other ethnic groups do, even after controlling for education. This means that even if Whites fail to get higher education, they still have at least one form

of capital to draw on. Therefore, we could conclude that ensuring minorities getting satisfactory education would be extremely important, especially if we want to eliminate inequality in labor markets.

Also, from the second set of models, we can see that there positive interactions between education and ethnic variables (to be precise, Black and Asian); however, the interactions between social capital and racial variables are significantly negative. This probably means that, for minorities, the pay-off arising from extra investment in human capital would yield higher returns than in social capital.

This conclusion seems to be counter to most of the previous research; we should be cautious about how to interpret these results, however. Studies in ethnic entrepreneurship have found that norms, trust and obligations accrued to social networks among immigrants are helpful to their economic success, especially for the creation of small business. Light, for example, emphasizes the importance of rotating credit associations (RCAs) for the capitalization of Asian immigrant firms in the U.S (Light 1984; Light and Bonacich 1988). Many studies of ethnic enclaves and ethnic niches also put lots of emphasis on the role of social networks, arguing that the co-ethnic nature of the work relationship has created an unique niche for immigrant workers. We should notice that, though the argument that social networks among minorities could be an asset for them has been supported by many studies, there also exists lots of counter evidence. For example, some authors have warned that social capital do not come with cost (see Portes, 1993; 1998); some research also have found that jobs created by ethnic economy may not be "niche" at all; their pay-offs usually are worse than those comparable jobs in the secondary labor market(Hum, 2000).

Therefore, the role of social capital for minorities or immigrant workers is still ambiguous; it may bring economic security and prosperity for minorities but also may produce some unexpected side effects. This paper has no intention to downplay the importance of social capital for minorities (it actually helps their employment outcomes, according to my models) But anyhow, we indeed find significant negative interactions between social capital and ethnic variables in the earnings model; at the same time, there are positive interaction effects between education and racial variables. Perhaps these results just tell us that, though utilizing social capital would help minorities to land a job, it not necessary be a decent job. To get a "better" job with higher pay, minorities might be better off if they invest more on the human capital; for the government, the implication is that, the best way to minimize the income gap probably is to improve the quality and quantity of education for

minorities.

These findings not only confirm my third hypothesis, but also have some implications for public resources allocations. If attaining full-employment is a desirable goal, then it obviously is worthwhile to extend more resources to enhance minorities' educational level or to facilitate the vocational training offered for minority communities. Actually, sparing more resources on minorities would better the whole social welfare level; because, as illustrated in earlier paragraphs, we can produce greater marginal benefit from spending the same amount of money on minorities than on Whites. Therefore, ensuring minorities receiving decent education is not just a moral claim for justice; it is, in fact, more economic efficient.

Appendix: Tables of Simulated Results

Table A.1 Simulated Effects of Change in Education

	Little	**J College**	**Difference**
Typical Person	.74	.92	**.18**
Less Social Capital	.63	.87	**.24**
Criminal Records	.50	.80	**.30**
Disability	.38	.71	**.33**

Table A.2 Simulated Effects of Change in Social Capital:

	Lower Q	**Upper Q**	**Difference**
Typical Person	.80	.92	**.12**
Low Education	.63	.87	**.21**
Criminal Records	.59	.81	**.23**
Disability	.47	.73	**.26**

Table A.3 Relative Pay-off from improvement in education

Little Social Capital	33% higher
Disability	83% higher

Table A.4 Relative Pay-off from improvement in Social Capital

Little Human Capital	75% higher
Disability	117% higher

REFERENCES

Becker, G.ary. 1962. *The Economics of Discrimination.* Chicago, IL: The University of Chicago Press

_____. 1964. *Human Capital.* New York, NY: National Bureau of Economic Research.

Bourdieu, Peirre. 1986. "The forms of Capital." Pp.241-258 in John Richardson, ed., *Handbook of Theory and Research for the Sociology of Education*, Westport, CT: Greenwood Press

Coleman, James.1986. "Social Theory, Social Research, and a Theory of Action." *American Journal of Sociology*, 91:1309-35

_____.1988. Social Capital in the Creation of Human Capital." *American Journal of Sociology*, 94:S95-S120

_____.1990. *Foundations of Social Theory.* Cambridge, MA: Harvard University Press.

Farley, Reynolds. 1984. *Blacks and Whites: Narrowing the Gap?* Cambridge, MA: Harvard University Press

Huffman, Matt, and Lisa Torres. 2001. "Job Search Methods: Consequences for Gender-Based Earnings Inequality." *Journal of Vocational Behavior* 58:127-41

Hum, Tarry. 2000. "A Protected Niche? Immigrant Ethnic Economies and Labor Market Segmentation." Pp.279-314 in Lawrence Bobo, Melvin Oliver, James Johnson, and Abel Valenzuela, ed., *Prismatic Metropolis: Inequality in Los Angeles.* New York, NY: Russell Sage

Johnson, James, Elisa J. Bienenstock, Walter Farrell, and Jennifer Glanville. 2000."Bridging Social Networks and Female Labor Force Participation in a Multiethnic Metropolis" Pp.383-416 in Lawrence Bobo, Melvin Oliver, James Johnson, and Abel Valenzuela, ed., *Prismatic Metropolis: Inequality in Los Angeles.* New York, NY: Russell Sage

Lichter, Michael, and Melvin Oliver. 2000. "Racial Differences in Labor Force Participation and Long-Term Joblessness Among Less-Educated Men." Pp.220-248 in Lawrence Bobo, Melvin Oliver, James Johnson, and Abel Valenzuela, ed., *Prismatic Metropolis: Inequality in Los Angeles.* New York, NY: Russell Sage

Light, Ivan. 1984. "Immigrant and Ethnic Enterprise in North America." *Ethnic and Racial Studies* 7:195-216

Light, Ivan, and Bonacich Enda. 1988. *Immigrant Entrepreneurs : Koreas in Los Angeles 1965-1982*. Berkeley, CA: University of California Press

Lin, Nan. 2001. *Social Capital: A Theory of Social Structure and Action.* Cambridge, MA: University Press

Lin, Nan, Karen Cook and Ronald Burt, ed. 2001. *Social Capital Theory and Research.* Aldine de Gruyter.

Loury, Glenn. 1977. "A Dynamic Theory of Racial Income Differences." Pp. 153-86 in P.A. Wallace and A. Lamond, ed., *Women, Minorities and Employment Discrimination*edited. Lexington, MA: Lexington Books

Loury, Glenn. 1981. "Intergenerational Transfers and the Distribution of Earnings." *Econometrica* 49 (4): 843-67

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *American Review of Sociology* 24:1-24

_____. 1995. *The Economic Sociology of Immigration.* New York, NY: Russell Sage

Portes, Alejandro, and Julia Sensenbrenner. 1993. "Embeddedness and Immigration: Notes on the Social Determinants of Economic Action." *The American Journal of Sociology* 98(6):1320-50

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Revival of American Community.* New York, NY: Simon and Schuster.

Schultz, Theodore. 1961. "Investment in Human Capital." *American Economic Review 51* (March): 1-17