Social Capital and the East Asian Welfare Society Model？Models?: Evidence from 2003-2008 Asia Barometer

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Abstract

This article measures social capital in East Asia to test two hypotheses in the discussion of "Social Welfare Society Model", based on 2003-2008 Asia Barometer. The most important finding is the different characteristics of Northeast Asia and Southeast Asia, which there is homogeneity in Northeast Asia, but diversity in Southeast Asia. We also find that, public good social capital has a stronger effect upon welfare than private good social capital, and Northeast Asia in general has a high level of public good social capital. All of these evidences may indicate that it's more valid to discuss the "Social Welfare Society Model" limited to East Asia.

1. Introduction

A number of studies have discussed about East Asian welfare, which can be classified into two main groups according to the research target region. The first one is focused on North East Asia, especially the East Asian welfare states (Jones: 1990; Goodman and Peng:1996; Esping-Andersen:1999; Holliday:2000; Uzuhashi:1997; Takegawa:1999,2007; Kim:2008). The second one covers both North East Asia and South East Asia, focusing on the exploitation of developing countries (ILO: 1996; Hiroi and Komamura: 2003; Osawa:2004; Aratame:2006,2007; Oizumi:2007; Suehiro:2010).

Both of the discussions above are deeply influenced by Esping Andersen's work "The Three Worlds of Welfare Capitalism", and both of them share almost the same changes. We can see these changes through the names given by the researchers in different periods. Comparing to "liberal welfare state", "conservative welfare state", and "social democratic welfare state", Welfare states in East Asia are called "oikonomic welfare states", "Confucian welfare states" (Jones:1990), "developmental states" (Suehiro:1996). This is the so-called "East Asian Welfare States" discussion, and later there are some researchers using the expressions as following to describe the discussions, "East Asian Social Welfare System" (Suehiro:2006), "East Asian Welfare Model" (Aratame:2007), "East Asian Welfare Society Model" (Noguchi:2009).

The changes of the name reflect the shift from welfare state to welfare society. In the 20th century, as the saying "from the cradle to the grave" goes, government played the most important role in social welfare. But when it came to the end of the 20th century, the financial burden increased in these welfare states, leading to the "crisis of welfare states". Community welfare and NPOs are paid more attention to in such circumstances. And the emphasis of the social welfare policy also changed from social spending levels to QOL (quality of life). In such background, some researchers began to discuss the possibility of "Asian Welfare Model", focusing on Japan's community welfare (Aratame: 2006,2007; Oizumi:2007, Noguchi:2009).

The main idea in Aratame(2007), which discussed the Japan's community welfare and the possibility of "East Asian Welfare Model", is that the government can't undertake the key role in

social welfare as the Welfare States in the East Asian developing countries do, so they should make use of the function of the market, and create a system that puts the volunteer, private profit and nonprofit organizations, and also the traditional region group to practical use. In "Social Protection Sector Strategy" (2001), the World Bank also suggests that informal traditional groups are very important to the social welfare policies in developing countries, and we should emphasize the international support through social capital.

The main points can be summarized in the theory of social capital in the following sentences: there is a large quantity of social capital in the East Asian countries, and it should be made practical use in social welfare policy, which shows the hint of "East Asian Welfare Model".

The question we have to realize is that this discussion based on two hypotheses as premises.

Hypothesis 1, there is a large quantity of social capital in every East Asian country, which indicates the high quantity and homogeneity of social capital in the East Asia.

Hypothesis 2, social capital promotes welfare.

Can these hypotheses be empirically tested?

We intend to do this by analyzing data from the 2003-2008 Asia Barometer (an Asia Values Study survey). We will give a brief overview on the definition and classification of social capital, and the discussion of the relationship between social capital and social welfare. After that, we will measure social capital of the East Asian countries in order to test hypothesis 1. To test hypothesis 2, we should evaluate the welfare of every East Asian country. We must notice that the "welfare" in hypothesis 2 is not "welfare policy", but refers to ensuring the QOL or welfare of civic citizens. So we will test it using subjective indicators, examining the relationship between social capital and feeling of happiness and satisfaction of social welfare system. Finally, we will summarize the conclusion and findings, and point out the limitations of this approach.

2.   Social Capital and Social Welfare

The term of "social capital" was first used by L. J. Hanifan in his article regarding local support for rural schools in 1916. But the concept didn't gain popularity until the publication of Robert Putnam's "Making Democracy Work". He studied the performance of twenty regional Italian governments since 1970, which were all regional government institutions but differed in their local social, economic and cultural context. He found that regional governments performed best where there were strong traditions of civic engagement. And he concluded that one of the most important reasons is the different levels of social capital, which contained the general trust, norms of reciprocity, and networks within these different regions of Italy.

Social capital has many distinct dimensions. Putnam (2000) classified social capital into bonding and bridging dimensions. Bonding social capital is "inward looking and tends to reinforce exclusive identities and homogeneous groups", in contrast bridging social capital is "outward looking and encompasses people across diverse social cleavages" (Putnam 2000:22). Uphoff (2001) categorized it into the structural (roles, rules, precedents, and procedures), and the cognitive (norms, values, attitudes, and beliefs). Inaba (2005) grouped networks among individuals, and networks among organizations into private good; general trust and norms of reciprocity into public good; and the trust and norms within certain group into club good.

As the understanding to social capital, various measurements have been proposed (Healy and Cote 2001; Grootaert et al. 2004), and the research has been conducted not only among regions

within a country (Putnam: 2002; Kawachi:1997,1999), but also at the international comparative level . Fukuyama (1995) showed that economic conditions are good where there is a high level of general trust. Knack (1997) argued that general trust and norms are highly related to the economic performance, but there is no sign of relevance to the participation of organizations. But there are also some researchers who have argued that social capital does relate to the good performance of society, but it is limited to special countries such as those in the OECD (Hatakeyama:2009). Many studies have been concerned mostly with Western countries, producing almost no information about East Asia. Therefore, this study is focused on the East Asia.

The relevance of social and welfare is discussed in many dimensions. Kawachi (2002) argued that norms and the community ties promote health behaviors, club activities increase the services which are good for health, and political action, such as voting, can promote the performance of health care system. Subramanian (2002) reported that unhealthy conditions are related to the lack of social capital。

With the shift from welfare state to welfare society, and the changes of demographic and social structure (such as aging society), "the failure of government" and "the failure of market" expanded to more and more social regions, because of the lack of social capital. And more and more attention is paid to the volunteer activities and NPOs to build social capital (Adachi: 2008).

The relevance of social capital and welfare state is also discussed. Some researchers found that welfare state can both prevent and promote social capital (Kumilin and Rothstein: 2005; Kaariainen and Lehtonen: 2006). Kaariainen and Lehtonen (2006) discussed on two hypotheses by comparing the three types of welfare state. The first one is the society-centered hypothesis, which assumes that social capital emerges first and foremost in close communities such as families, local communities, or in civic engagement. The second theory is the institution-centered hypothesis which begins from the premise that social capital develops mainly in societies with a strong political system and very well-functioning public administration. These scholars concluded that both hypotheses are partly correct.

To measure welfare/QOL, Mieno (2010) divided the indicators into three groups. The first one is monetary (economic), the second one is non-monetary (sociological, social psychological), and the third one is medical. According to these previous studies, we confirmed that social capital can promote economic performance, which is an economic indicator, and health, which is a medical indicator. The sociological indicators are neglected. All the aforementioned studies dealt with developed countries. This brings up the question: how relevant are conclusions drawn from empirical studies using the data of both developed and developing countries? Can we get the same conclusion from sociological indicators? In this article, we will take the approach.

3. Data and Methods
1) Data

The data is from 2003~2008 Asia Barometer Survey (Australia, Russia, America excluded). Our analyses are confined to 13 East Asian countries (region), including Cambodia, China, Hong Kong, Indonesia, Japan, Laos, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam. The target population of this survey is the adults of 20~69 years old, while samples were taken by stratified random sampling and quota sampling methods, and the survey was

taken by interviewers. The total size of the 13 countries (region) is 31094 samples, and each country (region) has at least 1000 samples (Table 3-1).

Table 3-1   Overview of Data Collection

	2003	2004	2006	2007	2008	Total
Cambodia	0	812	0	1012	0	1824
China	800	1000	2000	0	1000	4800
Hong Kong	0	0	1000	0	0	1000
Indonesia	0	825	0	1000	0	1825
Japan	857	825	1003	0	1012	3697
Laos	0	800	0	1000	0	1800
Malaysia	800	800	0	1000	0	2600
Philippines	0	800	0	1000	0	1800
Singapore	0	800	1038	0	0	1838
South Korea	800	819	1023	0	0	2642
Taiwan	0	0	1006	0	0	1006
Thailand	800	800	0	1000	0	2600
Vietnam	807	800	1000	0	0	2607
Total	4864	9081	8070	6012	3067	31094

2)   Variables

Independent variables

We measure social capital with the traditional indicators and questions. General trust, reciprocity and networks are the three main factors of social capital, and network can be distinguish between bonding network and bridging network (Putnam: 2000; Naikakuhu: 2003). Therefore, we use general trust, reciprocity, bonding network and bridging network as the indicators of social capital.

In Asia Barometer Survey, there are some questions designed for measuring social capital, using the same questions as the other surveys (e.g. World Value Survey), such as the questions of general trust and reciprocity. The question of general trust is, "Generally, do you think people can be trusted or do you think that you can't be too careful in dealing with people (that it pays to be wary of people)? (SA)". The answers are, "1 Most people can be trusted", "2 Can't be too careful in dealing with people", "3 Don't know". We take the percentage of respondents who answered 1 as general trust score.

The question of reciprocity is, "Do you think that people generally try to be helpful or do you think that they mostly look out for themselves (SA)". The answers are, "1 People generally try to be helpful", "2 People mostly look out for themselves", "9 Don't Know". We take the percentage of respondents who answered 1 as reciprocity score.

The question about network used in the previous study is the number of groups you joined, such as family, cooperatives, NPOs, and religions (World Bank: 2002; Naikakuhu: 2003) which is not contained in AsiaBarometer survey. But, there is a question referring the importance of social circles or groups, "Which of the following social circles or groups are important to you (MA)". And the answers are "family", "relatives", "place of work", "Club, hobby circle, etc.", "the school / university you attended", "the region where you grew up", "People who speak the same language

or dialect as you", "neighborhood", "agricultural cooperative, commercial cooperative or industry group", "labour union", "political party", "religion", "other", "don't know". Regional bond is used as predictor of bonding networks, while hobby circles like bowling is used as predictor of bridging network in many previous studies (Putnam: 2000; Naikakuhu: 2003; Fujisawa: 2010).Therefore we use the percentage of respondents who choose "neighbor" as the predictor of bonding network, and the percentage of respondents who choose "club, hobby circle, etc." as the predictor of bridging network.

Dependent variables

Most of social Indicators are objective data, but as QOL (Quality Of Life) is more and more emphasized, subjective indicators became more and more important, such as the feeling of happiness and the satisfaction of life (Mieno: 2010). In this article, we will use "feeling of happiness", and "satisfaction of social welfare system" as the indicators of welfare.

The question of "feeling of happiness" is, "All things considered, would you say that you are happy these days? (SA)", the answers are "1 very happy", "2 quite happy", "3 neither happy nor unhappy", "4 not too happy", "5 very happy", "9 don't know". We reverse the score of the answers, and take the average as the score of "feeling of happiness" of each country (region).

The question of "satisfaction of social welfare system" is, "Please tell me how satisfied or dissatisfied you are with the following aspects of your life (SA for each)", and the number l is "Social welfare system", the answers are "very satisfied", "some what satisfied", "neither satisfied nor dissatisfied", "Somewhat dissatisfied", "very dissatisfied", "don't know". We reverse the score of the answers, and take the average as the score of "satisfaction of social welfare system" of each country (region).

Control variables

We also include a series of control variable that could affect the "feeling of happiness" and "satisfaction of social welfare system" in the analysis of hypothesis 2. We will control for gender, age, marital status, education, and household income. Gender is a dummy variable with 0=male and 1=female; age is continuous variable; marital status is a dummy variable with 0= singe and divorced or widowed or other, 1=married; education is three scales of "high", "mid" and "low".

3)　Methods

First of all, we will measure social capital of each country (region). Social capital is measured by principal component analysis (Putnam: 2000). We do principal component analysis of general trust, reciprocity, bonding network and bridging network, using the 2003~2008 AsiaBarometer (Australia, Russia, America excluded). And we take the result of it as the score of social capital. After we get social capital score, we focus on the 13 East Asian countries (region), and compare the social capital score to test the hypothesis 1.

We take two steps to test hypothesis 2. First, we test the relevance of social capital and welfare both in country-level analysis and individual-level analysis, because there are some previous studies showing that there is a difference between country-level analysis and individual-level analysis. Newton（2006）argues that, there was relevance between social capital and political support in country-level comparative analysis, but it can't be tested in case study of four countries (Finland, Sweden, News land, Japan). Subramanian（2002）reports that the significance

level of country-level analysis was lower than that of individual-level analysis. After confirming the relevance, we do multiple regression analysis in stepwise method to test whether social capital promotes welfare or not.

4. Results and Discussion
4.1 Social Capital in East Asia (Test of hypothesis 1)

The result of Principal component analysis of social capital is presented in table 4-1-1, and the scores of general trust, reciprocity, bonding network, bridging network, social capital, feeling of happiness and satisfaction of social welfare system are summarized in table 4-1-2.

Table 4-1-1 Result of Principal component analysis

	Social capital	
	Factor loading	Contribution ratio
Trust	0.76	
Reciprocity	0.72	45.24%
Bridging NW	0.75	
Bonding NW	0.40	

Notes:

"Trust" is short for general trust, "NW" is short for network, the same as the following tables.

Table 4-1-2 Score summary

	Trust	Reciprocity	Bonding NW	Bridging NW	Social capital	Feeling of happiness	Satisfaction of social welfare system
Cambodia	0.04	0.23	0.80	0.21	-0.09	3.17	3.25
China	0.60	0.62	0.38	0.15	1.63	3.72	2.72
Hong Kong	0.34	0.41	0.88	0.21	1.25	3.53	3.18
Indonesia	0.23	0.63	0.66	0.03	0.18	3.80	3.81
Japan	0.44	0.36	0.38	0.22	0.88	3.69	2.93
Laos	0.23	0.24	0.67	0.11	-0.32	3.75	3.55
Malaysia	0.14	0.38	0.61	0.10	-0.30	4.05	3.68
Philippines	0.12	0.30	0.31	0.03	-1.32	4.07	3.51
Singapore	0.34	0.43	0.47	0.12	0.34	4.00	3.62
South Korea	0.66	0.50	0.44	0.22	1.93	3.48	2.62
Taiwan	0.40	0.49	0.45	0.24	1.30	3.55	2.78
Thailand	0.25	0.23	0.53	0.05	-0.75	3.88	3.49
Vietnam	0.25	0.60	0.78	0.12	0.83	3.95	3.29

Hypothesis 1, there is a large quantity of social capital in every East Asian country, which indicates the high quantity and homogeneity of social capital in the East Asia.

We can test hypothesis 1 by diagramming the social capital in East Asia, to see whether the

East Asian countries all has high level in quantity. Figure 4-1-1 displays the social capital scores of East Asian countries (region). It is clear that, there is quite different among the countries in East Asia. We can't see high level of quantity in every country nor homogeneity through the result.

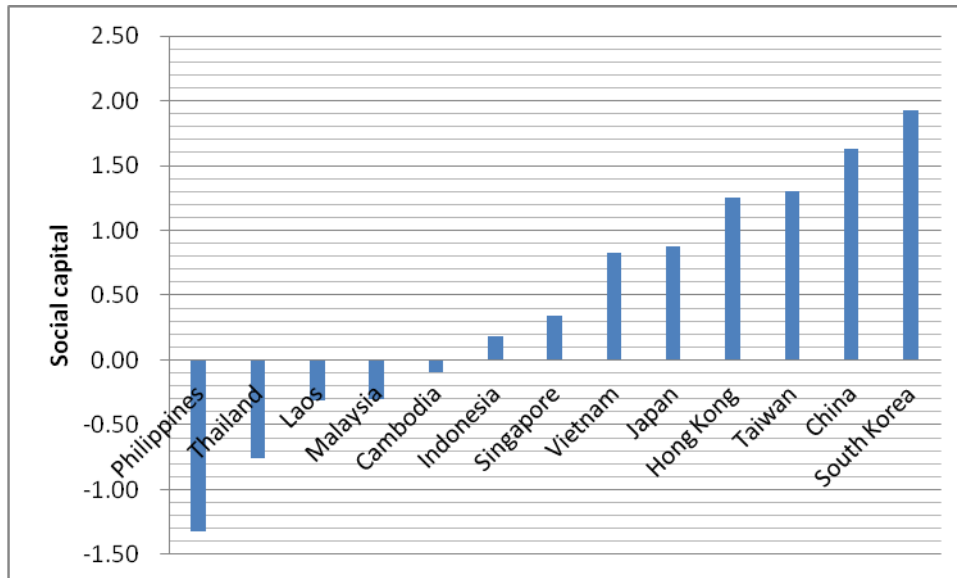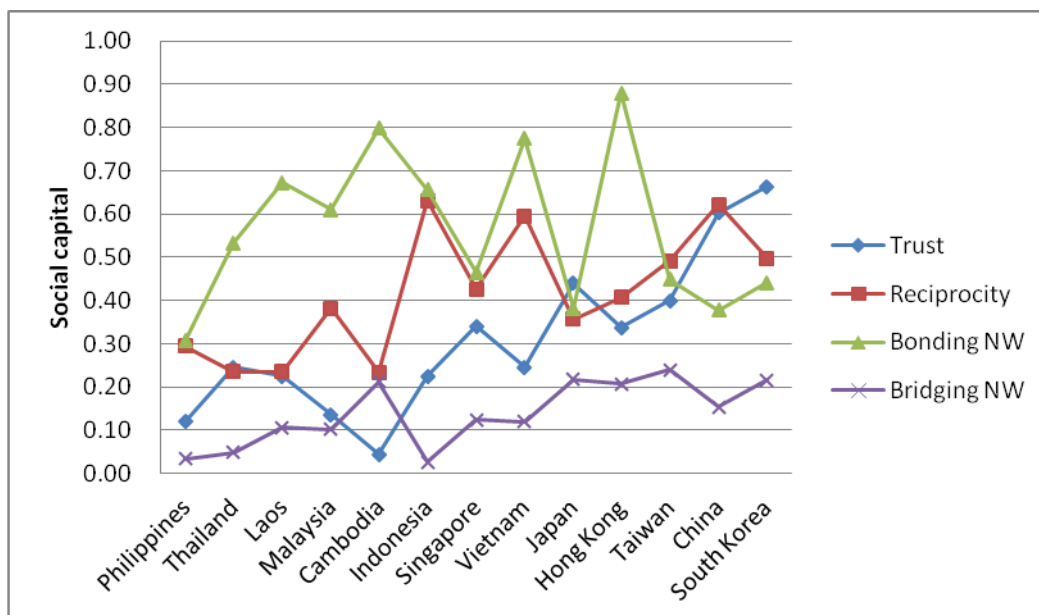Figure 4-1-1   Social capital in East Asia

Figure 4-1-2   Social capital in four dimensions

If we focus on East Asian countries, we will find that Northeast Asian countries (South Korea, China, Taiwan, Hong Kong, Japan) and Southeast countries (Vietnam, Singapore, Indonesia, Cambodia, Malaysia, Laos, Thailand, Philippines) can be divided into two groups clearly by the line of 0.85.

To discuss the homogeneity, we look into the context of social capital in East Asian countries. Figure 4-1-2 displays the social capital of East Asian countries in four dimensions: general trust, reciprocity, bonding network and bridging network.

In the dimension of general trust, South Korea has highest score, and Cambodia has the lowest score. Northeast countries (regions) have higher level in common. On the contrary, Southeast Asian countries have lower level, except Singapore.

In the dimension of reciprocity, the top 3 is Indonesia, China and Vietnam. Comparing Northeast Asia with Southeast Asia, we can find that, Northeast Asia (except Japan) have higher level of reciprocity, while Southeast Asia is divided into two groups: Indonesia, Vietnam, Singapore and Malaysia have higher level of reciprocity, but Thailand, Philippines, Cambodia and Laos have lower level of reciprocity.

In the dimension of bonding network, the top 3 is Hong Kong, Cambodia, Vietnam, and the bottom 3 is Philippines, Japan and China. Northeast Asia (except Hong Kong) has lower level of bonding network, while Southeast Asia (except Philippines and Singapore) has higher level of bonding network.

In the dimension of bridging network, the top 3 is Taiwan, South Korea and Cambodia, and the bottom 3 is Philippines, Indonesia and Thailand. Northeast Asian countries have higher score, on the contrary, Southeast Asian countries, except Cambodia and Singapore, have lower level of bridging network.

The notable features between Northeast Asia and Southeast Asia in social capital can be summarized into Table 4-1-3.

These results lead to the conclusion that, the hypothesis 1 is not proved from our data.

Table 4-1-3

	Social capital	Trust	Reciprocity	Bonding NW	Bridging NW
Northeast Asia	High	High	High (Japan)	Low (Hong Kong)	High
Southeast Asia	Low (Singapore, Vietnam)	Low (Singapore)	Divided into high group and Low group	High (Philippines, Singapore)	Low(Cambodia, Singapore)

Note: ( ) refer to exceptions

4.2 Relation between SC and Social Welfare (Test of Hypothesis 2)

Hypothesis 2, social capital promotes welfare.

To test hypothesis 2, we take two steps. Firstly we test the relevance between social capital and feeling of happiness, and satisfaction of social welfare system. After that we test whether social capital affects welfare by multiple regression analysis inputting control variables.

Table 4-2-1 shows the Pearson's Correlation coefficient of social capital and feeling of happiness, and satisfaction of social welfare system. At first sight, the coefficient of feeling of happiness and bridging network, and the coefficient of satisfaction of social welfare system and social capital is negative. Does it really mean social capital don't promote welfare but reduce it?

Newton (2006) reported that the result of case study was different from the result of statistic analysis in country-level. And Subramanian（2002）reported that the significance level of country-level analysis was lower than that of individual-level analysis. To see whether social capital really reduces welfare, we do the multi-level analysis[1] to check it.

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[1] Multi-level analysis in this paper doesn't refer to hierarchical linear model, just means analysis in different levels of country and individual.

Table 4-2-1   Correlation coefficient in country-level analysis

	Trust	Reciprocity	Bridging NW	Bonding NW	Social capital
Feeling of happiness	-0.196	0.102	-.736**	-0.323	-0.46
Satisfaction of social welfare system	-.775**	-0.276	-.786**	0.31	-.788**

n=13   **: p<0.01

Table 4-2-2 shows the result of correlation coefficient of feeling of happiness and social capital in every East Asian country (region). It's clear that the coefficient of feeling of happiness and social capital is positive in every East Asian country (region) except Cambodia. And we can find that there are some differences between Northeast Asia and Southeast Asia, when we look deep into the coefficient of the four factors of social capital.

Within the four factors of social capital, the coefficient with trust is significantly positive in every East Asian country (region) except Cambodia. In Northeast Asia, the coefficient is positive in all of the Northeast Asian countries (regions), South Korea (0.133), Japan (0.128), Hong Kong (0.125), Taiwan (0.115), and China (0.079). On the contrary, the coefficient is positive in Singapore (0.118), Philippines (0.78), Laos (0.068), Indonesia (0.065), and Thailand (0.051). But it's not significant in Cambodia, Malaysia and Vietnam. We also can find that the coefficient in Northeast Asia is stronger than that in Southeast Asia. The coefficient with reciprocity is positive in every East Asian country (region) except Cambodia and Hong Kong. And we also can see that the coefficient in Northeast Asia is stronger than that in Southeast Asia, except that Singapore has the highest coefficient. The relation between feeling of happiness and bonding network or bridging network is weaker. We can only find positive coefficient with bonding network in Hong Kong (0.088), Singapore (0.067) and Japan (0.043), and with bridging network in Hong Kong (0.116), Malaysia (0.070), Korea (0.049) and Japan (0.042).

Table 4-2-3 shows that the coefficient of satisfaction of social welfare system with social capital in individual-level analysis is also positive in every East Asian country (region). The coefficient with trust is positive in every Northeast Asian country (region) except Hong Kong: Taiwan (0.172), Japan (0.137), China (0.80), and South Korea (0.042). On the contrary, you can only find it positive in Thailand (0.078) and Vietnam (0.041) in Southeast Asia. The coefficient with reciprocity is positive in every East Asian country (region) except Cambodia, and you can also find it stronger in Northeast Asia than in Southeast Asia in some degree. The coefficient with bonding network is found positive in Singapore (0.100), Cambodia (0.067), Malaysia (0.057) and Vietnam (0.040), but negative in Japan (-0.055), Taiwan (-0.006). The coefficient with bridging network is positive in Taiwan (0.080) and China (0.037), and negative in Malaysia (-0.054).

Table 4-2-2 correlations of feeling of happiness with social capital (individual-level)

Country	Trust	Reciprocity	Bonding NW	Bridging NW
Cambodia	-.002	-.015	.030	.037
China	.079**	.116**	.034*	.028
Hong Kong	.125**	.025	.088**	.116**
Indonesia	.065**	.063**	.038	-.007
Japan	.128**	.119**	.043**	.042*
Laos	.068**	.065**	-.021	-.013
Malaysia	.012	.051*	.016	.070**
Philippines	.078**	.069**	-.017	.016
Singapore	.118**	.140**	.067**	.023
South Korea	.133**	.124**	-.003	.049*
Taiwan	.115**	.129**	.000	-.036
Thailand	.051*	.041*	-.026	-.010
Vietnam	.017	.052**	.022	-.013

*: p<0.05   **: p<0.01

Table 4-2-3 correlations of satisfaction of social welfare system with social capital (individual-level)

	Trust	Reciprocity	Bonding NW	Bridging NW
Cambodia	-.010	.028	.067**	.019
China	.080**	.160**	.006	.037*
Hong Kong	.052	.071*	.027	.036
Indonesia	.017	.062**	-.006	-.010
Japan	.137**	.171**	-.055**	.000
Laos	.047	.115**	-.012	.049
Malaysia	.022	.128**	.057**	-.054**
Philippines	.024	.097**	-.017	-.027
Singapore	.034	.108**	.100**	.011
South Korea	.042*	.095**	.018	.004
Taiwan	.172**	.186**	-.006*	.080*
Thailand	.078**	.131**	.021	-.027
Vietnam	.041*	.121**	.040*	.024

*: p<0.05   **: p<0.01

We got totally different results in country-level analysis and individual-level, and the question is that why and which is right?

Why is it different in country-level and individual-level analysis? One may notice that both feeling of happiness and satisfaction of social welfare system are subjective indicators, which related to expectation of them. Expectation towards welfare or well-being in developed countries is usually higher than in developing countries. Under such influence, we can't predict the effect of social capital or economic capital upon the feeling of happiness and satisfaction, because the expectation will increase when social capital or economic capital rise. Therefore this may be one explanation that expectation influences the result of country-level analysis.

In contrast, we can consider that it's the same within one country (region) in cross – national comparative analysis. It means that the influence of expectation can be excluded. There is also some previous studies indicated that it is more accurate of individual-level analysis than country-level analysis (Subramanian: 2002).

Accordingly, we take the result of individual-level analysis as our conclusion, which proves the relevance of social capital with welfare. Next, we will see whether social capital effect on welfare or not in individual-level analysis, by multiple regression analysis inputting control variables such as gender, age, marital status, education and household income.

Table 4-2-4 is the result of multiple regression analysis of feeling of happiness. We can find that, trust is the most effective indicator in Japan (0.159), Philippines (0.180) , and also effective indicator in China (0.087), Hong Kong (0.173), Laos (0.124), Singapore (0.106), South Korea (0.157), Taiwan (0.147), and Thailand (0.107); reciprocity is the most effective indicator in China (0.159), Indonesia (0.119), and Singapore (0.183), and also effective in Japan (0.134), Laos (0.103), Philippines (0.123), South Korea (0.143), Taiwan (0.171) and Vietnam (0.082); bonding network is the most effective indicator in Hong Kong, and also effective China (0.066) and Singapore (0.183), but it's not significant in other countries (regions); bridging network is the most effective indicator in Malaysia (0.173), and also significant in Hong Kong (0.129), but it's not significant in other countries (regions). It is obvious that social capital has a significant effect upon the feeling of happiness.

Table 4-2-5 is the result of multiple regression analysis of satisfaction of social welfare system. It is obvious that reciprocity is the most effective indicator in every country (region) except Cambodia, while Cambodia's most effective indicator is bonding network, which means social capital is the most effective indicator of satisfaction of social welfare system.

In conclusion, hypothesis 2 that social capital promotes welfare has been proved right.

Thus, there is still an important finding we haven't discussed. In the relation of social capital and welfare, trust and reciprocity appear more effective than bonding network or bridging network. Inaba (2005) grouped general trust and norms of reciprocity into public good, the network between individuals or organizations into private good, and the trust and norms in certain group into club good. According to this classification, it may indicate that public good social capital is more effective than the private good social capital.

Table4-2-4   result of multiple regression analysis of feeling of happiness

	Cambodia	China	Hong Kong	Indonesia	Japan	Laos	Malaysia	Philippines	Singapore	South Korea	Taiwan	Thailand	Vietnam
Gender	-0.118	0.092		-0.076	0.111					0.16	0.181		
Age		-0.003			-0.005				-0.005	-0.01		-0.004	-0.005
Marital status		0.289			0.429		0.075		0.178	0.292	-0.131	0.117	0.448
Education	0.081	0.078	0.156		0.091	0.087		0.161		0.093			0.051
Income		0.093	0.122	0.067	0.068	0.22	0.065		0.086	0.128		0.093	0.112
Trust		0.087	0.173	0.091	0.159	0.124		0.180	0.106	0.157	0.147	0.107	
Reciprocity		0.159		0.119	0.134	0.103		0.123	0.183	0.143	0.171		0.082
Bonding NW		0.066	0.245						0.129				
Bridging NW		0.129					0.173						
R Square	0.016	0.050	0.088	0.026	0.091	0.054	0.01	0.027	0.044	0.082	0.034	0.016	0.06

Notes:

1. Multiple regression analysis is done by stepwise method, and the models shown are the models which have the most variables of each country (**region**)

2. Coefficients shown are significant at $p<0.01$

Table4-2-5   result of multiple regression analysis of satisfaction of social welfare system

	Cambodia	China	Hong Kong	Indonesia	Japan	Laos	Malaysia	Philippines	Singapore	South Korea	Taiwan	Thailand	Vietnam
Gender													
Age	-0.007	0.007							-0.006	0.005			
Marital status													
Education	-0.182	0.048							-0.095			-0.154	
Income	-0.107	0.162		0.120		0.126			-0.065	0.088			
Trust		0.083			0.180							0.129	
Reciprocity		0.307	0.107	0.139	0.270	0.277	0.209	0.200	0.199	0.165	0.229	0.244	0.216
Bonding NW	0.157				0.090		0.089		0.151		0.202		
Bridging NW						0.158	-0.159						
R Square	0.03	0.052	0.006	0.013	0.040	0.027	0.019	0.008	0.036	0.019	0.044	0.041	0.015

Notes:

1.   Multiple regression analysis is done by stepwise method, and the models shown are the models which have the most variables of each country (**region**)

2.   Coefficients shown are significant at p<0.01

5. Conclusions

The two hypotheses we have examined here are the premises of the discussion of "East Asian Welfare Society Model". Hypothesis 1: there is a large quantity of social capital in every East Asian country; and hypothesis 2: social capital promotes welfare. The results disprove hypothesis 1 and confirm hypothesis 2. Therefore is it justified to assume the invalidity of the discussion about the "East Asian Welfare Society Model"? Not necessarily. What can we draw from the findings we have got? At least, two important points need to be noted.

First of all, there is a significant difference between Northeast and Southeast Asia. As we have seen, the level of trust, reciprocity and bridging networks in Northeast Asia are higher than those in Southeast Asia, while the level of bonding networks in Southeast Asia are higher than in Northeast Asia. As for the quantity of social capital and relevance with welfare, they are more homogenous in Northeast Asia, but quite diverse in Southeast Asia. Consequently this may indicate that it is more valid to focus on Northeast Asia when we discuss the "East Asian Welfare Society Model".

Secondly, we have found that public good social capital (trust and reciprocity) affects welfare more than private good social capital (bonding network and bridging network) does. As we have mentioned Northeast Asia has a higher level of trust and reciprocity, which means Northeast Asia has a higher level of public good social capital. On the other hand, Southeast Asia has a higher level of bonding networks, but a lower level of bridging networks. It may imply the possibility of "Northeast Asian Welfare Society Model".

However, how to make practice use of social capital in welfare policy making? Can we get the same conclusion using objective indicators of welfare? All of these questions are still unsettled, and it requires further effort on this issue.

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