# **Evolution of Social Capital and International Business**

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## 1 . Introduction

I have become interested in social capital that is a fundamental factor of business environments during my research on multinationals 'activities in Russia. Social capital which I refer to is not hard infrastructures, such as railways, roads, electricity or communications, but soft ones, such as institutions or relationships. Since institutions, indispensable for business operations, are missing or have not yet matured in Russia, firms, either domestic or multinational, have to pay additional transaction costs to cope with uncertainty. For example, General Electrics, the U.S. conglomerate, had to withdraw from Russia because the tax regime was unfair to foreign companies<sup>1</sup>. So did Philips, the Dutch electronics firm, since the restructuring scheme of its plant was interfered by the local government. The multinationals and the Russian government could not share the soft infrastructures, which caused their withdrawal. On the other hand, properties of hotels and restaurants where Japanese companies invested and formed joint ventures were deprived of by the Russian partners. These cases show that legal arrangements are still underdeveloped, and unmatured social capital encourages such an opportunistic behavior in Russia<sup>2</sup>.

I want to consider what social capital is and its influence on international business, but shall not limit the argument to the business in Russia and expand to that in developing and transitional economies in general. I will first survey how social capital has been discussed in international business, development economics and sociology. Then I propose my own understanding and the definition of social capital in this paper. Next I attempt to explore possibilities of evolution of social capital, based upon research accumulations in the evolutionary game theory. Finally I will suggest my research themes to be explored further and their direction.

# 2 . What Is Social Capital?

#### (1) Discussion in international business and development economics

Dunning (1997) divided determinants of the location of multinationals 'activities into two; direct production costs and benefits, and transaction and coordinating ones. The former include natural resource endowment, factor conditions, created assets3, markets etc., which influence primary activities of firms 'value chains. The latter can be further divided into hard infrastructures, such as transportation and communication, and soft infrastructures, which include political, economic, social and cultural factors. During the first stage of firms 'internationalization, the multinationals' major purpose of direct investment is resource or market seeking, and thus the direct production conditions are the most important. However, as firms 'value adding activities become internationalized, the competitive advantages which accrue from networking of overseas subsidiaries and affiliates become more and more important. Therefore, from the 1990s on, transaction and coordinating conditions have been more focused than ever. Dunning ranked crossborder transmission of information, technology and finance as the No.1 factor for multinationals to set up the state-of-the-art facilities overseas. An effective and trustworthy legal framework which secures property rights and resolves contractual disputes comes a close second<sup>4</sup>. According to this type discussion, the role of governments is becoming more and more important to enhance location specific advantages of its own country despite 'the retreat of the state<sup>5</sup>. 'It is quite interesting that Dunning pointed out the significance of soft infrastructures which directly relate to government functions in an era of globalization. Dunning & discussion on networked created assets, however, is for advanced countries, not for developing and transitional economies which have just primitive soft infrastructures. Although there are several researches to have studied cultural differences among transitional economies<sup>6</sup>, international business studies have not paid much attention to highly uncertain business environments and their influence on multinationals. This paper aims to suggest necessity to explore interaction between locations and businesses, paying particular attention to soft infrastructures.

In development economics, naive panacea for market which claims that free market automatically leads to economic development is forced to be reconsidered in the light of economic stagnation in developing and transitional economies<sup>7</sup>. World Bank pays particular attention to social capital, based upon recent studies in new institutional economics and sociology, often raises it in its World Development Reports, and has established its URL site for this particular issue<sup>8</sup>. World Bank s narrow definition of social capital refers to social networks and norms which enhance

productivity and welfare of the community. On the other hand, its broad definition extends to social and political environments, such as administrative and legal institutions, which shape the social structure and promote development of social networks and norms. In consequence, it defines social capital as institutions, relationships and norms, but it is unfortunate that it does not advance the discussion further to relations among the three factors, for example. Research on social capital is now becoming more pervasive. Transparency ranking of locations is announced annually<sup>9</sup>, and Japan & Institute of Developing Economies held a forum titled 'Development assistance and social capital <sup>10</sup>. 'Some empirical studies support the social capital theory by suggesting that stable governments and transparency in laws and administrative procedures promote economic development at a higher rate<sup>11</sup>. I will define social capital in the following paragraphs and consider its significance in the discussion on the location and business interaction.

#### (2) Economics approach to social capital

Uzawa (2000) proposed the concept of social overhead capital, which consists of natural environment, such as air and water, social infrastructures, such as roads and power supply, and institutional capital that includes education, medical and financial systems. The earth environment has become the urgent task to be tackled, and natural environment, which even private firms cannot disregard nowadays, is vital for our own lives. But natural environment is out of my interests since this paper focuses on interaction between a certain location and business. Social infrastructures, which refer to hard infrastructures, are fundamental assets when firms operate in developing and transitional economies. But its development is slightly easier than soft ones, which is difficult even to find out problems. That is why I am interested in the soft infrastructures, and raise it in this paper. Institutional capital which Uzawa pointed out includes those covering political, economic and social fields in general, but I want to discuss about those directly related to business.

North (1990) discussed about institution, and divided into three dimensions; official rules, unofficial constraints and effectiveness of enforcement. Official rules are those written by governments with compelling forces, such as laws and administrative or judicial procedures, based upon laws. In the context of economic activities, official rules pertaining to ownership and exchange are the most important. However, even if there are official rules, they are useless when people disregard and do not obey them. The point is whether a neutral organization, normally the government, can enforce the rules (the third party enforcement), which is labeled as effectiveness of enforcement. If it is effective, people rely on and obey the rules. But if it is not, they disregard the rules and need another measure, such as private enforcement by paying additional costs.

Therefore, official rules and effectiveness of enforcement are closely interrelated and interdependent with each other, like the both wheels of a vehicle. They determine behavioral patterns of economic agents and transaction costs, i.e. efficiency of the society. On the other hand, unofficial constraints refer to norms and behavioral standards which are internally forced and authorized by the society. It is practically impossible to cover whole the social issues by the written rules since it incurs prohibitively high costs to foresee the future and write official rules *ex ante*. Unofficial constraints, in this sense, can be defined as what expand, revise and maintain the official rules without additional costs. They are quite important and crucial factors. However, I want to put them in relational capital which I will discuss about in the next paragraph. The reason is that norms, behavioral patterns and social practices, which are core factors of unofficial constraints, derive from relationships among economic agents in the society.

What is institution then? It is rules of the game for economic agents to play in the society. Their role is to minimize transaction costs to operate the society by reducing uncertainty. If rules of the game become rational, open to the players, everyone understands causes and effects in advance. Provided that the third party succeeds in enforcing the rules very effectively, disputes on the rules will not occur frequently, and rent-seeking behaviors shall be meaningless. Institutions thus could reduce transaction costs, and improve efficiency of the location.

#### (3) Sociological approach to social capital

Coleman (1990) has discussed that social capital consists of some aspects of social structures which facilitate certain actions of individuals within the structure. Another remark he made is that it, like other forms of capital, is productive and makes it possible to achieve certain goals that would be unattainable in its absence or attainable only at a higher cost. Social capital, in his definition, is relations among people, which facilitate cooperative behaviors. He emphasized the aspect of 'capital 'since its values would be enhanced by investment. It is significant that he paid attention to social capital as social structural assets for individual.

Putnam (1993), on the other hand, define social capital as features of social organization, such as trust, norms and networks, that could improve efficiency of a society by facilitating coordinated actions. And voluntary cooperation becomes possible in a community which has inherited a substantial stock of social capital, in the form of norms of reciprocity and networks of civic engagement. He emphasized features of the society and its 'civicness 'through the lens of social capital. His point is different from Coleman & in that he focused on the society in general.

Fukuyama (1995) equalized social capital with trust. He categorized the U.S. and Japan as high trust societies while China and Italy as low trust societies by resorting a criterion that whether it is

able to produce large-scale organizations. According to his discussion, the barometer of trust is whether people can establish mutual trust between members of the society, neither families nor relatives. Social capital is converged into trust in his argument, and concluded the level of countries 'social capital by a single criterion. His point is very simple and there should be both the pros and cons.

It is significant that relationships between people and features of societies are emphasized in the sociological approach. They argue that norms, values and trust between people support social capital and increase its values. These discussions are quite important and help understand soft infrastructures of the society. But I think that we have to refer to official rules of the society, too, and attempt to integrate the both approaches to conceptualization of social capital.

#### (4) Integration of the both approaches

The both, economics and sociological approaches are, of course, different in goals and styles. But when we consider soft infrastructures, necessary to do business, they are quite informative and fruitful. I want to call institutions in the economics approach institutional capital while social capital in the sociology approach, relational capital. And social capital includes, in my definition, the both institutional and relational capital (see Exhibit 1).

Social Capital

Institutional capital

Official rules (Ownership, contract law)

Effectiveness of enforcement (Third party enforcement)

Relational capital

Organizational characteristics (Inter-organizational relations)

Inter-organizational relations (Social networks)

Institutional capital consists of official rules mainly on protection of ownership and contracts, and effective enforcement by a third party, normally by the government. It supports business and other activities in the society when the both factors works well.

I want to divide relational capital into two; organizational features and inter-organizational relationships. The former refers to relationships among organization \$\frac{1}{2}\$ members, and represents characteristics of the organization. The latter is social networks among people and organizations. This is an amalgam of the sociological approaches, having been discussed above. I want to treat trust, behavioral norms, customs, values and moral codes as what support relational capital (see Exhibit 2). These factors are sources of and are also influenced by relational capital, but they are

not relational capital *per se*. Relational capital is relationships of intra- and inter-organizations and people.

Needless to say, institutional and relational capital interacts with each other very strongly and is supplemental relations. It is practically impossible that institutional capital cover everything in a society when considering huge transaction costs under uncertainty. It is relational capital that is able to fill such vacuum in the society at modest costs. Changes in institutional capital urge those in relational capital, but it normally takes much more time to change relational capital. Institutional capital tends to regulate vertical relations of the country while relational capital usually shapes horizontal characteristics of the society.

Relational capital

Organizational Inter-organizational relations

Trust

Shared norms

Shared philosophy

Exhibit 2 Structure of relational capital

# 3 . Does Social Capital Evolve?

#### (1) Destiny or evolution?

I pointed out that Russia & social capital retards its development, introducing several cases in the business. According to Hakamada (1996), people & moral has been completely destroyed under the socialist regime in Russia. People, who were continuously exploited by the nation, have got back some however small they are, by cheating the state. This is the inescapable behavior if they want to live. Even after transformation of the regime, they seem to regard trades or business deals as dubious deeds, and thus trust or the concept of contract in business has hardly been established. It is true that there are many Russian merchants who do not keep their own promises in order to obtain or maximize immediate gains. The deprivation of foreign properties by local partners which I introduced at the beginning is one of the examples. Hakamada characterized Russia as 'bazaar economy 'because of such attitude or behavior. Putnam (1992), on the other hand, made comparison of 'civivness 'between northern and southern Italy, and concluded that development of

social capital is path dependent and has much historic heritages. Based upon this discussion, social capital is hard to change artificially or to accelerate its development.

On the other hand, even in Russia reported is the emergence of some Russian businessmen who are sensitive to time and costs, like American or European senior managers. Vodka is no longer an indispensable business tool, which had been a magic liqueur in the business negotiation once in Russia (Odaka, 2000). Although there might have been some mutant businessmen (Mr. Gorbachev in politics, for example) in and before the 1980s, it is undoubtedly true that the number increases very drastically in and after the 90s. It is obvious that the turning point was transformation of the regime and changes in institutional capital, such as introduction of market economy and privatization of state properties.

China, too, entered into the socialist regime without experiencing a civic society. Culture is completely different from that of western societies. Therefore, for western people China is one of the most uncertain nations, and it is ranked low in the transparency ballot due to undeveloped social capital. However, Singapore, of which populations are occupied by overseas Chinese by three quarters, is ranked 6th, and Hong Kong or Taiwan is now perceived fairly transparent, which have been lead by policymakers, although their systems were more or less similar to those in the mainland China several decades ago. Even in China, social capital seems to be in the progress, and the social structures are becoming transparent in the 2<sup>nd</sup> half of the 90s on by internationalizing its economy and multinationals 'entry into the domestic market.

If I object to the discussion on 'bazaar economy' or the path dependent theory of social capital by presenting these examples, I shall be criticized for being naive. However, my point is that it remains possible to evolve social capital artificially. Relational capital seems to develop faster if policymakers could adopt appropriate measures and change institutional capital.

#### (2) Introduction of evolutionary game theory

I want to explore evolution of social capital by applying the evolutionary game theory. The reason of adopting it as an analogy is that the relations between multinationals and host governments, multinationals and local partners in joint ventures and pre-modern and modern institutional capital, for example, seem to be similar to those among players in the evolution game.

The evolutionary game theory demonstrates how populations of players are selected, based upon the payoffs when they play cooperation and defection games with each other. This rule looks similar to evolution of social capital. Prisoners 'dilemma where defective players gain more temporarily, but less in the longer terms than cooperative strategies reminds us the bazaar economy in Russia. I anticipate that lessons for host country governments to develop social capital and for multinationals to enter into low social capital locations can be drawn by applying the evolutionary game theory. In the next part I intend to introduce several evolutionary games, and investigate possible evolution of social capital.

#### (3) Intrusion of different institutional and relational capital

I will look into what conditions allow a small number of players adopting a tit-for-tat strategy to succeed in entering into a society where defective players are dominant, according to Axelrod (1984). The tit-for-tat strategy stands for what cooperates with any player at the very first match, and presents exact the same card that the counterpart showed last time from the 2<sup>nd</sup> match on. This is a question about whether it is possible to alter a society, dominated by pre-modern institutions or agents with bazaar economic spirits into a modern and cooperative society. Axelrod held computer tournaments twice in the 80s, where each strategy, either cooperative or defective, made matches repeatedly and competed with each other for higher payoffs. As a result the tit-for-tat strategy was ranked first at the both tournaments where participants were 14 and 62, respectively. Strength of the tit-for-tat strategy is that they are nice since they do not betray first, forgive a defective competitor soon once he changes his mind, and draw the cooperative card from the counterpart by committing to the simple strategy. This result is very interesting as it appears to represent the nature of the society.

The payoff matrix (Exhibit 3) is a typical prisoners 'dilemma. The cooperative strategy gains 3 points when it matches the cooperative, which is the Pareto optimum. And the defective strategy gains 5 points against the cooperative that does not get any point. If the both players choose the defective card, then they get just 1 point, which is the Nash equilibrium. V(A|B) in Exhibit 3 stands for player A's payoffs against B. w is weight of the future or discount parameter, and shows the degree that the game repeats itself in this game, i.e. likelihood of matching the same counterpart. If w>2/3, the tit-for-tat strategy becomes collectively stable. If 2/3>w>1/3, the strategy of the

Exhibit 3 Possibility of cooperative agents' entry

Payoff	С	D
Cooperation (C)	3	0
Defection (D)	5	1

 $V(A|B)=R+wR+wR^2+wR^3+...=R/(1-w)$ 

V(C|D)+V(C|C)>V(D|D)

 $30p+9 \times (1-p)>10$ 

p>4.8%

Source: Axelrod (1984).

defective cards for every 2 matches becomes the best, while if w<1/3, that of the defective option every time, the best. Here in this game I assume that w is 0.9 since players are limited and no new comers participate in the game. In addition, human beings 'long-term memory and the capability to distinguish people become fairly high, particularly when he was betrayed. When 0 w<1, the sum of geometric progression becomes 1/(1-w) and thus:

V(A|B)=R/(1-w)

R is A s payoff against B, and therefore the question is what is the share (p) of V(C|C) in the following equation:

V(C|C)+V(C|D)>V(D|D)

3/(1-0.9)p+[0+1X0.9/(1-0.9)]X(1-p)>1/(1-0.9)

p>4.8%

This result shows that if a group of cooperative players, which is more than 5% of the original society society population, attempt to enter into a location, filled with defective agents, they shall succeed in entering and even changing the nature of the society from the defective to the cooperative society. This simulation varies, depending on the design of the game, i.e. the payoff matrix and the discount parameter, and some may feel that this is an arbitrary scenario. But I think that it implies possibility to evolve whole the society with a relatively small number of mutants 'entry.

The above-mentioned picture illustrates that reform of the existing institutions advances quite drastically once a certain ratio (5% in the above simulation) of modern institutions have been introduced. A good example is China, which has been in the process of modernization of legal and administrative structures for the membership of World Trade Organization. Another implication is that if a certain percentage of agents, based on rational relational capital, such as multinationals, enter into a society where people are defective except among the close community like families or relatives, they may succeed in entering and even changing attitude or behavior of the local agents. Although it is difficult to prove quantitatively, this could partly explain that policies of NIES and ASEAN countries to invite multinationals and industrialize their economies by export promote evolution of the social capital and lead to the economic development.

#### (4) Factors urging evolution of social capital

I will consider what kind of rules makes the cooperative or defective strategies dominant, referring to Maynard Smith & Dove-Hawk game<sup>12</sup>. The dominant strategy stands for evolutionarily stable strategy (ESS) that is able to become a major population, i.e. the strategy that deals well with its own copy. The rule of the game means features and characteristics of the payoff matrix. It is expected to draw implications for policymakers by exploring what alteration of the rules leads to

the cooperative strategy to ESS.

According to the payoff matrix (Exhibit 4), if the both players cooperate with each other, they can share the gain (V) equally. If one attempts to acquire when the counterpart gives up, he obtains all of the gain (V). Once the both decide to compete with each other to acquire the gain (V), they have to pay some costs (C). And if they are even in the competition, they have to share the gain (V-C) equally in the long term, and thus the gain shall be 1/2(V-C) for the both. If V>C, uncooperative strategy becomes the Nash equilibrium and cannot reach the Pareto optimum unless the both players recognize benefits by repeated game (the Folk theorem). On the other hand, if V<C, i.e. when costs to compete are higher than the gain, the payoff becomes negative for the match between uncooperative players. And the portion of uncooperative strategy (p) is the intersection between the payoff graphs of the cooperative and uncooperative strategies. Equation of payoff for the uncooperative strategy is:

V(D|D)+V(D|C)=p/2(V-C)+(1-p)V

That for cooperative strategy is:

V(C|D)+V(C|C)=1/2(1-p)V

And p that satisfies the both equation becomes:

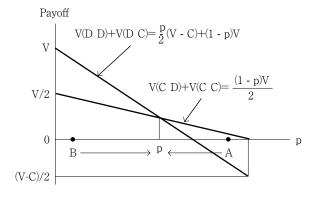
p=V/C

Exhibit 4 Transformation of social capital by changing payoffs

Payoff	С	D
Cooperation (C)	1/2V	0
Defection (D)	V	1/2(V-C)

Source: Maynard Smith (1982).

Exhibit 5 Ratio of Cooperative and Defective agents



Source: Adapted from Maynard Smith(1982).

Let s find the payoff matrix to be stable with 90% for the uncooperative and 10% for the cooperative strategies. The answer is very simple, and if V=9 and C=10, for example, the matrix becomes like Exhibit 6. We can find that the uncooperative strategy's gain against the cooperative is extremely high. On the other hand, the payoffs to be stable with 10% for the uncooperative and 90% for the cooperative strategies are V=1 and C=10 or V=9 and C=90, for example, and the matrix becomes like Exhibit 7. It becomes clear that the gains (V) is extremely high or the costs (C) are tremendously low in the case of equilibrium A (society occupied with uncooperative strategies) in comparison with equilibrium B (location with cooperative agents). In order for the equilibrium A to converge on the B, or to urge evolution of social capital, it might be a good idea to reduce the gains (V) in order to reduce incentive to be uncooperative or to increase the costs (C) to deter from being uncooperative. Implication in this discussion is that alteration of the rules of the game could promote evolution of social capital. It is policymakers that make the rules of the game, and might influence evolution of the society. Needless to say, in addition to the above argument, various policies for stabilizing the politics and economy, for developing education and for constructing the civic society shall directly influence evolution of relational capital and thus promote development of social capital.

Exhibit 6 Equilibrium A (Defective 90%, Cooperative 10%)

	С	D
Cooperative (C)	4.5	0
Defective (D)	9	-0.5

Exhibit 7 Equilibrium B (Defective 10%, Cooperative 90%)

B-1		
	С	D
Cooperative (C)	0.5	0
Defective (D)	1	-4.5

B-2		
	С	D
Cooperative (C)	4.5	0
Defective (D)	9	-40.5

#### (5) Multinational's strategy to enter into low social capital locations

I want to consider multinational strategy, intending to enter into low social capital locations, referring to evolution of birds removing ticks, suggested by Dawkins (1989). The birds are easily infected by ticks which leads to death. However, they are usually not that dangerous since the birds can recognize ticks and remove by themselves. But they have to ask the other bird to remove

when ticks infected their heads. There are three characters: suckers, cheaters and grudgers. Suckers are altruists who remove ticks of anyone else even if he did not remove their ticks in the past. Cheaters are egoists who never remove ticks of anyone else even if he removes their ticks in the past. Grudgers are conditioned-altruists who remove ticks of anyone else first, but will never remove if he did not remove their ticks. They will cooperate with cooperative counterparts, but will not with uncooperative ones.

Dawkins made computer simulation on how three types of the birds evolve when they match each other continuously. When a limited number of cheaters and grudgers are put into a majority of suckers, suckers are exploited by cheaters, and thus the population decreases drastically and finally leads to extinction. Grudgers, too, decrease its population but do not come to extinct. Rather, grudgers increase its population drastically after suckers 'extinction while cheaters decrease their population. Grudgers become stable as a majority while cheater, too, become stable as a minority. That is why cheaters cannot acquire much gains against themselves while grudgers 'ticks shall be removed by themselves. Therefore, in this game grudgers are evolutionary stable strategies (ESS). But grudgers are not the only ESS, and cheaters could become ESS, depending upon the ratio of the three at the early stage and the payoffs. For example, if cheaters are overwhelmingly majority, say 98%, they may become ESS since there remain little matches among grudgers.

Implication of this evolution game, in relation to multinationals 'entry into low social capital locations, is that it is necessary to make counterparts to recognize that you will take measures to uncooperative behaviors, which shall be a heavy blow to them<sup>13</sup>. It is important to make them to understand that you are a conditioned-altruist. You have to be familiar with the locations' features and peculiarities, and show your commitment to counterblow to any defections. It is the exact same as learning the rules of the game and reducing transaction costs by oneself.

As Granovetter (1985) pointed out, it is a mistake to either undersocialize or oversocialize human behaviors since they are embedded in the network of inter-personal relations. I have been emphasized the undersocialization aspect of the human behavior, and thus want to balance the point by stressing another side<sup>14</sup>. It is, too, vital to share its management philosophy and codes of conduct with business partners by maintaining dense communication and confirming shared benefits through the long-term business relations. You also have to minimize political risks by proactive contacts and communications with host government officials rather than reactive ones. I think that it becomes possible to minimize risks by constructing both dry and wet relations when entering into low social capital locations.

Additional remarks on implications of the evolutionary game theory are that it is necessary to

make the matches between old and new social capital to repeat themselves many times so as to transform the present equilibrium and evolve social capital. Indispensable is to develop and open domestic markets and to increase an opportunity to contact with foreign institutions and mutants. However, the socialist regime, for example, had little chance to do so. Even if a society had had relatively good initial conditions, social capital would not have been well developed without an open society.

## 4 . Concluding Remarks

This paper has overviewed where social capital is positioned in the economics and the sociology, and suggested my observation. I discussed social capital by dividing into institutional and relational capital, and argued the components and their interrelations. Then I looked into possibilities to evolve social capital, referring to the evolutionary game theory. First, it is possible to transform the existing social capital by entry of a relatively small number of mutants. Second, it is possible to promote evolution by changing the rules of the game. Third, it is important to prevent from defective behavior by a conditioned-altruist strategy and dense communications with counterparts. I will omit implications of this summary to either locations or international business since the discussion has already presented in the earlier sections.

Finally I want to develop my discussion a little bit further and suggest some research themes to be tackled. According to Morishita (1997), the civic society is constructed based upon laws with enforcing power under market economy which is regulated by the economic laws. But communities, such as socialist societies, did not have such economic laws, and was administered by the bureaucracy from the top. As a result, that type of societies remained self-sufficient, and failed to develop legal cultures. Based upon this discussion, market economy is the basis and promoting factor of institutional capital. Moreover, market economy nurtures rational and cooperative relations among individuals (relational capital) through ownership and free trades. It is undoubtedly true that evolution of institutional and relational capital contributes to development of market economy according to discussion in this paper. It seems possible that social capital and market economy co-evolve with each other, but this is my next research theme.

This is a preliminary study on social capital in international business research. There remain sophistication of the concept of social capital, model building of social capital evolution, interaction and co-evolution of multinationals and locations as future research themes. I want to combine theoretical and empirical researches on multinational strategy as well as evolution of social capital and market economy in transitional economies.

#### Notes:

- 1 See Financial Times, March 20, 1997 and Business Eastern Europe, April 5, 1999.
- 2 BP Amoco, the British oil major, also suffered from the similar ownership dispute.
- 3 Created assets include professional human resources, advanced industrial clusters, for example, which were artificially created in contrast to natural assets.
- 4 See Dunning (1997) pp. 222-223.
- 5 See Strange (1996).
- 6 See Ralston et al. (1997), for example.
- 7 See Stiglitz (1999) on his criticism over the Washington consensus.
- 8 See World Bank (1999), (2002) and URL (www.worldbank.org/poverty/scapital).
- 9 Transparency International, Berlin, Germany, announced in September 2000 that Finland is the No. 1 in transparency, Singapore 6th, the United States 14<sup>th</sup>, Japan 23<sup>rd</sup>, China 63<sup>rd</sup>, and Russia 82<sup>nd</sup>.
- 10 Institute of Developing Economies held this forum on January 26, 2001 and published Sato (2001) that explores possibility of social capital theory.
- 11 See Knack and Keefer (1997), for example.
- 12 See Maynard Smith (1982).
- 13 Many properties of hotels and restaurants in Russian Far East in which Japanese firms invested were deprived by local partners, but the lumber joint ventures are not the case. It is obvious that the Russian partners shall lose the Japanese market if joint ventures are unfairly broken. See Imai (2000) on the commitment question.
- 14 An example is that Japanese partners endeavor to share values with the Russian partner by continuous contacts in the Peat Moss joint business in Sakhalin. See Imai (2000).

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