

A note on the relation between social capital and migration decision about temporal migrant workers

Kakuya MATSUSHIMA¹ and Gunawan PRAYITNO²

¹Member of JSCE, Associate Professor, Dept. of Urban Management, Graduate School of Eng., Kyoto University
(Kyotodaigakukatsura, Nishikyoku, Kyoto, 615-8540, Japan)
E-mail:matsushima.kakuya.7u@kyoto-u.ac.jp

²Member of JSCE, Department of Regional and Urban Planning, Faculty of Engineering, Brawijaya University
(Veteran Street, Malang postal code 65145, East Java, Indonesia)
E-mail: gunawan_uin93@yahoo.com

Income from temporal migrant workers contributes much to households in rural area in developing countries. On the other hand, lack of labor force due to migrant workers has impact on other household members and community there. Two hypothesis came out to investigate the relation between social capital and number of temporal migrant workers. The first hypothesis is that communities and households with higher social capital can afford without migration workers even though they have comparatively lower income. The second hypothesis is on the other hand, that communities and households with higher social capital are afforded to send their members as migrant workers. This is in line with some research on social capital and migration where is found that social ties among community member and trust caused the migration increase. In this paper, an over-lapping generation model is formulated in order to show that either hypothesis is appropriate.

Key Words : social capital, temporal migrant, over-lapping generation model

1. INTRODUCTION

The literature on social capital, which has grown exponentially during recent years, reveals an imbalance between the volume of publications and the relative lack of progress in measuring the concept. Using “social capital” as a key word in Google Scholar now suggests over 3,430,000 articles or documents containing the phrase. Given the quantitative tradition of Economics, this contrast is even more striking, as economists have not so far made any significant methodological contributions to the measurement of social capital.

Social capital is a wide concept, and hence it can be represented by a wide variety of proxies or theoretical representations (Sequeira and Lopes, 2011). So, it can have different impacts on the economy. The concept of social capital brings to the economic literature influences of both sociology and political science. It can be defined as a characteristic embedded in a given society, as in Putnam et al. (1993): “social capital . . . refers to features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions.” Further work on this type of social capital is

included; for example, in the already vast literature on the effects of social networks, modeled as an asset in economics. Contrary to this definition, social capital has been studied as a characteristic of the individual that also contributes to the evolution of the society, as in the work of Glaeser et al. (2002) and Fang and Loury (2004, 2005). The social capital at the individual level can be defined as the social attributes of the individual, such as social skills and belonging to social networks.

As one of the potential sources of growth in economy, social capital in most of the literature are centered on the empirical level. One of the empirical evidence, it is shown in the World Values Survey. This survey covers 29 market economies and is based on the construction of a measure of trust. The World Bank (2006) also defines trust as a measure of social capital, as well as the ability of people to work together to achieve common goals. The World Bank uses social capital as one of several types of capital, which it uses to calculate intangible capital. It also studies the relationship between the different types of capital (among them social capital) and economic growth. Among other studies, Knack and Keefer (1997) establish a causal relationship between trust

and growth, but do not find a very robust association. Temple and Johnson (1998) use several measures of social capital and compose an index, finding those measures useful for predicting economic growth. Most followers in empirical studies estimate a robust relationship between social capital and growth (Beugelsdijk et al. 2004; Rupasinga 2000; and Whiteley 2000) but with a wide interval of point estimates. Empirical studies also have focused on the interaction between social capital and income, such as Fukuyama (1995), Narayan and Pritchett (1999), Putnam et al. (1993), and Robison and Siles (1999), also using the definition of social capital at the aggregate level.

However, some literatures to date have addressed the contribution of social capital in economic growth in the theoretical framework. Social capital in these literatures, modeled on individual and aggregate levels. One example is Growiec and Growiec (2012) found that the ease of forming new interpersonal contacts (that is, bridging social capital) is proportional to the pool of contacts one already has and the pool of people with whom one is not yet acquainted but might consider being. The size of this pool is in turn determined by the total number of people in the society and, most importantly, by the level of social trust. Bartolini and Bonatti (2008), using an endogenous growth model, found a negative correlation between the expansions of market related activities and social capital, and in their model economic growth and social capital have a negative relationship. Moreover, this model accounts for the fact found by Putnam (2000), according to which social capital has been declining in the US, although the country has been growing. However, most other previous works modeled social capital as an accumulable asset that contributes to production (that is Bisin and Guaitoli 2006; Glaeser et al. 2002). Antoci et al. (2007, 2009) modeled a negative relation between the stock of social capital and economic growth, since time dedicated to market activities steals time away from social related activities, i.e. decreasing the amount of time people dedicate to invest in social capital.

A less developed issues, but still very important is the interaction between human capital and social capital in economic growth. Where the dimensions of social capital used in these studies is usually at the individual level. Glaeser et al. (2002) found a strong empirical relationship between human capital and membership of a given social organization (the proxy used to measure social capital). Glaeser and Redlick 2009, presented a theoretical framework for the analysis of the determinants of social capital. This starts from the analysis of both consideration on how social capital is formed using a model of optimal individual

investment decisions and the social capital accumulation process.

We are considering between the relation of social and human capital in the migration decision model. This is the main focus of our study, and it is still scarce in the theoretical literature: to our knowledge, this has only been done in the working paper of Bisin and Guaitoli (2006) in an overlapping generations (OLG) framework, working paper of Gentili and Ferreti (2012) and working paper of Agénor and Dinh (2013). In Bisin and Guaitoli (2006), they are concerned with the different roles that human and social capital have in rural and urban societies. Agénor and Dinh (2013) are study the links between social capital, human capital, and product imitation (or implementation innovation), in an overlapping generations (OLG). Gentili and Ferreti (2012), explains dynamic migration with a particular focus on the accumulation process that causes a variation in the distribution of income in OLG model.

Our contribution follows these empirical and theoretical references in considering both social and human capital in the decision choices (migrate or stay) as a single theoretical framework. Our analysis is different with Gentili and Ferreti (2012) because we didn't not use dynamic migration model. The different with Agénor and Dinh (2013) that human capital is produced using human capital allocated to the education sector and the total amount of social capital, we follow Bisin and Guaitoli (2006) that the growth of human capital can be accompanied by a loss of social capital or otherwise. Our approach stresses the economic aspect in two senses: first, by modeling social capital as a result of an investment process or accumulation among individuals, which responds to the logic of maximizing individuals' expected utility; and second, by considering that economic relationships are fundamental to generate social capital in economies theory maximization they will decided between migrate or stay.

2. THE MODEL

We develop a model in overlapping generation model to explain the interaction between agents and how it related to their decision either migrate or stay.

(1) Assumptions

Consider an economy where 3 agents live. Each agent live for 3 periods where each her period is called as a young generation, adult generation, and old generation. As only one agent is born in each period, we consider and overlapping generations model with 3 agents and 3 periods.

(2) Agents' behavior

Every agent in the economy invest their time resource to either human capital formulation or social capital formation in order to maximize her (expected) utility. Her utility consists from sub-utility gained from social capital in a region where she lives, and that from goods consumption with wages while she works. We assume that she can work only in adult generation. We also assume that human capital investment has positive influence to her wage. Human capital accumulation is described as follows.

$$h_{t+1} = \delta h_t + I_{t+1}^h \quad (1)$$

where h_t is human capital at period t ($t = 0, \dots, \infty$), δ is the discount rate, and I_t^h is human capital investment at period t . As all agents live for 3 generations, h_t can be rewritten as h_t ($t = Y, A, O$), where Y, A, O indicates each generation. She has chance to work either in home (H) or foreign (F) country, and she may get her salary either as $\omega^H(h_Y)$ or $\omega^F(h_Y)$. Wages in adult generation are based upon the investment to her human capital in young generation, and $\partial \omega^H(h_Y) / \partial h_Y > 0$ ($i = H, F$) is assumed. We also assume that each agent has initial endowment h_{Y0} for her human capital. Her utility function can be written as follows.

$$U_t = u_1(c_t) + u_2(SC_t) \quad (t = Y, A, O) \quad (2)$$

Her utility function U_t consists from the sub-utility from consumption $u_1(c_t)$ and that from social capital $u_2(SC_t)$. c_t is the amount of consumption in t generation, and SC_t is the level of social capital in the region where she lives. Social capital in the region SC_t is formulated by the contribution of social capital investment from each agent. As the economy consists from 3 agents with each generation Y, A, O , we define the level of social capital at period t as follows.

$$SC_t = \{SC_Y * SC_A * SC_O\}^\alpha \quad (3)$$

$\alpha \geq 1$ shows the intensity of social tie in the region. As agents with three different generation are always in the region for each period, the subscription t will be removed from now and the level of social capital in the region is written as $SC \forall t$. SC_Y, SC_A, SC_O indicate contribution from an agent of each generation, respectively. Social capital is accumulated with investment by each agent. Investment by each agent will be accumulated for every period and its accumulation process is written as follows.

$$SC_{t+1} = \delta SC_t + I_{t+1}^s \quad (4)$$

I_t^s is social capital investment at period t . We also assume that each agent has social endowment SC_{Y0} . In each period, every agent decides to allocate his time resource either for human capital investment or social capital investment. Assume that she has 1 endowment as time resource, and she decide to allocate time e_t for social capital investment, and $1 - e_t$ for human capital investment, where $0 \leq e_t \leq 1$, ($t = Y, A, O$). As a result, both human capital investment and social capital investment are function of e_t ;

$I_t(e_t)$ and $SC_t(e_t)$.

Let us start to define agents' behavior in old generation. Agents in old generation do not have any chance to work. Her behavior is described as the following formulation.

$$\max_{e_o} U_o = u_1(c_o) + u_2(SC) \quad (5)$$

$$\text{subject to } Y_o = p * c_o \quad (6)$$

Y_o is her income in old generation and p is the price for the single good which is normalized as $p = 1$. She decides her time allocation about capital investment with her budget constraint. By solving this optimization problem, indirect utility function $V_o(e_o^*)$ is derived. As we do not allow any transfer to other agents after she dies, she do not have any incentive to invest in human capital in old generation, $e_o = 1$. Hereafter * indicates the optimized result.

In adult generation, she has a chance to migrate to work in foreign countries. She can work with higher wage when she works in foreign country. We define the wage as ω^k ($k = H, F$), where H is home country and F is foreign country. Without loss of generality, $\omega^H < \omega^F$. When she decides to work in the foreign country, her expected utility is expressed as follows.

$$EU_A^F = u_1(c_A) + u_2(SC^F) + \delta V_o \quad (7)$$

She maximize the utility above with the budget constraint $Y_A = c_A + s_A$, where s_A shows saving for adult generation. Obviously she does not have any incentive to save her money for next generation because consumption in earlier generation brings about higher utility if the amount of consumption is the same; $s_A = 0$. As a result,

$$Y_A = \omega^F = c_A \quad (8)$$

By maximizing the expected utility function (7) with her budget constraint (8), the indirect utility EV_A^F can be calculated.

In the same manner, the utility maximization problem of agents who decides to stay in her home country is described as,

$$\max EU_A^H = u_1(c_A) + u_2(SC^H) + \delta V_o \quad (9)$$

$$\text{subject to } Y_A = \omega^H = c_A \quad (10)$$

Sub-utility from social capital in home country might be higher than that in the foreign country, because she had invested to social capital in her home country and social network in her home country is higher than that in the foreign country. To make the discussion simple, we assume that $SC^F = 0$ and remove the superscription H from SC^H . By solving the problem above, indirect utility EV_A^F is derived. As human capital investment in adult generation does not have any effect to her age, $e_A^* = 1$. As a result, her optimal decision is to migrate when $EV_A^F \geq EV_A^H$, and to stay in her home country when $EV_A^F < EV_A^H$.

In young generation, she has no income yet as it is not allowed to work in young generation, so $c_Y = 0$.

The investment to her human capital has positive effect to her wage in adult generation, while the investment to social capital has positive effect to social capital in the region. She will decide her time allocation in young generation by considering the balance. Her behavior in adult generation is written as follows.

$$\max_{e_Y} EU_Y = u_2(SC) + \max [EU_A^F, EU_A^H] \quad (11)$$

(3) Equilibrium

Instantaneous utility both in young and old generation is common either for migrant workers who go to the foreign country in adult generation and those who stay their home country. As a result, she decide her time allocation in young generation e_Y and whether to migrate or not by comparing following expected utility.

$$\hat{EU}_A^F = u_1(\omega^F(e_Y)) \quad (12a)$$

$$\hat{EU}_A^H = u_1(\omega^H(e_Y)) + u_1(SC) \quad (12b)$$

In order to make the discussion simple, following assumptions are set.

$$I_t(e_t) = 1 - e_t \quad (13a)$$

$$SC_t(e_t) = e_t \quad (13b)$$

$$u_1(c) = c \quad (13c)$$

$$u_2(SC) = SC \quad (13d)$$

Let us define new functions as follows.

$$g(e_Y) = SC(e_Y) \quad (14a)$$

$$f(e_Y) = \omega^F(e_Y) - \omega^H(e_Y) \quad (14b)$$

$g(\cdot)$ is the monotonically increasing function from the definition of social capital function (3). $\omega^i(\cdot)$ ($i = F, H$) is monotonically decreasing function from the definition of wages function. In addition, we assume that $\partial f(e_Y)/\partial e_Y < 0$. This assumption shows that the marginal effect of human capital investment to the wage is higher for her wage in foreign country than that in home country. The function of $g(e_Y)$ is monotonic increasing function, where is $\left. \frac{\partial SC}{\partial e_Y} \right|_{0-1} > 0$, or $\frac{\partial g(e_Y)}{\partial e_Y} > 0, (0 \leq e_Y \leq 1)$.

[Case 1] $f(0) < g(0)$

In this case, $g(\cdot)$ is always larger than $f(\cdot)$ for any $0 \leq e_Y \leq 1$. All agents stay their home country and $e_Y^* = 1$.

[Case 2] $f(1) > g(1)$

$f(\cdot)$ is always larger than $g(\cdot)$ for any $0 \leq e_Y \leq 1$. All agents migrate to the foreign country and $e_Y^* = 0$.

[Case 3] $f(0) \geq g(0)$ and $f(1) \leq g(1)$

There exist a threshold \bar{e}_Y ($0 \leq \bar{e}_Y \leq 1$) which satisfies $\hat{EU}_A^F = \hat{EU}_A^H$ in this case. When $f(0) \geq g(1)$, all agents migrate and $e_Y^* = 0$. When $f(0) < g(1)$, all agents stay at home country and $e_Y^* = 1$.

3. SOCIAL TIE AND MIGRATION

Now let us consider the effect of social tie and migration decision. As we defined in eq. (3), ($\alpha \geq 1$) indicate the level of social tie in the region. It is possible to have different equilibrium for different α . Now start to check the existence of the threshold $\bar{\alpha}$ where staying in home country and going to abroad for migration is indifferent for agents. Firstly, it is easily shown that function (14a) is increasing function in α , and function (14b) is independent from α . In order to guarantee the existence of $\bar{\alpha}$, expected utility about migration \hat{EU}_A^F should be smaller than that about staying in home country \hat{EU}_A^H when $\alpha = 1$. This condition can be rewritten as $f(0) - g(0)|_{\alpha=1} \geq 0$. With simple calculation from equations 3, 14a and 14b, we could calculate $g(e_Y)$ and $f(e_Y)$.

$$\begin{aligned} g(e_Y) &= SC(e_Y) = \{SC_Y * SC_A * SC_O\}^\alpha \\ &= (SC_{Y0} + e_Y)^\alpha * (SC_A + e_A)^\alpha * \\ &\quad (SC_O + e_O)^\alpha \\ &= (SC_{Y0} + e_Y)^\alpha * (\delta SC_{Y0} + 1 + \\ &\quad \delta e_Y)^\alpha * (\delta^2 SC_{Y0} + \delta + 1 + \delta^2 e_Y)^\alpha \\ &= [\delta^3 e_Y^3 + (3\delta^3 SC_{Y0} + \delta + 2\delta^2) e_Y^2 \\ &\quad + \{(2\delta^3 + 3\delta^2 + 2\delta) SC_{Y0} + 1 \\ &\quad + \delta\} e_Y + \delta^2 SC_{Y0} + 1 + \delta]^\alpha \end{aligned}$$

When $e_Y = 0$ and $\alpha = 1$, $g(e_Y) = \delta^2 SC_{Y0} + 1 + \delta$ and $f(e_Y) = \omega^F(0) - \omega^H(0)$, and we have the following condition.

$$\omega^F(0) - \omega^H(0) \geq \delta^2 SC_{Y0} + 1 + \delta \quad (15)$$

This condition indicates that when the wage difference is big enough, and/or the discount rate is small enough, there exist a threshold $\bar{\alpha}$. When social tie is not strong in the region, all are migrate to seek higher wage, and all agents stay at their home country when social tie is strong.

In summary, we have following propositions.

[Proposition 1]

There exist a unique threshold $\bar{\alpha}$ when conditions (refc) is satisfied.

[Proposition 2]

When social tie in the region is strong enough ($\alpha \geq \bar{\alpha}$), all agents in the region stay their home country. As a result, no migration equilibrium is observed. When social tie in the region is weak ($\alpha < \bar{\alpha}$), all agents in the region migrate to work in the foreign country.

From the propositions above, the second hypothesis 'Communities and households with higher social capital will not send their family members as migrant

workers' is proved.

These results are in line with our investigation in study area, which is the respondents not migrate because they have high level of social capital or social ties with their friend or families. In general, based upon the questions related to their feeling to their village and neighbor, respondents in Arjowilangun village think that their community and living environment are meaningful and precious for them. Based on the questions about their activity in the community, both respondents (migrant and non-migrant) answered that they want to participate in community activities. It can be concluded that for non migrant respondents; they want to participate to community participation more frequently, and it also indicates the higher level of social capital. Respondents with higher social capital have no intention to send migrants workers.

4. CONCLUSION

In this paper we develop the methodological theory to measure social capital investment. We could show that investment of social capital among interactions of three agents live in three periods in overlapping generation. Social capital is formed using a model of optimal individual investment decisions and the social capital accumulation process. Social capital is total stock of social capital from each agent in one time period with consider the discount rate, and from this relation we could calculate parameter to measure the social tie effect.

When social capital is monotonically increasing function, wages is monotonically decreasing function and $\partial f(e_Y)/\partial e_Y < 0$, we can assumption shows that the marginal effect of human capital investment to the wage is higher for her wage in foreign country than that in home country. And we have a unique equilibrium for following 3 cases: (i) case 1: $f(0) < g(0)$. In this case, $g(\cdot)$ is always larger than $f(\cdot)$ for any $0 \leq e_Y \leq 1$. All agents stay their home country and $e_Y^* = 1$. (ii) case 2: $f(1) < g(1)$. In this case, $f(\cdot)$ is always larger than $g(\cdot)$ for any $0 \leq e_Y \leq 1$. All agents migrate to the foreign country and $e_Y^* = 0$. And (iii) Case 3: $f(0) \geq g(0)$ and $f(1) \leq g(1)$. There exist a threshold \bar{e}_Y ($0 \leq \bar{e}_Y \leq 1$) which satisfies $\hat{E}U_A^F = \hat{E}U_A^H$ in this case. When $f(0) \geq g(1)$, all agents migrate and $e_Y^* = 0$. When $f(0) < g(1)$, all agents stay at home country and $e_Y^* = 1$.

We have following propositions. Proposition 1: There exist a unique threshold $\bar{\alpha}$ when conditions: (i) social capital function is increasing function in α ; (ii) wage function is decreasing function and independent from α ; and (iii) $f(0) - g(0)|_{\alpha=1} \geq 0$, are

satisfied; and Proposition 2: When social tie in the region is strong enough ($\alpha \geq \bar{\alpha}$), all agents in the region stay their home country. As a result, no migration equilibrium is observed. When social tie in the region is weak ($\alpha < \bar{\alpha}$), all agents in the region migrate to work in the foreign country.

From the propositions above, the second hypothesis 'communities and households with higher social capital will not send their family members as migrant workers.'

REFERENCES

- 1) Agénor P.R., and Dinh H.T., 2013. Social Capital, Product Imitation and Growth with Learning Externalities. The World Bank
- 2) Antoci, A., Sabatini, F. and Sodini, M. (2009) "The Fragility of Social Capital," Department of Economics, University of Siena, Italy.
- 3) Antoci, A., Sacco, P. L. and Vanin, P. (2007) "Social Capital Accumulation and the Evolution of Social Participation," Journal of Socio-Economics 36: 128–43.
- 4) Bartolini, S. and Bonatti, L. (2008) Endogenous Growth, Decline in Social Capital and Expansion of Market Activities, Journal of Economic Behaviour and Organization 3–4(67): 917–926.
- 5) Blanchard O.J., and Fisher S., 1993. Lectures on Macroeconomic. The MIT Press Cambridge, Massachusetts.
- 6) Beugelsdijk, S. and Smulders, S. (2009) Bonding and Bridging Social Capital and Economic Growth, CentER Discussion Paper 2009–27, Tilburg University, Department of Economics, February.
- 7) Bisin, B. and Guaitoli, D. (2006) "Social Capital, Modernization and Growth," ASSET Conference, mimeo.
- 8) Fang, H. and Loury, G. C. (2004) Toward an Economic Theory of Dysfunctional Identity, Cowles Foundation Discussion Papers 1483, Cowles Foundation, Yale University.
- 9) Fang, H. and Loury, G. C. (2005) Dysfunctional Identities Can Be Rational, American Economic Review 95: 104–111.
- 10) Fukuyama, F. (1995) Trust: The Social Virtues and the Creation of Prosperity, New York: Free Press.
- 11) Glaeser E.L., Redlick C., 2009. Social Capital and Urban Growth. International Regional Science Review. Volume 32 Number 3. July 2009. Pp 264-299
- 12)
- 13) Glaeser E.L., David Laibson and Bruce Sacerdote., 2002. AN ECONOMIC APPROACH TO SOCIAL CAPITAL. The Economic Journal, 112 (November), F437–F458. Royal Economic Society 2002. Published by Blackwell Publishers, 108 Cowley Road, Oxford OX4 1JF, UK and 350 Main Street, Malden, MA 02148, USA.
- 14) Growiec, K., and Growiec, J. 2012. "Social Capital, Trust, and Multiple Equilibria in Economic Performance," Online at <http://mpra.ub.uni-muenchen.de/39976/>MPRA Paper No. 39976, posted 10. July 2012 14:02 UTC.
- 15) Knack, S. and Keefer, P. (1997) "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation," Quarterly Journal of Economics 112: 1251–1288.
- 16) Ljungqvist L., and Sargent T. J., 2000. Recursive Macroeconomic Theory, Second edition. Massachusetts Institute of Technology (MIT) Press
- 17) Narayan, D. and Pritchett, L. (1999) Cents and Sociability: Household Income and Social Capital in Rural Tanzania, Economic Development and Cultural Change 47: 871–897.
- 18) Putnam, R. D., (1995), Bowling Alone: America's Declining Social Capital. Journal of Democracy. 6(1), 65-78.

- 19) Putnam, R.D., 2000. *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon and Schuster.
- 20) Robison, L. J. and Siles, M. E. (1999) Social Capital and Household Income Distributions in the United States: 1980–1990, *Journal of Socio-Economics* 28: 43–93.
- 21) Rupasinga, A. Stephan J. Goetz, and David Freshwater (2000) “Social Capital and Economic Growth: A County-level Analysis,” *Journal of Agricultural and Applied Economics* 3(32): 565–572.
- 22) Tiago Neves Sequeira & Alexandra Ferreira-Lopes (2011) An Endogenous Growth Model with Human and Social Capital Interactions, *Review of Social Economy*, 69:4, 465-493, DOI: 10.1080/00346764.2011.592330
- 23) Temple, J. and Johnson, P.A. (1998) Social Capability and Economic Growth, *The Quarterly Journal of Economics* 3(113): 965–990
- 24) Youyou Baende Bofota, Raouf Boucekine, Alain Pholo Bala. Social Capital as an Engine of Growth: Multisectoral Modelling and Implications. 2012. <halshs-00790855>
- 25) Whiteley, P. (2000) Economic Growth and Social Capital, *Political Studies* 3(48): 443-466.
- 26) World Bank (2006) “Where is the Wealth of Nations? Measuring Capital for the 21st Century,” Washington DC: The World Bank.

(Received April 25, 2015)

ソーシャルキャピタルと出稼ぎ労働者の意思決定行動に関する一考察

松島 格也, Gunawan PRAYITNO

本研究では、家計が人的資本とソーシャルキャピタルのいずれに投資するかを表現する世代重複モデルを構築し、出稼ぎ労働に関する意思決定行動を分析する。構築したモデルを用いて、地域におけるつながりが強く高いソーシャルキャピタルを持つ地域が、出稼ぎ労働者不在でもコミュニティを維持できるために出稼ぎ労働者を送りやすい傾向にあるのか、もしくは比較的低い収入レベルでも生活を継続できるために出稼ぎ労働者が少ない傾向にあるのか、相対する二つの仮説のいずれが適切であるかについて分析する。