

TRUST AND ECONOMIC DEVELOPMENT : COMPARISON OF SUBCONTRACTING RELATIONS AMONG KOREA, JAPAN AND TAIWAN

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Abstract: This study examines the link between trust and economic development by focusing on subcontracting relations and comparing institutional sources of trust among Korea, Japan and Taiwan. Korea and Japan show similarities that trust was based on institution, whereas trust may be a product of culture as well as that of institution in Taiwan. In contrast to Taiwan and Japan, the Korean subcontracting relations between the Les(Large Enterprises) and the SMEs(Small And Medium Enterprises) have been exploitative and noncooperative ones without trust, and the Korean economy has the dual structure of strong LEs and weak SMEs. The persistent weakness of the SMEs in Korea could be attributed to institutional defects, resulted from the political coalition between the government and the LEs, excluding the SMEs. To increase the level of trust in subcontracting relations, institutional setting such as monitoring and sanctioning system needs to be established. Building effective institutions requires genuine understanding of the importance of the SMEs in the economy.

INTRODUCTION

This study will examine the link between trust and economic development by focusing on the subcontracting relationship and comparing the institutional sources of trust among Korea, Japan and Taiwan. ‘

Recently, a great deal of literature has analyzed the relationship between trust and economic development (Fukuyama, 1995a. Coleman, 1990). The literature treats trust as an important factor that could explain why some countries develop and others lag behind, and often concludes that societies with high level of trust grow faster and those with low level of trust have a tendency to experience political instability and grow slower.

First, to explain the source of trust, many studies take a cultural view of trust and conclude that trust is a product of culture.

Studies on trust and economic development in East Asia also followed this line by arguing that the main cause of fast growth in East Asian countries was the Confucianism. Some scholars further extended the analysis to the Asian crisis and argued that crony capitalism in East Asia was the main cause of the crisis.

However, the cultural approach to trust has some defects, especially in explaining the East Asian development. If we regard trust as a product of culture, the empirical link between trust and economic development could not be easily proven. The transformative process of economic development and crisis is very dynamic, compared to the change of trust over time. The dynamic economic process in East Asia cannot be explained with low or no variation of culture. Also, we can not explain variations of economic development among East Asian countries by means of this similar cultural source of trust.

To avoid the problems, we focus on the

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institutional view of trust, which is interested in creating the level of trust where there is none. Since the institutional view intends to explain the variation of trust among important actors, such as the LEs, the SMEs and the government, we could explain the transformative process of economic development and crisis by taking the institutional view.

Second, to explain the empirical link between trust and economic development, most studies focus on trust at the macro level and associate high trust with superior economic development. However, although Korea, Japan and Taiwan have the common experience of fast economic growth, their patterns of economic development are quite different from one another. When we focus on trust at the macro level, it is difficult to explain the different patterns under a similar fast growth. The analysis of trust at the macro level also makes it difficult to explain why Korea, which is considered to have low trust, has achieved growth rates for decades as high as Taiwan and Japan which are considered to have high trust.

To resolve these problems, we need to analyze the connection between trust and economic development at a micro level by focusing on, for example, organizational trust. Since Korea, Japan and Taiwan are distinguished by the industrial structure, this study specifically focuses on trust in subcontracting relations between the LEs (large enterprises) and the SMEs (small and medium enterprises). This analysis of trust at a micro level could explain why East Asian countries have shown different patterns of development and suggest which system is efficient for continuing economic development.

The remaining of this paper is organized as follows. The next section critically reviews various perspectives of trust and suggests a theoretical framework for this study. The third

section compares subcontracting relations between the LEs and the SMEs in Korea, Japan and Taiwan and explores the source of trust and effect of trust on economic development. The final section concludes with a brief summary and some suggestions for institutional mechanisms through which trust can be built and maintained.

THEORETICAL FRAMEWORK

Trust provides a way to cope with risk or uncertainty in exchange relationships. Risk and uncertainty are seen to be inherent in social relationships, due to problems of time and information. Trust is a mechanism which overcomes the problem of time and bridges uncertainty in the face of imperfect information. Or trust is a mechanism by which actors reduce the internal complexity of their system of interaction (Luhmann, 1988). Various definitions of trust have two core elements: an agent's acceptance of risk from the actions of others, and the expectation that the partner will not take advantage of the opportunities opened up by the agent's acceptance of risk. Trust is viewed as accepted vulnerability to another's possible but not expected ill will toward one.

Before we explore the link between trust and economic development, we need to first understand a conceptual framework of trust by considering what the source of trust is and how trust can be created when there is none.

Understanding Trust: Culture or Institution?

1) Culture as a source of trust

One may argue that the different level of trust among different societies could be attributed to the different culture, social norm and values. Trust is a by-product of the embeddedness of

people who share a common culture (Granovetter, 1985). Fukuyama (1995a, b) also states that trust comes out of shared values, stresses commonly shared norms and sees economic actors support each other where they share a community of trust. Fukuyama suggests cross-cultural differences in social capital to explain cross-national differences in forms of economic organization. And he compares the case of high-trust societies such as Germany and Japan, where there are strong ties to impersonal corporations and loyalties to groups not based on families, with the case of low-trust societies such as China and Italy, where there exists a predisposition toward firms based on family and kinship. Fukuyama connected low level of trust with underdevelopment. And he emphasized culture as the source of trust and cooperation.

Some Korean scholars emphasized the close link between trust and economic development in East Asia. They also claim that Confucianism has functioned as an important culture for fostering trust and cooperation in East Asia, especially in Korea (Lew, 1997; Kook, 1997). There existed close relations between Asian Confucianism and economic development. The dynamics of Confucian capitalism include individual's sacrifice and obedience to group, importance of education and mutual cooperation.

According to Lew (1997), the ethics and culture of the Confucianism influenced the Korean society so much that the social ties such as family, school, and region functioned as an important basis of networks in society. The existence of social network decreased the transaction costs of economic and social activities, therefore contributed to the economic development in Korea. Lew also argues that there was limited predatory behaviour under the extensive use of social networks. Although Fukuyama and Lew disagree with the

issue of whether the Confucianism foster trust or not, they have in common the idea that trust is a by-product of culture.

However, the cultural perspective of trust shows several problems. First, if trust is seen as a reflection of culture, societies without trust are doomed to suffer from the negative effects of low trust and it may seem difficult to create it when there is none. However, empirical work tells us that trust can be built even between people from different cultural backgrounds or between individuals who share no values beyond their narrow business goals (Lane, 1997; Lane and Bachmann, 1997, 1998). Second, if we suppose that culture does not change fast, it may be difficult to relate the transformative process of economic development with the cultural factor. How do we explain the successful growth of Korea for some time, and economic crisis for other time with the same culture?

The question of whether the Confucianism increases the level of trust or not is hard to be answered. According to Weber, the Confucianism functioned as an obstacle for capitalist development in Asia. In relation to this, during the Yi dynasty, the ethics of "disgrace of commerce" may have influenced the economic underdevelopment. When Korea, as one of the NICs, grew rapidly during the 1960s and 1970s, scholars emphasized the elements of Confucianism such as hard work, education as the key engine of growth. However, the recent economic crisis in 1997 drew scholarly attention again to attribute the major causes of economic crisis to the negative aspects of Confucianism, such as crony capitalism. It may be problematic to draw the causes of development and crisis from the same ideology of Confucianism. We may have to follow the process of dynamic transformation of the Confucianism over time in Korea. If Confucianism includes both the negative and the

positive elements within its ideology, then we should ask why some aspect of ideology was an engine of economic development for some time and other aspect was a cause of crisis for other time.

Also when the Confucianism had been spreaded into many countries in East Asia, we could find some differences in the specific characteristics of the Confucian ideology among countries. Confucianism is interpreted very differently in Japan, Korea and Taiwan. For example, kinship ties vary in importance in Asia: they play a minimal role in Japan and a very important one in Southern China and Taiwan. Asia is a diverse place. Values differ from country to country and Confucianism does not always constitute the dominant cultural value(Fukuyama, 1998). Lifetime employment and keiretsu network in Japan, the chaebol in Korea and family-based networks of overseas Chinese businesses are unique to these societies, but it is difficult to measure to what extent they have contributed to high growth. There have not been any persuasive arguments on the issue of which factors of the Confucianism affect the economic development in which countries. Also, according to the cultural explanation of the Asian crisis, crony capitalism was the main cause of the crisis. But the degree of corruption among Asian countries differ, and generalization can not be made.

2) Institution as a source of trust

Yamagishi, Cook and Watabe(1998) conducted cross-societal experimentation to compare the level and the origin of trust in Japan and the U.S. The result of their experiment showed that the tendency to remain in group was much stronger among the American people than among the Japanese. It is contrary to the simplistic view of American and Japanese culture that Japanese people prefer to be part of

group and they are by nature collectivists while American people are more individualist and they value independence from group. And it would be difficult to interpret this result if we take the view that the origin of trust is culture.

According to the institutionalistic view, however, the Japanese often prefer to belong to groups and place group interests above their own individual interests not because they intrinsically like to do so, but because it is in their own long-term interest. Japanese society has developed systems of mutual monitoring and sanctioning to curtail free riding in a collective work group. In such a laboratory situation where mutual monitoring and sanctioning do not exist, Japanese tend to prefer not to stay in the group.

According to this reasoning, it is informal mutual monitoring and sanctioning rather than internalized moral values that insure that the Japanese will cooperate in achieving group goals. Yamagishi's(1988) cross-societal experiments also shows that once opportunities for monitoring and sanctioning are removed, the Japanese are in fact less cooperative in achieving group goals than are Americans. External social control is strong in collectivistic Japanese society, where mutual monitoring and sanctioning is exerted through the feelings of shame. However an internal guilty feeling is more important in an individualistic American society. From these experiments, we find out that the cultural difference disappears once these factors are experimentally controlled.

Kim and Son(1998) replicated Yamagishi's experiment in Korea and found that sanctions was an important factor in inducing cooperation in Koreans and the Japanese. In general, American students had the highest level of trust, while Koreans and Japanese were similar in terms of low level of trust. The introduction of sanctions induced noncooperators to coope-

rate, especially in Korea and Japan. However, the level of cooperation may drop when the sanctioning system is withdrawn. It implies that, although sanctioning did bring cooperation, it did not help increase trust.

The institutionalistic view regards institution such as sanctioning as an important basis for trust. However, when we rely highly on sanctions to induce cooperation, and when the system of sanctions collapse, due to government failure, cooperation will suddenly drop. The institutional view of trust is interested in creating the general level of trust when there is none. It could explain why individual social actors are more inclined to trust each other under the conditions of a certain institutional environment, and why they tend to distrust one another in other circumstances, and how trust is created and reproduced through the various institutional order.

Trust and Economic Development

Some scholars claim that trust has no role for economic performance. However, majority of scholars connect trust with superior economic development(Arrow, 1974; Fukuyama, 1995a). We could analyze the link between trust and economic development in various ways, based on the different levels of analysis regarding trust. There exist four different levels of analysis in trust: system trust, institutional (organizational) trust, interpersonal trust, and societal trust(see Lane and Buchmann, 1998, pp. 14~9).

Many studies focus on system trust at the macro level. System trust is trust or confidence in an abstract system. System trust focuses on the structure of society. For example, Gambetta (1988) tried to show how the structure of society affects economic performance. Members of society are forced to choose certain types of activities between rent-seeking and investment

for competitiveness. When the benefits of rent-seeking are higher than the investment for competitiveness, members will focus on the rent-seeking activities and the rate of economic productivity will be decreased. The reason why people choose rent-seeking activities is related with the lack of trust on the government. The rational individual behavior gives rise to the irrational economic inefficiency.

In the case of Korea, the society is described as having high private trust and low public trust. High private trust resides in the networks of family, school, and region. The importance of networks decreased the level of trust among people beyond the networks in society. However, Korea has shown high growth rates in spite of the high degree of corruption under the crony capitalism. The empirical link between trust and economic development could not be easily proven by focusing on the macro level trust. Also, although Korea, Japan and Taiwan have the common experience of fast economic growth, their patterns of economic development are quite different from one another. When we focus on trust at the macro level, it is difficult to explain the different patterns under a similar fast growth.

A better way of analysing the connection between trust and economic development and comparing Korea, Japan and Taiwan is to focus on trust within and between organization. We need to focus on the impact of trust among firms, in particular between suppliers and customers on business performance.

Sako(1998) explains the links between trust and business performance like the following. Interorganizational trust may enhance trust business performance in a number of ways. First, trust could reduce transaction costs. Trust is a social norm which lessens the need to use hierarchy to attenuate opportunism. Thus, the higher the general level of trust, the less need

there is for vertical integration. Second, building trust in itself is an investment. The returns to investment may be in terms of low monitoring and co-ordination costs. Although the initial set-up cost for building trust is high, it leads to an assumption that the older the trading relationship, the greater the gap in performance between high-trust and low-trust supplier relations. Third, trust gives rise to more rapid innovation and learning. Trust produces an extra positive motivational force to enhance efficiency. It leads both suppliers and customers to improve quality, reduce costs, and to innovate production and management method by joint problem solving. Scholars such as Granovetter(1985) argue that a high level of trust removes the need for any contractual and monitoring devices, therefore reduces transaction costs. A high level of trust makes it possible for exchange partners to share information. Easy exchange of information makes them more open to each other. It inclines them to explore new opportunities of collaboration, such as the improvement of product quality(Sako, 1998).

This connection between trust and economic development at a micro level could provide a clue to explain different patterns of economic development among Korea, Japan and Taiwan. Since they are contrasted with one another by industrial organization, it would be useful to focus on the level of trust between organizations, especially trust in subcontracting relations between the LEs and the SMEs, and to compare the different patterns.

COMPARATIVE ANALYSIS OF KOREA, JAPAN, AND TAIWAN

Subcontracting Relations in Korea

Before we discuss about the nature of sub-

contracting relations in Korea, let's look at the historical and political origins of the development of strong LEs and weak SMEs first.

1) The LEs and the SMEs in Korea's growth

The industrial structure in Korea is characterized as a dualism, the strong LEs and the weak SMEs. The political sources of institutional setting have contributed to the dualism and the exploitative nature of subcontracting relations(Lim, 1998).

The industrial policy in the 1960s basically emphasized export promotion and the firms involved in exports could get support by industrial policy. Although the LEs in those export-oriented sectors were more favored and the SMEs were relatively disadvantaged, this does not mean that the policy itself was against the SMEs.

However, during the 1970s, the inclination of industrial policy toward the LEs shrank the SMEs further. The export-led strategy led the development of the large assemblers by providing an incentive for them to import and thereby avoid the need to domestically produce parts and components. For export firms could get various subsidies such as tax-exemption for importing parts and components.

During the middle of 1970s, the large assemblers began to experience pressure to buy parts and components domestically, and tried to produce them internally and even took over small suppliers. As a mechanism for promoting the export-led strategy, the government established the GTC(General Trading Companies) in 1975. There were export subsidies and many privileges on the designated GTC. Thus the LEs began to build their vertical integration of production by taking over the SMEs to become qualified for the GTC.

In the 1970s and early 1980s, the SMEs themselves were not willing to take an

investment in the localization of parts and components for several reasons. First, foreign competitors such as Japanese parts makers lowered the cost down whenever the Korean parts suppliers developed new parts. Secondly, the large assemblers in Korea did not want to buy parts produced by the domestic makers. Finally, as mentioned above, the LEs in Korea merged those parts firms into their subsidiaries through vertical integration. This trend further deteriorated trust between the LEs and the SMEs because subcontracting between them was not based on cooperative but exploitative relationship.

There existed a continued accumulation and concentration of the LEs during the period. Overseas borrowing by the government channeled priority loans to the LEs with low interest rates. To the contrary, the SMEs in Korea had very limited access to financial routes. The SMEs were competing for survival, and did not have enough resources for collective action (Shafer, 1990, pp. 127~149). He explains the difficulty in organizing light manufacturing labor as follows: dispersion of workshop, little job security, high turnover rates, and low skill are the factors for an obstacle of organizing labor union (See also Deyo, 1989).

The government did not pay adequate attention to the SMEs, whereas it was very sensitive to the problems of the LEs. The authoritarian government regime forced labor and the SMEs to bear the costs of economic adjustments. The sharp decline of big business was regarded as a threat to the legitimacy of political power in the authoritarian government.

Whereas the LEs strengthened the vertical integration of production by taking over the SMEs and increased in-house production in the 1970s, the LEs have been forced to increase the subcontracting rate with the SMEs since the

1980s. The 'Gye-yol-hwa' subcontracting policy contributed to the increase of the subcontracting rate. In 1975, the government enacted the SME "Gye-yol-hwa" Promotion Act. It was designed to strengthen and stabilize vertical relations between the large firms and the smaller suppliers by guaranteeing at least three-year contracts. This policy was expected to provide the SMEs with a stable market. However, it resulted in hierarchically organized and dependent characteristics of the subcontracting relations because trust between the LEs and the SMEs did not exist.

In the sense, the period since the 1980s shows the quantitative development of the SMEs. The subcontracting rate of the SMEs increased in the 1980s. Out of total sales, subcontracting sales almost doubled from 25.6 per cent in 1980 to 46.6 per cent in 1988.

In the 1980s, the phenomenon of taking over the SMEs suppliers by the LEs has been somewhat reduced. However, when the LEs did not provide the SMEs a stable market through trust, the dumping attack by foreign firms and the insecure market for new products still posed obstacles for the SMEs to invest in innovation of parts and components. This situation gave rise to the persistently weak and dependent SMEs.

Since the end of 1980s, Korea's growth slowed down. The primary causes for the sluggish growth at the turn of the 1990s was a world wide economic downturn, increasing protectionism in developed countries, loss of price competitiveness due to rising wages, and weakness of the technological capabilities in various industrial sectors. In particular, the lack of trust among firms was often considered the primary obstacle for firms to upgrade their technological capabilities.

In sum, the political coalition between the government and the LEs led to the develop-

ment of a dualism, strong LEs and weak SMEs and the exploitative nature of the subcontracting system. The political networks gave rise to institutional setting in which trust could not be built.

2) Characteristics of subcontracting practices

The overall trend of subcontracting has been expansionary although it has been stagnated in recent years. Subcontracting rate has been increased from 30.0 per cent in 1980 to 73.4 per cent in 1992 and recently decreased a little to 71.7 per cent in 1997 (Table 1).

The development of the subcontracting structure since the 1980s is characterized as a pyramid-type and a multilayer structure. In the 1970s, the relative importance of subcontracting among the SMEs decreased and instead the subcontracting between the SMEs and the LEs began to increase. However, since the 1980s, subcontracting among the SMEs accelerated again. This shows that there has been an increased multi-layer subcontracting relationship among the SMEs.

However, the basic characteristics of the Korean subcontracting relations have been exploitative, noncooperative, and vertically integrated. Also the customer-suppliers relation was irregular and unstable. To institutionalize the cooperative relationship, the SCA (Subcon-

tracting Cooperative Association) was organized. In the beginning, the technical and financial support from the parent firms centered on the suppliers which were members of the SCA, but the number gradually decreased.

Although the subcontracting rate has increased, it does not imply the improvement of trust between the LEs and the SMEs. Most subcontractors are locked into a fairly closed production network controlled by a particular large assembler. Since the end of 1980s, the closed production network has been changed into a more opened one. The average numbers of assemblers with which SME suppliers are subcontracting are 5.9 in 1997. The other side of coin is, however, that assemblers increased the number of suppliers in order to get a secure supply of products since the labour strike of 1988. This made suppliers compete with each other and let them be further weakened.

The subcontracting relations between customers and suppliers reflect an unequal exchange terms, as known from the fact that suppliers have very limited decision autonomy (Ernst 1994, p. 53). The price of subcontracting products is decided against the preferences of SME suppliers. According to one survey, the percentage of the cases in which the preferences of suppliers were reflected in decisions making process was only 7.3 per cent in 1990 (Baik, Nak-gi et al., 1995, p. 41) and it is

Table 1. Ratio of Subcontracting SMEs to Total Manufacturing SMEs (%)

	80	84	88	92	96	97
SME total	30.0	41.7	55.5	73.4	73.6	71.7
5~9	17.8	31.7	48.5	73.4	72.3	65.6
10~19	27.4	42.1	56.1	74.1	71.6	74.1
20~49	38.6	50.0	63.3	72.3	77.6	78.2
50~99	51.2	52.9	57.7	74.9	77.7	82.9
100~199	49.8	50.9	54.2	71.1	73.9	78.7
200~299	50.2	44.4	40.9	70.8	77.6	83.2

Source: KFSB. The Current Status of the SMEs.

believed to be still the case. During the economic expansion, the subcontracting price is decided by the consultation of assemblers and customers. However, during the economic downturn, the price is in most cases decided by assemblers. It implies that assemblers shifted the costs of economic adjustment to suppliers.

Delaying payment by assemblers has been the major unwarranted business practices. In 1997, payment in cash accounted for 28.2 percent while the other 71.8 percent was paid in credit including promisory note. This behavior of delaying payment aggravated the financial condition of the SME suppliers.

In the past, unwarranted business practices such as delaying payment by assemblers had been the most important problems in the subcontracting relationship. But since the 1980s, the pressure of low cost has become the most important issue in subcontracting relationship (Table 2). In an exclusive relationship with the parent firms, the suppliers are discouraged from having multiple customers. In this case, the suppliers are forced to lower prices. The distribution of profits between assemblers and suppliers also became an important issue. Squeezing profit margins left no room for the suppliers to reinvest in technology development (Kenney, 1995).

The exploitative subcontracting relationship between the LEs and the SMEs made the LEs feel cooperation with the SMEs not beneficial,

and retarded trust building through stake-sharing with the SMEs. For example, capital investment by the LEs in SMEs suppliers could increase the level of trust. This investment decreases the possibility of opportunistic behaviour (expost-opportunism) of the assemblers. In 1997, the percentage of the capital investment by the customers was only 2.8 per cent among the total surveyed firms. Capital investment would reduce the risk that the SMEs should take in developing new technologies for domestic production of parts and components. One of the reasons of low level of capital investment by customers, for example, the LEs, was the fear and suspicion that the decision autonomy of suppliers would be lessened (Baik, Nak-Gi et al., 1995).

Financial support from customers to suppliers has been increased, but the level of support is still very low. The percentage of financial support to SME suppliers by customers is increased from 4.2 per cent in 1987 to 12.7 per cent in 1997.

Technical assistance has been regarded as the most important ways through which customers and suppliers could enhance competitiveness and produce value-added products. Suppliers complained that they usually get more technological support and training from Japanese firms than from domestic assemblers (Yoon et al., 1989, p. 95). During the mass-production period, however, the technical assistance may

Table 2. Complaints of Subcontracting SMEs Regarding Assemblers

	80	84	88	92	96	97
Harsh Quality Inspection	8.1	12.6	11.5	13.7	32.0	33.1
Pressure of Low Cost	36.1	38.3	46.4	38.5	68.4	61.3
Delaying Payment	37.4	22.3	18.9	23.1	44.9	52.3
Unstable Order	14.7	19.6	13.7	15.3	48.3	41.5

Source: KFSB. The Current Status of the SMEs.

Note: Since 1993, the survey system has changed from the single choice to the multiple choice. This table includes only manufacturing SMEs.

not be an important issue. But in the more sophisticated production period, the production system requires the close cooperation from design to production between customers and suppliers. In sum, the subcontracting relations have been very exploitative, not based on trust between suppliers and customers. The reasons for the lack of institutional setting in which trust could be built between the LEs and the SMEs, could be attributed to the political coalition between the government and the LEs by excluding the SMEs.

Subcontracting Relations in Japan

It is often argued that one important reason for the competitiveness of Japanese producers is the nature of Japanese subcontracting, which emphasize synergistic problem solving, rather than antagonistic bargaining, between organizations. Also Japan has developed strong LEs as well as efficient SMEs. The trust-based subcontracting system has contributed to rapid economic development in Japan. The postwar subcontracting system until the 1960s was however, exploitative and noncooperative. The government policies promoting the SMEs and improving subcontracting practices contributed to the development of the cooperative subcontracting relations between the LEs and the SMEs. Let us explore the transformative process of subcontracting system briefly and analyze the institutional sources of trust in subcontracting relations.

1) Transformative Process of Subcontracting System

With the coming of the economic boom, and where there was a growing disparity in wages, Japanese manufacturers revived the institution of subcontracting and hiring temporary workers. Postwar *laissez-faire* subcontracting maintained

some of the harsh aspects of subcontracting relationships between assemblers and suppliers similar to the Korean case. For example, large firms forced reductions in subcontractors' prices and withheld payments to their subcontractors.

However, owing to pressure from small-business organizations and in the interests of securing electoral support, the government then intervened and introduced three 'protective' programmes fostering small-firm cooperatives and provisions to establish small-business financial organizations: legislation prohibiting unfair subcontracting practices; the nurture of small-firm cooperatives; and the establishment of small-business financial organization (Nishiguchi, 1994, Ch. 3; Yokokura, 1988, Ch. 20).

First, the practice of withholding payments to subcontractors had become a major problem by the early 1950s. However, in response to pressures from small-business organizations, the Fair Trade Commission took action to regulate unfair subcontracting practices, including delayed payments. A wave of legislative support for small firms in the 1950s is largely due to their political pressure. It is often argued that small businesses constituted a sizable electoral source for the Liberal Democratic party and affected government policies. Unfair subcontracting practices were largely corrected in the 1956 Law on the Prevention of Delay in the Payment of Subcontracting Charges and Related Matters. The success of these policies is better measured in their implementation than in the legislation. The FTC implements these regulations by investigating firms across the nation based on periodic, special investigations, and investigations of subcontractors. Periodic investigations take place every year, covering a proportion of prime contractors in all industries. It is claimed that every prime contractor is investigated by the government

every one to one and a half years. Special investigations have been conducted in selected industries each year in which there is a specific need. Investigations of subcontractors began to complement the other two, which pertained mainly to prime contractors. Through these investigation, covering 25,156 subcontractors between 1973 and 1977, facts generally undetectable by surveying customers were revealed and used to rectify unfair transactions. (Nishiguchi, 1994, pp. 71 ~ 3).

The second postwar government policy concerning small businesses was the promotion of cooperative. These cooperatives developed along the lines of a larger formal government policy in the late 1950s: the dissolution of dualism. In order to achieve this goal, an organization of small businesses was established with legislative backing. However, despite the government's political orientation at the start, the postwar Japanese cooperatives took a purely economic direction. For example, financing continued to increase as one of the cooperatives' major activities. The promotion of cooperative provided small businesses with useful means for collective financing.

The third government policy was to pass legislation for the financial support of small firms. An array of financial institutions specializing in small-firm financing encouraged start-ups and very small businesses.

These measures generally helped promote and stabilize postwar subcontracting systems in Japan. In other words, it offered a legal and institutional framework within which small businesses were stabilized. Under the institutional framework, the Japanese subcontracting structure has developed as a cooperative local production network. The Japanese local production network is organized as a pyramid-style subcontracting system, consisting of assemblers, first-tier subcontractors, second-

tier subcontractors and trading houses. Most SMEs depend upon the help of local production networks and subcontracting relations for survival. They receive a continuous flow of information from assemblers, trading houses and rival producers. Trading houses and assemblers even provide the SMEs with financial support such as commercial credits. Generally speaking, technical and marketing support for the SMEs comes mostly through private networks. On the other hand, public support is more important for financial support (Itoh and Urata, 1994).

In sum, in the case of Japanese subcontracting, it was the political factor that heavily influenced the development of Japanese subcontracting institutions. Legislation and other measures that the government implemented to protect and promote small businesses after the 1950s established the legal framework within which certain rules of the game were imposed on all the players.

2) Trust-based subcontracting system

The government's measures may have offered a strong incentive for prime contractors to stop subcontracting, owing to government intervention. It must have made more sense for prime contractors to revert to in-house production. However, the large firms adopted the other option, which is the expansion of their utilization of subcontracting.

New modes of subcontracting were different from the previous ones in several aspects. First, rather than negotiating price downstream, prime contractors and subcontractors alike began to look at the possibility of reducing costs at the source by means of joint problem solving. The large firms were able to demand subcontractors' contribution to price reduction and product quality improvement in exchange for long-term contractual relations (Nishiguchi,

1994, p. 125).

Second, innovations made by suppliers led to the development of win-win game between assembler and supplier. Third, the evidence of enhanced subcontractor capabilities in Japan is reinforced by the prevalence of self-developed technologies among subcontractors. Fourth, the collaborative design and production is done by the resident engineers.) Resident engineers are made part of a project team consisting of the customer's planning, design, product, and process engineers and other suppliers' resident engineers. They collaborate to solve various design problems and to attain target costs. (Nishiguchi, 1994, p. 131).

Finally, during the 1960s, many Japanese manufacturers was establishing subcontractor grading, in which the subcontractors' performance was continually evaluated by their customers in terms of product quality, price, delivery, engineering and other areas. These innovative measures reflect the coexistence of interests between them, which is more likely to increase the level of trust. In the sense, interest and trust is the both side of a coin.

In sum, the SMEs in Japan continued to keep pace with large firms through the large firms' commitments to subcontracting. Why did the producers choose the option of expanding subcontracting with the different modes? A major reason was traced to a distinctive producer strategy to try to manage the demands of increasing product proliferation (due to rapid market expansion and competition among many producers) by outsourcing to subcontractors. The delegation of production and development activities to subcontractors allowed producers adjust more easily to shifting demands and improve their competitive position. Whereas primary producers focus their internal resources on strategic activities, subcontractors had new opportunities to learn and develop the

multifunctional technical expertise. The various institutional innovations in subcontracting system resulted in transforming the logic of subcontracting relations from exploitative to collaborative manufacturing. In the sense, the Japanese culture in itself can not explain the transformation of subcontracting practices. The various institutional measures, affected the characteristics and creation of trust and cooperation in subcontracting system in Japan.

Subcontracting Relations in Taiwan

Taiwan has grown rapidly and one of the causes of this fast growth is traced to the existence of the efficient and flexible SMEs. Before we explore the sources of trust and the effects of trust on economic development, let us explain the historical and political dynamics of the development of viable SMEs in Taiwan.

1) The LEs and the SMEs in Taiwan

Contrary to conventional wisdom, large firms have played a central role in the development of the Taiwanese production system. They have also facilitated knowledge creation in the SMEs. After the second world war, the Taiwanese government took over the Japanese enterprises that had been established during the 50 years of colonial rule(1895 ~ 1945). Unlike Korea, the government did not privatize these firms; instead, they were run as public enterprises. Taiwan developed public enterprises large enough to enter the capital-intensive sectors, while at the same time avoiding the dominance of private conglomerates.

Linkages with the LEs have played an important role in the development of Taiwan's SME sector. Most of Taiwan's exports come from the SMEs. The Taiwanese LEs are encouraged to be important indirect exporters in their role as input suppliers such as

electronics, petrochemical, textiles, and steel to the small direct exporting firms. The LEs are linked to the SMEs as providers of credit, technical assistance, and trained personnel (Wade, 1990, p. 70). The relationship between the LEs and the SMEs has been a collaborative one and the Taiwanese industrial structure is densely interconnected.

Why do the SMEs prosper in Taiwan? We could find some evidence of institutional measures in which the SMEs could be prospered. For example, the tax code in Taiwan favoured the starting up of new firms by allowing a five-year tax holiday for a new firm. Further, tax policy was characterized as a fairly steep, progressive corporate income tax which encouraged the establishment and maintenance of many small firms to reduce its total tax burden. Financial and taxation systems were not conducive to a rise of the LEs in Taiwan (Dollar and Sokoloff, 1994, p. 9). It is argued that the Taiwanese government tries to prevent the concentration of private capital because of the political concerns of the KMT leaders. The political elite of the KMT regime perceived the formation of private indigenous economic power as a challenge to their hegemony in Taiwan.

Taiwan started industrialization with quite a large number of entrepreneurs. In this case, industrial policy tends to take a more neutral incentive applied to all industrial sectors. Taiwan's niche-seeking small firms needed less firm-specific and relied instead on stable prices and exchange rates. However, there have been government policies to promote SMEs such as market promotion, management rationalization, cooperation and promoting strategic alliances, loans and upgrading technology and labor training. Also there was no discrimination against smaller firms within the SME category. This neutral policy was an important founda-

tion for the development of Taiwan's large pool of vibrant and entrepreneurial SMEs. Through the state monopoly of the banking system, the nationalist state developed numerous restrictions designed to retain its monopoly and enforce its policies of price stability and the prevention of private economic concentration. Most businessmen complained that banks are too conservative and bureaucratic. Most businessmen in Taiwan rely on private sector such as family members, friends, business partners, rather than public source such as banks.

During the period of labor-intensive industrialization, the leading industrial sector was textiles and the traditional form of business organization was the loose networks of family-owned SMEs. However, when electronics took over from textiles as the leading industrial sectors, this led to a erosion of traditional form of business organization. The Taiwanese firms began to produce a peculiar form of business organization: cross-sectoral business groups. These business groups consist of a loose network of mostly medium-sized companies that produce a variety of products for different markets, with one core company exercising financial control. This type of firm organization reflects the need to combine the scale advantages of the LEs with the flexibility of the SMEs.

2) Personal trust and institutional setting

It is often argued that the horizontally integrated industrial network is based upon personal trust among firms. Personal trust can provide businessmen with security, because it is used to reduce risks. Personal trust also provides businesses with flexibility, because it helps to mobilize resources promptly. In Taiwan, over 90 percent of businesses are small and medium in size and are recognized to be family firms. Personal trust is one of the key

mechanisms upon which *quanxi* (networks and partnerships) is based. The family enterprise is a business firm, or group of related firms, whose major decision-making positions are occupied by individuals related by blood, marriage, or adoption. Personal trust in Taiwan seems to be a product of the Confucian culture. According to Hamilton, Chinese family firms typically do not grow large, but rather remain small. Chinese partible inheritance, with each son receiving an equal portion of his father's estate. Because of this practice, it is difficult to maintain a large firm over several generations. Given the first reason, a common strategy for prosperous families was to start multiple businesses. The network-based market economy rested on reciprocal relationship, whereas in the west, the firm-based market economy rested on impersonal laws. Hamilton's explanation emphasizes the importance of society rather than the role of state. (Hamilton, 1991, p. 61).

At the same time, we could still regard institutional measures as source of trust among firms in Taiwan. Relatively speaking, although the Taiwanese government did not directly try to protect and promote the SMEs, compared to Korea and Japan, the viable SMEs resulted both from political considerations and cultural sources. In other words, trust in network-based structure comes from personal relations (strong family tradition) as well as the results of political considerations. In the case of Taiwan, state and societal factors converged to prevent Taiwan from choosing either of the options that Korea or Japan followed.

As we already discussed, Taiwan have passed through the phases of industrial transformation from the labor-intensive sectors to knowledge or technology-intensive sectors. In this technology driven period, family firms are forced to venture across product lines and to move from industries with declining margins, like textiles,

to the much more profitable sectors. In most cases, they are unable to raise the capital required for increasing fixed investment and R&D. To cope with these pressures, the SMEs became integrated into larger business groups and the cooperative relationship between the LEs and the SMEs became more prominent (Levy, 1988). Also, the Taiwanese firms had a linkages with foreign customers through international subcontracting and OEM arrangements, and linkages with international supply sources for key components. To fulfil an OEM contract, the LEs in Taiwan rely on hundreds of domestic suppliers.

Taiwanese SMEs have relied heavily on informal social networks for access to resources, capabilities, and knowledge. These networks were originally restricted to family and kinship relations. As the economy gets more sophisticated, the firms had to develop various sources of networks such as informal peer group, class mates and former colleagues. Also the government launched CS (Center-Satellite) program in 1984, to encourage closer, interdependent and long-term ties between large "center firms" (upstream suppliers, final assemblers, large trading companies) and their "satellites" (especially component suppliers). In other words, the CS program is designed to improve a cooperative subcontracting relations between the LEs and the SMEs. In order strengthen these links, the government provides a variety of financial, manpower training and technical engineering assistance to both the central plants and the satellites (Wade, 1990, p. 167; Ernst, 1998, p. 23) In the sense, the government policies produce an institutional setting in which the subcontracting relations became more cooperative. In the case of Taiwan, the existence of high trust among firms may be a product of both culture and institution.

The above comparison of Korea, Japan and

Table 3. Comparison of Korea, Japan and Taiwan

	Korea	Japan	Taiwan
	lack of trust	Institution	culture and institution
	- institutional defects	- three protective programmes	- family kinship ties
Source of Trust	- coalition between the government and the LEs excluding the SMEs	- coalition between the government and the LEs including the SMEs	- government policies
Trust in Subcontracting	Exploitative hierarchical	from exploitative to cooperative	cooperative
Industrial Organization	strong LEs weak SMEs	strong LEs strong SMEs	Strong and flexible SMEs

Taiwan can be summarized as in Table 3. Korea and Japan show some similarities that trust was based on institutional measures, whereas Taiwan reflects that trust may be a product of culture, and family networks as well as institutional measures. In contrast to Taiwan and Japan, subcontracting relations are exploitative and lack of trust in Korea. If a country develops a cooperative and trust-based subcontracting system, it is more likely to develop an efficient and flexible production system, which will lead to the continuing economic development. Compared to Japan and Taiwan, Korea shows some defects in developing trust-based subcontracting system, which could be functioned as an obstacle for upgrading its technology and adapting to the rapidly changing environment.

In terms of industrial organization, Korea has a different characteristic of dualism with strong LEs and weak SMEs from Taiwan and Japan. This is clearly shown in Table 4. Although there is not significant difference in number of firms and number of employees, the Korean SMEs lag far behind the Taiwanese and Japanese SMEs in the level of competitiveness, represented by the percentage of the export. In particular, Korea and Taiwan are usually compared as a contrasting case in industrial organization. According to Feenstra et al.,

Table 4. Comparison of the SMEs in Manufacturing (%)

	Japan ('97)	Taiwan ('97)	Korea ('98)
Number of Firms	99.0	97.8	99.2
Number of Employees	72.0	81.3	70.5
Value-added	55.2	34.4	48.0
Export	51.8	50.6	39.6

Source: Administration of SME, *SME Statistics*

Note: The SMEs are defined as firms with 5~299 and 4~299 in Korea and Japan, respectively. In Taiwan firms with capital below 60 million Taiwanese yuan are included in the SMEs. The export data is for 1995.

(1993, p. 2), Korea has many large, vertically-integrated business groups known as chaebol, whereas business groups in Taiwan are smaller and horizontally-integrated in the production of intermediate inputs. Due to the different industrial organization, the exploitative and vertically-integrated form of subcontracting may not be found in Taiwan.

Also, Korea, Japan and Taiwan responded differently to the similar international challenges due to the differences in trust and domestic structure (Lim, 1999). Relatively speaking, Korea was hit hard while Taiwan and Japan have shown a relative stability during the recent crisis. The LE-based structure as a product of the exclusive coalition, led to the

non-cooperation and the lack of trust in subcontracting relations, and Korea was difficult to adjust to the rapidly changing domestic and international environment. The SME-centered structure in Taiwan and the cooperative structure between the LEs and the SMEs in Japan basically showed inclusiveness in its coalition base, therefore Taiwan was flexible in adjusting to the newly changing environment.

CONCLUSION

The purpose of this study was to explore the source of trust and effect of trust on economic development, by comparing subcontracting relations among Korea, Japan and Taiwan. Korea was in general regarded as low-trust society. Korea has grown fast enough to be seen as the NICs and also experienced the economic crisis. Taiwan and Japan, however, have shown the relative stability during the recent crisis. We could ask why these three countries responded differently to the similar international environment. This study tried to answer this puzzle by focusing on the link between trust and economic development. Instead of regarding trust as a by-product of culture, this study regards it as a product of institution. The institutional perspective of trust is concerned with the creation and the maintenance of trust. This study focused on subcontracting practices to explain institutional trust among firms.

Korea and Japan show some similarities that trust was based on institutional measures, whereas Taiwan reflects that trust may be a product of culture (family networks) as well as institution. In contrast to Japan, Korea has failed to transform the subcontracting practices from exploitative to cooperative one. The

subcontracting practices in Japan has transformed from exploitative to cooperative ones due to political reasons. There existed political coalition and interest match between the government and the SMEs. The Japanese government tried to promote the SMEs and cure the unfair subcontracting practices to get political and electoral support. Also the LEs realized that the competitiveness of the large firms requires the efficiency of the SMEs. The LEs have cooperated with their suppliers in terms of technology transfer and financial assistance.

However, the Korean subcontracting relations between the LEs and the SMEs have been exploitative and noncooperative ones without trust. Korea developed the dual structure of an economy with strong LEs and weak SMEs. The persistent weakness of the SMEs in Korea could be attributed to institutional defects, resulted from the political origin of the government policy. Since there existed close coalition between the government and the LEs, the SMEs promotion policies have not been effective in developing efficient SMEs. Also the Fair Trade law, Monopoly Regulation law, which intended to establish fair subcontracting transaction between the LEs and the SMEs, have not implemented seriously. In a sense, the monitoring and sanctioning system in subcontracting relations was only nominal. The persistent characteristics of exploitative subcontracting relations worsened the weakness of the SMEs. The exploitative subcontracting relations have functioned as one of the structural obstacles for increasing competitiveness of the Korean economy.

How could we create trust when there is none? To create and increase the level of trust in subcontracting relations, the monitoring and sanctioning system needs to be established first. Establishing institutional framework

requires the strong legal implementation of laws by the government. To expect the serious will of the government, there should be a realization of the fact that the SMEs need to be grown strong in overcoming the structural bottleneck of an economy. Also the genuine coalition between the government and the SMEs needs to be established. It means that the SMEs should organize themselves voluntarily to pressure and check the behaviors of the government.

The LEs should change the previous perspective of short-term interests into the perspective of long-term interests. The normative prescription may not be realistic. As mentioned before, the capital investment by the LEs with the SMEs could increase the level of trust by inducing the incentive of cooperation between them.

As Nishiguchi argues, the development of collaborative subcontracting relationship can not be explained by a single-faceted perspective. Subcontracting can be explained as the evolutionary product of a complex historical interaction among socioeconomic, technical, and political factors. Trust could be increased by the establishment of institutional framework such as sanctioning system. However, building institutions requires the interest match between the government and societal actors. Interest match is calculated not only by the rational choice, but also by the genuine understanding of interests.

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