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CONTENTS

KOBE ECONOMIC & BUSINESS REVIEW, 52 (2007), 1-6

AN EMPIRICAL TEST OF THE EFFICIENCY HYPOTHESIS ON THE RENMINBI NDF IN HONG KONG MARKET

HIDEKI IZAWA **Kobe University**

Abstract

In this paper we analyze empirically the efficiency hypothesis after the revaluation on July 21, 2005, using daily non-deliverable forward (NDF) renminbi rates in the Hong Kong market. The efficiency hypothesis for the renminbi NDF market is rejected. Therefore, the NDF rate is not an unbiased predictor of the future spot rate.

JEL Classification: F31, F37
Keywords: renminbi, non-deliverable forward (NDF), foreign exchange market efficiency hypothesis

1. Introduction

The Chinese government revalued the renminbi (RMB) per dollar by about 2 percentage points, to 8.11 from 8.2765 at 7 p.m. on July 21, 2005. It announced that the exchange rate regime would change from the de facto dollar peg to a managed float in reference to the currency basket. However, the exchange rates have not appreciated very much. In this paper, we analyze empirically the efficiency hypothesis after the revaluation, using daily non-deliverable forward (NDF) - a currency exchange derivative - renminbi rates in the Hong Kong market. If the efficiency hypothesis holds, the NDF rate is an unbiased predictor of the future spot rate. Could the NDF market forecast the revaluation on July 21, 2005? The 1 month NDF rate was 8.2397, the 3 month rate was 8.1829, the 6 month rate was 8.0464, and the 12 month rate was 8.1731. Therefore, the 1, 3, and 12 month rates were underestimated

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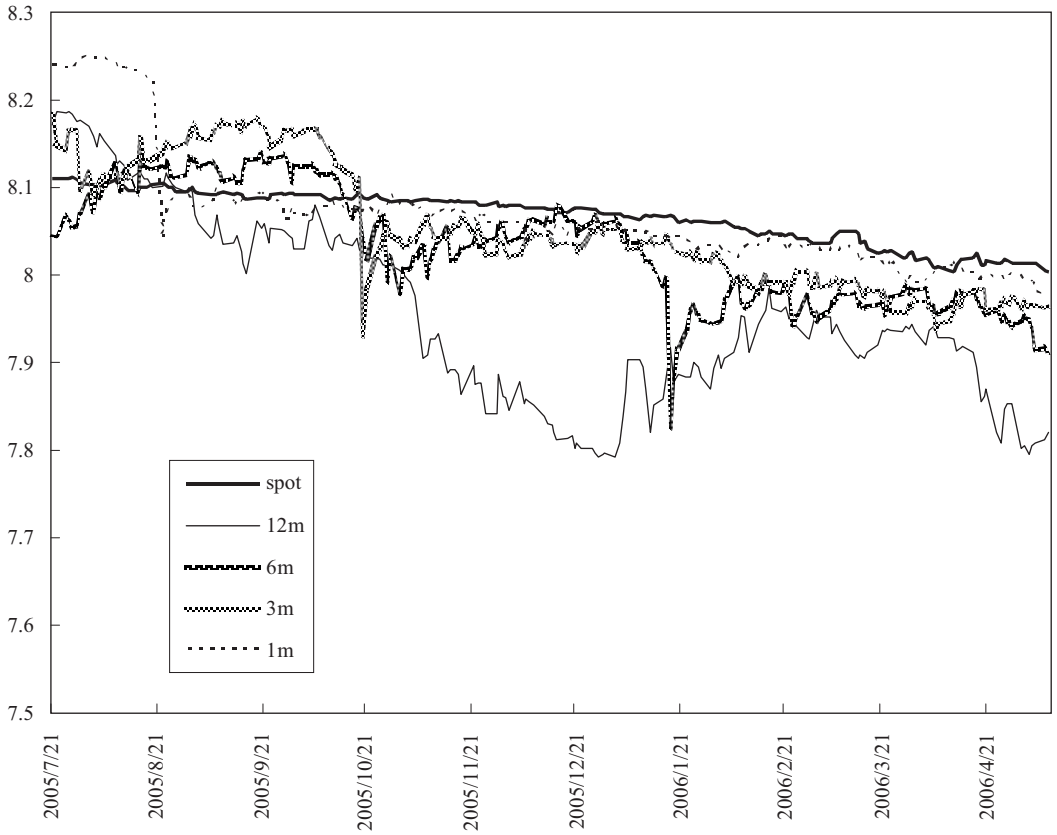
while the 6 month rate was overestimated. It seems that the revaluation was not anticipated accurately.

In the literature, Fama (1970) first defines an "efficient" market in which prices always fully reflect available information. The efficiency hypothesis in foreign exchange markets has been tested. For example, Hai etc. (1997) analyzed pound, french franc, and yen against US dollar. However, the renminbi NDF has never been treated. In Section 2, we show the empirical results. Section 3 concludes.

2. Empirical Results

Figure 1 shows the RMB spot rates and NDF (1, 3, 6, and 12 calendar months) rates. NDF rates are shifted to the right to compare with the corresponding future spot rates. We use NDF rates (F) on contract date and the spot rates (S) on valuation date.

Figure 1 Chinese renminbi spot rate and non-deliverable forward (NDF) rates



・NDF rate (F) on contract date
↓ two business days later (if holiday, next available business day)
・initial date of reckoning
↓
・spot rate (S) on valuation date
↓ two business days prior to settlement
・settlement date

Daily data by CEIC Data Company Ltd. are used in this paper. The estimation periods start from each date corresponding to 1, 3 and 6 month NDFs terms contracted on July 21, 2005 because the NDFs suddenly appreciated, as Figure 1 shows. In the case of the 12 month NDF, the estimation period of spot rates starts from July 21, 2005, corresponding to the 12 month NDF on July 21, 2004. The end of the data is May 10, 2006.

In this section we start from unit root tests. If both spot and NDF variables have unit roots, we test Engle-Granger cointegration and dynamic OLS (DOLS) to test the efficiency hypothesis.

2.1 Unit root test

First of all, we test Augmented Dickey-Fuller (ADF) unit roots of spot rate in logarithmic term (s), and 1, 3, 6, and 12 months NDF rates in logarithmic terms (f), respectively. The result is summarized in Table 1.

Table 1 Unit root tests

	lag		lag		lag		lag	
		$s_{1,t}$		$s_{3,t}$		$s_{6,t}$		$s_{12,t}$
ADF	0	0.469	5	0.234	0	-0.952	5	0.568
PP		0.497		0.065		-0.871		0.57
KPSS		2.606**		2.1**		1.159**		2.906**
		$\Delta s_{1,t}$		$\Delta s_{3,t}$		$\Delta s_{6,t}$		$\Delta s_{12,t}$
ADF	0	-12.085**	4	-6.718**	0	-9.142**	4	-8.531**
PP		-11.999**		-12.569**		-9.201**		-15.266**
KPSS		0.153		0.084		0.044		0.16
		$f_{1,t}$		$f_{3,t}$		$f_{6,t}$		$f_{12,t}$
ADF	1	-0.097	1	-0.006	0	-6.354**	0	-1.718
PP		-0.246		-2.527		-5.853**		-1.634
KPSS		2.63**		1.919**		0.22		1.93**
		$\Delta f_{1,t}$		$\Delta f_{3,t}$		$\Delta f_{6,t}$		$\Delta f_{12,t}$
ADF	0	-40.764**	0	-26.641**		—	0	-15.188**
PP		-47.336**		-24.263**		—		-15.503**
KPSS		0.292		0.344		—		0.174

Note: ADF is the augmented Dickey-Fuller test of a unit root against no unit root. All lag lengths are chosen based on SBIC. PP and KPSS indicate Phillips-Perron test and Kwiatkowski-Phillips-Schmidt-Shin (1992) test (Bandwidth=6). Tests for variables in levels and in first differences include a constant term. **: 1% significance level

(1 month NDF case)

The ADF t statistic of s is 0.469 and ADF t statistic of f is -0.097. Moreover, ADF t statistics of the difference (Δ) of s and f are -12.085 and -40.764, respectively. Therefore both s and f have unit roots, i.e. I(1), at 1% significance level. We also checked PP and KPSS unit root tests and had robust results

(3 month NDF case)

The ADF t statistic of s is 0.234 and ADF t statistic of f is -0.006. The ADF t statistics of the difference of s and f are -6.718 and -26.641, respectively. Therefore both s and f have unit roots, i.e. I(1)

(6 month NDF case)

The ADF t statistic of s is -0.952 and ADF t statistic of f is -6.354. f does not have unit root. The ADF t statistics of the difference of s is -9.142. Therefore s has a unit root. In such a case we need not test cointegration.

(12 month NDF case)

The ADF t statistic of s is 0.568 and ADF t statistic of f is -1.718. The ADF t statistics of the difference of s and f are -8.531 and -15.188, respectively. Therefore both s and f have unit roots.

2.2 Engle-Granger cointegration test

We test Engle-Granger cointegration.

$$s_{t+k} = \alpha + \beta f_{k,t} + u_{k,t}$$

where $k = 1, 3$ and 12 calendar months corresponding to the NDF contract maturity

(1 month NDF case)

As shown in Table 2, τ (ADF), ADF t statistic of residual derived from OLS regression following Engle-Granger cointegration test is -4.4. The residual of OLS regression is stationary, I(0). A cointegration relationship exists.

(3 month NDF case)

The ADF t statistic of residual derived from OLS regression following Engle-Granger cointegration test is -6.42. The residual of OLS regression is stationary, I(0). A cointegration relationship exists.

Table 2 Engle-Granger cointegration tests

$s_{t+k} = \alpha + \beta f_{k,t} + u_{k,t}$

	$k = 1$	$k = 3$	$k = 12$
α	0.286	0.618	1.737
	(0.045)	(0.052)	(0.032)
β	0.864	0.706	0.169
	(0.022)	(0.025)	(0.016)
τ (ADF)	-4.4**	-6.42**	-0.61
τ (PP)	-4.47**	-6.51**	-0.55
Q(6)	320.09	143.96	—
p-value	0	0	—

Note: Newey-West HAC standard errors are in parentheses (lag truncation=6). τ (ADF) and τ (PP) are Studentized coefficients for the augmented Dickey-Fuller and the Phillips-Perron tests, respectively, that $\{u_{k,t}\}$ has a unit root. The 5% and 1% critical values are -3.37 and -4.00, respectively (Engle and Yoo, 1987). Q(6) is the Box-Pierce statistics with 6 lags for the residuals and the associate p-values are reported. **: 1% significance level

(12 month NDF case)

The ADF t statistic of residual derived from OLS regression following Engle-Granger cointegration test is -0.61. The residual of OLS regression is not stationary. A cointegration relationship does not exist.

2.3 Efficiency Hypothesis

We test the null hypothesis, H(0) of efficiency hypothesis in 1 and 3 month NDF cases.

H(0): $\alpha = 0$, $\beta = 1$, and u is serially uncorrelated (or white noise)

If the null hypothesis is not rejected, the efficiency hypothesis holds.

(1 month NDF case)

As shown in Table 2,

$\alpha = 0.286$, $\beta = 0.864$,

(0.045) (0.022)

standard errors are in parentheses

If investors are risk neutral, the constant term (α) is zero. However, if they are risk averse, α can be positive which may not necessarily imply the rejection of the efficiency hypothesis. However, β is significantly different from 1.

And the residual, u is serially correlated according to Box-Pierce tests Q(6) with lag=6.

Next, we estimate Stock and Watson's dynamic OLS (DOLS) regression with six leads and lags.

$$s_{t+k} = \alpha + \beta f_{k,t} + \sum_{i=-6}^{6} \gamma_i \Delta f_{k,t+i} + u_{k,t}$$

Table 3 Cointegrating regressions (DOLS)

$$s_{t+k} = \alpha + \beta f_{k,t} + \sum_{i=-6}^{6} \gamma_i \Delta f_{k,t+i} + u_{k,t}$$

	$k = 1$	$k = 3$
α	0.267	0.513
	(0.085)	(0.080)
β	0.873	0.756
	(0.041)	(0.038)
t-value ($\alpha = 0$)	3.13**	6.42**
t-value ($\beta = 1$)	9.66**	40.40**
F ($\alpha = 0$, $\beta = 1$)	93.51**	537.17**

Note: Estimates of cointegrating regression coefficients using Stock and Watson's method with six leads and lags are reported. Newey-West HAC standard errors are in parentheses (lag truncation=6). **: 1% significance level

As shown in Table 3, $\alpha = 0.267$, $\beta = 0.873$

F statistic is 93.51 so that the joint hypothesis ($\alpha = 0$ and $\beta = 1$) is rejected. And $\beta = 1$ is also rejected.

(3 month NDF case)

$\alpha = 0.618$, $\beta = 0.706$,

(0.052) (0.025)

Q(6) is 143.96. Therefore the residual is serially correlated.

From DOLS, $\alpha = 0.513$, $\beta = 0.756$. F statistic is 537.17 so that the joint hypothesis is rejected. And $\beta = 1$ is also rejected.

3. Conclusion

In this paper we analyze empirically the efficiency hypothesis after the revaluation on July 21, 2005, using daily non-deliverable forward (NDF) renminbi rates in the Hong Kong market. The efficiency hypothesis in the renminbi 1 and 3 month NDF market is rejected. Therefore, the NDF rate is not an unbiased predictor of the future spot rate.

References

Fama Eugene, (1970) "Efficient Capital Markets: A Review of Theory and Empirical Work", *Journal of Finance,* vol.25, no.2, pp.383-417.

Hai Weike, Nelson C. Mark, and Yangru Wu, (1997) "Understanding spot and forward exchange rates regressions", *Journal of Applied Econometrics,* vol.12, no.6, November/December, pp.715-734, collected in Sarno L., and M. Taylor, *New Developments in Exchange Rate Economics,* vol.II, Elgar Reference Collection, (2002)

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FRAGMENTATION AND PRODUCTION NETWORK IN EAST ASIA

NOBUAKI HAMAGUCHI **Kobe University**

Abstract

This paper explains that the intra-regional trade in East Asia has progressed remarkably due to the increase of intermediate goods trade. Increasing presence of multinational firms has been the driving force of this process leading to the fragmentation of production. Our theoretical analysis identified that the interaction between the scale economy and transportation cost is the key factor for the emergence of fragmentation. Through the empirical analysis, we found that the border effect in costal regions of China is as low as that of Japan. Yet, there is significant border effect in inland regions of China. This result provides an evidence for concentration of the Japanese direct investment in China in the costal regions.

JEL Classification: F122, F15
Keywords: Fragmentation, Regional integration, Intermediate goods

1. Introduction

Since economic development does not occur everywhere uniformly, an analysis of economic geography should explain uneven distribution of economic activities. For such heterogeneity, the traditional explanation based on the theory of comparative advantage of international trade has emphasized the diversity of natural endowment which creates differences in technological advantage or relative factor prices across countries and regions. Given the assumption of constant returns to scale production technology and immobility of production factors under the perfect competition without transportation cost, the comparative advantage perspective spells out that free trade should promote efficient allocation of economic activities across the space compatible with the first-nature in each location.

The manifestation of this argument in the East Asian context has come to be known as

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the "flying geese" pattern of economic development. The wide disparity in income levels across nations of the region has served as the basis for the greater division of labor, paving the way to the entry of late industrializing economies in the catching up process based on the availability of cheap labor.

In this pattern, Japan has played the role of the lead economy. The international division of labor has developed as Japan has become increasingly specialized in technologically advanced industries while successively shedding industries in which it no longer holds a comparative advantage; these industries, in turn, moved to nearby less-developed countries (the Asian NIEs). Over time the "following geese", in turn, upgrade their own industrial structures following the "lead goose" trajectory while shedding outdated industries to the neighboring less-developed countries (ASEAN and China).

On the whole, the flying geese analogy describes well the catching-up industrialization in East Asia. Economic liberalization has provided low-income economies with opportunities to become integrated into the regional production network, enabling the sequential takeoff of industrialization in these economies.

However, it is not clear why Japan remained as the cutting edge "lead goose". Without considering any endogenous mechanism of the lead economy, we cannot fully understand the motion of flying geese.

Recently, a new branch of economics called new economic geography (NEG) has developed a viewpoint emphasizing the role of self-organizing agglomeration. The defining issue for NEG is to explain the agglomeration or clustering, in a large variety of forms, of economic activities as the result of the self-reinforcing process through interactions between firms attracted by the scale economies in larger markets and migration of associated workers and capital. At least three types of positive externalities are identified in a high potential market: the wide consumption variety on consumers' real income; the greater intermediate input variety on firms' productivity, and accumulation of the variety of talented people on the knowledge creation. (Fujita, 2007) With the concentration of firms, workers, intermediate good suppliers, and the talent, some regions become even larger markets and further magnify the externalities. The positive feedback mechanism leads to the self-organization of an agglomeration. Once such circular causation sets in, it cannot be easily reversed *(lock-in effect)*. According to Fujita et al. (2004), in 1990 Japan accounted for 72% of the total GDP in East Asia, while within Japan, economic core regions represented 40% of the national total. This implies that Japan's core regions, with a mere 0.18% of the total area and 2.5% of the total population of East Asia, represented 29% of the total regional GDP, showing remarkable geographical concentration. It is reasonable to assume that the high spatial density of economic activities has been associated with higher productivity and innovation with the cutting edge technology in the core economy.

Likewise, we cannot take it for granted that countries in late development stage will

automatically come into the sequence of catching up. In this sense, the World Bank's report *The East Asian Miracle* analyzed extensively the qualification of the "following geese". The main message of the *Miracle* is that East Asia was able to achieve the rapid growth with equity, which is unusual among developing economies. The report classifies policies into two broad groups: fundamental ones and selective interventions. Fundamental policies include macroeconomic stability, high investments in human capital, stable and secure financial systems, limited price distortions, and openness to foreign technology. Selective interventions included mild financial repression, directed credit, selective industrial promotion, and trade policies that push nontraditional exports (p.10-11). The report delivered clear message that these policy elements are mutually complementary which could not be addressed separately. For example, macroeconomic stability is fundamental for high savings as well as for exchange rate stability which facilitated more open economies, which, in turn, leads to a feedback to growth and stability through high investment and export. Accumulation of saving and high productivity for export had been sustained by wealth-sharing public policies on education, land holding, and small and medium-size enterprises. Due to the complementarities, developing economies face the challenge of coordination failure especially at lower level of development. Although controversial, while maintaining market-based competitive discipline, interventions should guide resource allocation in order to remedy such market failures. Given the existence of politically insulated high-quality civil service, the report argues that government intervention can effectively address the problem of coordination failure to create a business-friendly environment.

Thus, given the flying geese pattern of international division of labor within East Asia, the *Miracle* report characterized that it is a prerequisite for development that the government is committed to the social coordination and "getting the basics right" through implementation of consistent and unbiased government policy.

Although the flying geese remains pertinent argument, the economic trend since the 1990s has presented a new scenario in East Asia, under which "getting the basic right" at each country level may not be enough to enable the country to join the band of flying geese and, at the same time, the self-organizing agglomeration is not restricted to Japan. A remarkable feature of the recent economic development in East Asia is not successive dispersion of industrialization but the emergence of new agglomerations.

In the perspective of new economic geography, there are three factors which may destabilize a spatial structure. When transportation cost is high, production should be dispersed according to the distribution of the population. When transportation cost is reduced, firms are able to supply extended market area, choosing the location where they can obtain the highest demand. Thus, given the existence of the above-mentioned mechanisms of self-reinforcing agglomeration, the low transport cost consolidates concentration.

Now consider a spatial structure where all manufacturing firms are concentrated in the

core while the periphery is agricultural. There are two factors destabilizing the core-periphery structure. First, as the income level in the periphery gradual increases and reached to a certain level, firms in the core will find it profitable to relocate to the periphery because there will be sufficient demand. Second, because the concentration will increase the price of immobile factors such as land in the core, the factor price advantage in the periphery attracts firms. When these dispersion forces will be materialized, the core-periphery will become unsustainable, leading to the self-organization of a new spatial structure.

To analyze the East Asian economy from this perspective, let us start from the understanding that the regional economy is more integrated than ever, hence the relevance of the scale economy is indisputable. Our primary interest is to know how the economic geography of East Asia will be in the future. Furthermore, if growth of the regional economy should be linked to agglomeration, the emerging regional disparity must be of great concern. Hence, not only the flying geese catching up, the shared growth model is also at risk.

One predominant factor is the opening up of the Chinese economy and its remarkable growth. China was almost dismissed from the analysis of the *Miracle* report because it is too different from the rest of East Asia in terms of socio-economic institution. After the opening and assimilation to market economy, especially after the accession to the World Trade Organization, China attracts investment not only as the low cost production location but also as a huge market with explosive growth of middle class consumers, strengthening the importance of scale economy as the industrial location factor. As it is well known, industrialization in China has concentrated in costal regions, where agglomeration economies based on backward- and forward-linkages between final consumption goods and intermediate goods are in operation. The growth of income in the costal region has further strengthened the industrialization there.

Recent increase of free trade agreement should be also emphasized. East Asian regional integration has both *de facto* and *de jure* features. As the presence of multinational firms becomes predominant, the production network has been expanded in East Asia. It characterize the *de facto* feature of the regional integration because it has been motivated by factor price differences and built on unorganized tangle of trade-cost-reducing unilateral and bilateral trade deals, mainly targeting at multinational firms. These provisions have contributed to reduce setup cost of offshore factories and operational cost of linking various factories in different countries. Thus, trade integration also has strengthened the role of scale economies to shape the competitiveness of East Asian industries.

Today, from the global perspective, the integrated East Asia now can be seen as a global factory where fragmented production process is dispersed across countries with diversified resource allocation pattern among which intermediate products are frequently exchanged across countries. Yet, Baldwin (2006) warns that East Asian integration is so fragile because each country's preferential trade deals are neither disciplined by the WTO rules and nor counts on

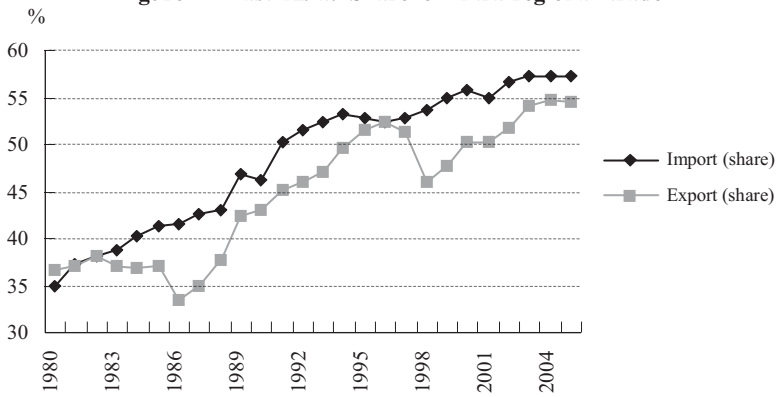
supra-national regional-level management body such as the case of the European Union, hence countries in the region should strengthen the *de jure* feature. In this respect, it is notable that free trade agreements are mushrooming in East Asia. ASEAN has launched for the formation of the ASEAN Free Trade Area (AFTA) in 15 years since 1993. Then, ASEAN proceeded to form a link with three largest economies in the region: China, Japan, and Korea. China agreed to establish a free trade area with ASEAN by 2010. Japan signed bilateral Economic Partnership Agreements (EPA) with six ASEAN member countries (Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand) which is going to be extended as the EPA between Japan and ASEAN as a group (including Cambodia, Lao PDR, Myanmar, and Vietnam). The FTA between South Korea and nine of ten ASEAN members, except Thailand due to the disagreement on rice market opening, has reached an agreement in 2007 and negotiations are being held to include the trade in services. ASEAN's aggressiveness in FTA diplomacy is partly a response to the rise of China by which ASEAN fears a hollowing out of investment. On the other hand, there is little progress in *de jure* integration among the three major economies in East Asia. FTA talks between China and Korea are still at preliminary stage while Japan-Korea EPA negotiation has been interrupted for several years.

It is also worth noticing that Asian NIEs caught up with Japan in certain technological areas such as semiconductors and information and telecommunication equipment (i.e., notebook computers and mobile telephones). Leading Asian NIEs and Japanese firms involved in these frontier technologies compete intensely with each other in the global market. In these countries, agglomeration economies based on input linkages and human resource diversity has already taken effect, giving rise to technology based clusters. Thus, the East Asian economy has been transformed from a traditional flying geese pattern with a single-core structure to a multi-cored one. The region has multiple technological centers and co-agglomerations undertaking final-good and intermediate-good production, with intermediate goods moving bi-directionally between countries.

Given the trend described above, the rise of China, regional integration extending the production network, and technological catch up of Asian firms are decisive factors influencing the economic geography in East Asia. Under such new scenario, it is beneficial to modify our analytical framework from purely traditional neoclassical comparative advantage view to incorporate the perspective of new economic geography which emphasizes economy of scale. When scale economy is relevant, production tend to concentrate rather than dispersion and trickle-down, leading to wider disparities rather than sequential catching up and income conversion.

A new World Bank report *An East Asian Renaissance* (Gill and Kharas, 2007) was written in this spirit, having noted that "Scale economies do seem to play an important role in East Asia" (p.9). The *Renaissance* report thus emphasizes the importance of product differentiation, knowledge creation, and agglomeration as sources of economic growth while

Figure 1 East Asia: Share of intra-regional trade



(Source) METI, *White Paper on International Economy and Trade 2007,* Figure 2-1-14.

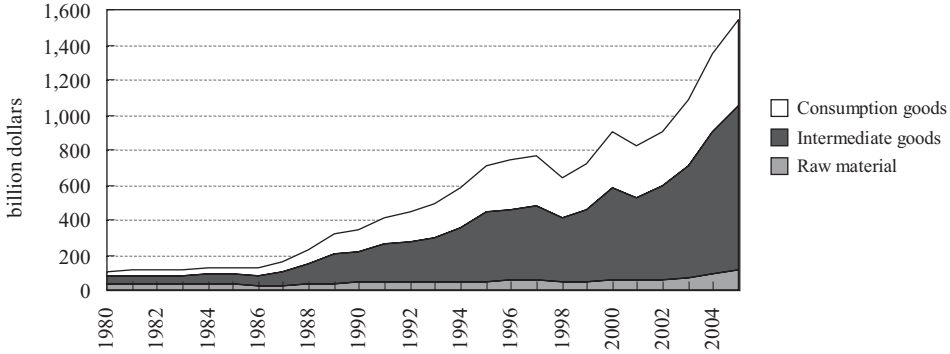
observing a departure from the "shared growth" view to inevitable income disparities due to widening skill bias in the wage structure and regional inequality. Policy recommendations are made such as: strengthening regional integration through FTAs and improvement of logistics; support of R&D, technology transfer and spillover; development of stable financial market including creation of local bond market; fostering agglomeration while mitigating diseconomies from congestion. The report also suggests that excessive inequality should be addressed and the rule of law must be firmly established. The last concern should not be overlooked because concentration of wealth and power under the scale economy may violate the social and political stability. These ideas for economic growth are recommended to the growing number of middle income economies in the region. However, for countries still in the early stage of development, the traditional recipe of "getting the basic right" and promote the economic opening to attract unskilled labor intensive industry is predominantly important.

2. Production network in East Asia

Figure 1 depicts the constant rise of the share of intra-regional trade for East Asian economies in the past quarter century, accounting for 57.3% of total imports and 54.5% of total exports of the region in 2005. Intra-regional trade share of imports have been increasing monotonically, while intra-regional exports were temporally damaged by economic crises in the 1980s and 1990s which increased exports to outside the region, compensating the shrunk demand in several countries during the crises. The current level of the share of intra-regional trade is nearly approached to that of the European Union, and the pattern is contrasts to that of NAFTA where the gap between the intra-regional trade share of exports and imports is widening due to the increase in imports from outside the region (mainly from EU and East Asia).

One of the reasons for the steady growth of intra-regional trade is increasing trade of

Figure 2 Composition of intra-regional trade in East Asia by category of use



(Source) METI, *White Paper on International Economy and Trade 2007,* Figure 2-1-15.

Table 1 Intra-regional trade of intermediate good in East Asia

	Japan			NIEs			ASEAN4			China		
	1995	2000	2005	1995	2000	2005	1995	2000	2005	1995	2000	2005
Intra-regional exports	137.2	143.9	216.5	129.8	174.3	309.5	62.1	108.3	175.4	40.0	63.8	171.4
Intra-regional imports	-51.1	-72.1	-110.4	-201.9	-252.5	-386.1	-83.8	-93.9	-148.5	-40.9	-78.5	-228.7
Balance	86.1	71.8	106.1	-72.1	-78.2	-76.5	-21.6	14.4	26.8	-0.9	-14.7	-57.4

(Source) METI, *White paper on International Economy and Trade 2007,* Figure 2-2-8.

intermediate goods. We can see clearly in Figure 2 that the dominant part of the growing intra-regional trade is occupied by intermediate goods, corresponding to nearly 60% of the total intra-regional trade in 2005. The intermediate good trade is multi-directional. As demonstrated by Table 1, Japan, Asia NIEs, ASEAN4 and China respectively exports as well as imports intermediate goods within the region. Being in surplus, this figure shows that Japan plays the role of net supplier of intermediate goods in the region. Still, it is noticeable that Japan's imports of intermediate goods from East Asia are rapidly increasing. On the other hand, while NIEs are still in deficit of interregional intermediate good trade, exports from these economies already exceed those of Japan. Intermediate good exports from China and ASEAN have also grown to a substantial level. According to METI (2007), in the electric machinery industry which accounts for more than one-third of all intra-regional intermediate goods exports, the share of Japan's exports has dropped from 42% to 22% between 1995 and 2005, whereas the share of ASEAN and China rose respectively from 25% to 31% and from 5% to 17%. Localization of intermediate good production following FDI into ASEAN and China and liberalization of intermediate good trade among ASEAN countries have contributed to the dispersion of intermediate goods production. (METI, 2007)

As these evidences show, the traditional image of the flying geese pattern which depicts

international structure of trade within the framework of vertical division of labor does not fit well. The trade relationship cannot be described as a horizontal relationship. Yet, we argue that the theory of comparative advantage still has explanatory power. In order to disentangle the issue, we need to take into consideration that the reduction of trade cost across countries enables firms to cut production processes into pieces. This phenomenon is already dubbed "fragmentation" by international trade theorists (Jones and Kierzkowski (2001) and Kimura and Ando (2005)). To have a concrete idea, we construct a trade matrix (Table 2) of the transaction of semiconductors and integrated circuits using IDE-JETRO's *Asian International Input-Output Table* as an example of intra-regional production linkage of electronic parts. The table shows total output value in the second column and the third block details decomposition by destination of shipments, followed by the demonstration of shares of each destination in the fourth block. Although Japan boosts the highest value of regional shipments of electronic parts among all countries, other East Asian countries also engage in regional exports of such products, while only Chinese consume domestically 70% of produced parts. Yet, Japan is distinguished by the fact that it supplies by far the largest value of electronic parts to production of the same products in other East Asian countries (type (2) market), suggesting highly differentiated upstream characteristics of the Japanese products. Now, to the downstream market (type (3)), the scale of export is nearly the same from Japan, Korea, Malaysia, and Taiwan. In this case, the largest markets are Japan and China. Except for Japan and China which consume mostly locally, East Asian countries exports substantial share of electronics parts to outside East Asia (type (5) market).

Next, Figure 3 captures the remarkable concentration of production of information technology related products in East Asia. We can observe that among the world production more than 73% of VCR and DVD players and 80% of personal computers (PC) are made in China.

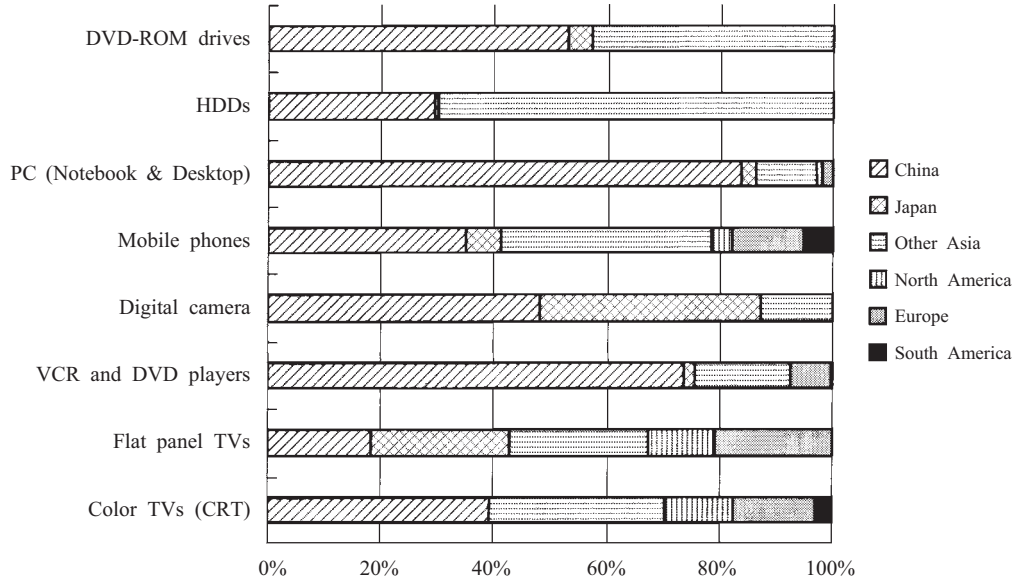
Table 2 Transaction of electronic parts (semiconductors and integrated circuits)

(Billion US$)

	Total output	Shipment to					Share (%)				
		(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Japan	58.1	23.5	9.7	7.4	0.5	16.9	40.5	16.8	12.7	0.9	29.1
China	42.2	29.6	0.8	0.9	0.1	10.8	70.2	1.8	2.1	0.1	25.7
Korea	30.4	5.3	3.5	6.8	0.5	14.2	17.6	11.6	22.3	1.8	46.7
Malaysia	22.3	2.5	3.0	5.1	0.4	11.3	11.4	13.7	22.8	1.6	50.5
Taiwan	20.1	0.8	3.1	7.8	0.6	7.8	4.0	15.4	38.9	3.0	38.7
Singapore	19.6	1.6	3.5	3.5	0.3	10.6	8.2	18.0	18.0	1.7	54.0
Philippines	15.4	0.2	1.8	3.0	0.3	10.2	1.0	11.6	19.4	1.7	66.3

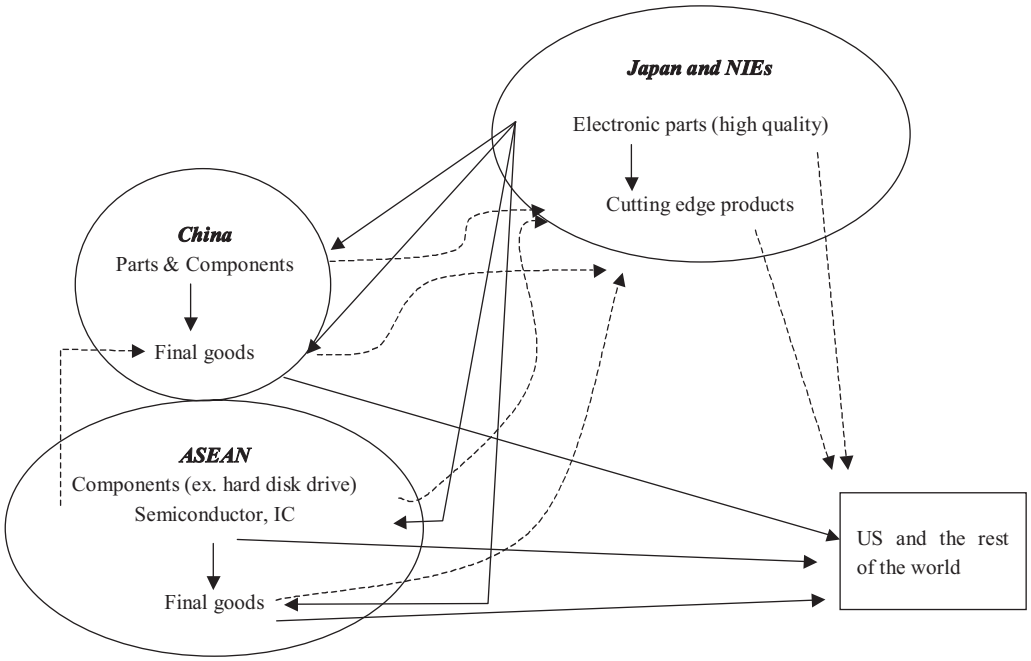
(1) Intermediate input in own country, (2) Intermediate input for electronic parts production in other East Asian countries, (3) Intermediate input for electronics and electronic products in other East Asian countries, (4) Intermediate input for other types of industries in other East Asian countries, (5) Others (for final consumption in East Asia and shipments to outside East Asia)
(Source) IDE-JETRO, 2006

Figure 3 Region shares of IT related products (2005)



(Source) Japan Electronics and Information Technology Industries Association, *World-wide production of Major Electronics 2004-2006,* JEITA, Tokyo, 2006.

Figure 4 Triangular trade in East Asia



(Note) Solid lines represent major trade flows.
(Source) IDE-JETRO, 2006.

On the other hand, 62% of hard disk drives (HDDs) and 38% of DVD-ROM drives are produced in ASEAN countries. These products are used for assembling PCs, hence the production linkage between ASEAN and China is obvious. In more advanced industrialized countries, Japan still has 25% of flat panel TVs and 39% of digital cameras, while Korea has 26% of mobile phone production due to the advantage in knowledge in these products by which firms are still able to develop new products of cutting edge technology. Yet, their advantage may not last long because of "commoditization", or short product cycle and deterioration of prices, which should force firms to look for cost saving through off-shoring, like what already happened for laptop PC production in Taiwan.

Finally, we can depict Figure 4 which synthesizes the above discussion. This figure is basically the same as the *triangular trade* scheme depicted by Fujita (2007) but it makes it more explicit types of products are localized in each economies and related pattern of trade.

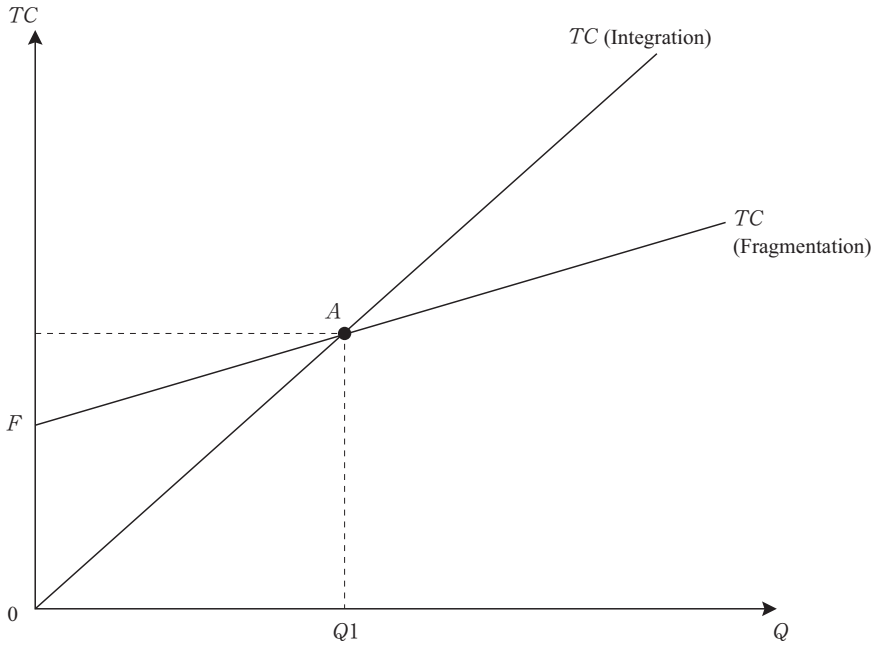
3. Fragmentation and regional integration

Fragmentation refers to a splitting up of a previously integrated production process into two or more components (Jones and Kiertzkowski, 2001). For example, consider a case of a production process consisting of capital intensive component and labor intensive one. Fragmentation allows the firm to locate the former in a country endowed with relatively more capital and the latter in a country where labor is relatively abundant. By doing so, the firm can reduce marginal cost by taking advantage of factor price differences in comparison to locating the two production components together in either of the two countries. However, such cost saving is made possible by incurring "setup cost" of establishing extra production plants and "service link cost" for utilizing transportation and communication services in order to link the two operations. Firm's choice whether or not to split up the production depends on the balance of the marginal cost saving and the additional costs.

Using the firm-level micro data of Japanese multinational firms, Kimura and Ando (2005) found that Japanese firms investing in East Asia are likely to more flexibly de-internalize their production processes and conduct outsourcing activities than those going to other regions such as North America and Europe. East Asian countries have lowered international transaction costs through trade policies to facilitate imports of intermediate goods, favorable treatment to foreign direct investment, and development of infrastructure. Ando (2006) identified explosive increase of vertical intra-industry trade in machinery industry in East Asia in the 1990s associated with rapid expansion of vertical fragmentation.

Borrowed from Jones and Kierzkowski (2001), Figure 5 depicts the decision making of the firm. In this figure, production quantity is measured by the horizontal axis and the vertical axis scales the total cost of production. The sum of the setup cost and the service link cost of fragmentation is considered as a fixed cost represented by F. The line for the

Figure 5 Framework for Fragmentation



fragmentation case is drawn flatter implying the marginal cost saving. If a firm will choose the lower cost production modality, output expansion further than $Q1$ entails a switch to fragmented production.

This illustration is not satisfactory because the decision depends only on the output scale. The diagram also does not address the question of interaction between the transport cost and the scale economy. In order to add geographical perspectives, we turn to a straightforward extension by modifying the graph as Figure 6. Let F now represent the setup cost only. If a firm decides to integrate the production process at one location and produce under higher marginal cost without the fixed, its total cost is given as TC (Integration). Under free entry and exit, the total cost is equal to the total revenue (TR). Suppose that service link cost incurs per unit of fragmented production which is discounted from the revenue. Then, total revenue for fragmented firm denoted as TR^* or TR^{**} is lower than TR by the magnitude of the cost of linking the fragmented operations across the distance. Here, TR^* is depicted as the total revenue of a firm which locates the affiliate in further location (hence the service link cost is higher) than the case of TR^{**}. Imagine that each firm produces $Q1$. Thus, the integrated firm produces at point A in zero profit. Given the output level, the firm can setup an affiliate in abroad and conduct a multiplant operation. In Figure 2, such decision is represented by the move to point B. Although the firm can reduce total cost by fragmentation, this is not a profitable because B passes above TR^{**}, i.e, the cost exceeds the revenue because of the service link cost. Hence, at individual firm level, fragmentation will not occur.

However, if the firm will be able to sell $Q2$ instead of $Q1$, the move from point A to point C on TC (Fragmentation) turns out to be profitable if the firm chose to locate its affiliate in the location with lower service link cost such as TR^{**}. However, if the service link cost is too high, point C is still not profitable.

Figure 6 enables us to examine the interaction between the scale economy and transportation involved in the fragmentation. Clearly, if each firm's output is given at $Q1$, no individual firm will defect to fragmentation. It is interesting that with $Q2$ fragmentation might be an outcome under the same service link cost TR^{**} and the same production technology TC (Fragmentation), suggesting the possibility of multiple equilibria.

What kind of a reality this result describes? We can infer the following effect of externalities. Imagine that initially all firms integrate the production in an industrialized country. Technological development in transportation and communication opens the possibility of reducing the marginal cost by fragmentation but each firm alone will find it unattractive to do so if the output size is not large enough for the given service link cost. Now suppose that there is some sort of coordination which induces all firms to opt for fragmentation. The move creates industrial jobs and raises the income in the less industrialized country, increasing the total demand to $Q2$, enabling firms to operate at point C profitably under the service link cost TR^{**}. Hence, the Big Push-like concerted shift (Murphy et al, 1989) toward fragmentation is a key when the service link cost is reduced to a moderate level. This does not necessarily require the government coordination but the rush for the Japanese investment

Figure 6 Revised Fragmentation

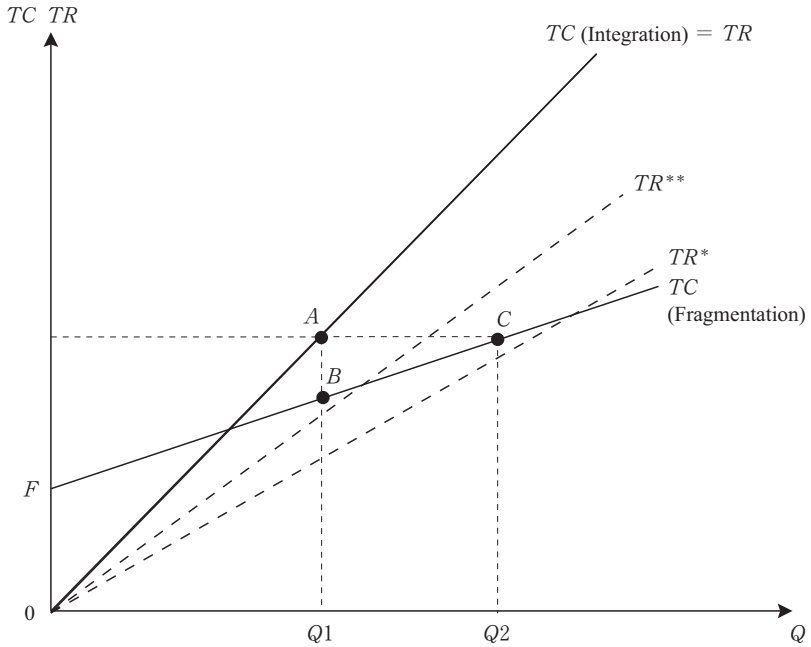
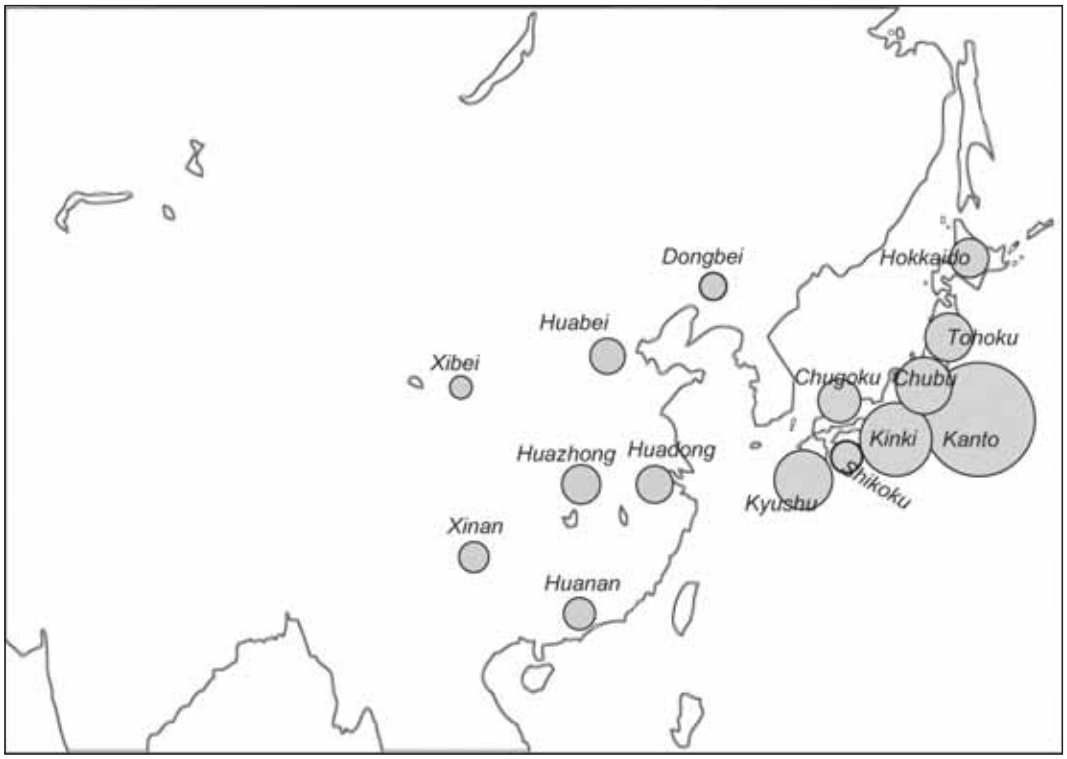


Figure 7 Size of GRDP (2000)



(Source) Author's compilation based on IDE-JETRO 2007.

in China in the 1990s might be the case of the self-organizing shift from point A to C. Obviously, if the service link cost is sufficiently high such as the case of TR^*, the fragmentation with output $Q2$ is still not profitable. This observation implies that fragmentation is more likely to occur with lower service link cost, suggesting the case of the regional integration among the neighboring countries. Fragmentation may be more sensitive to distance than the case of ordinary trade because the service link cost entails frequent travel of the people for technical assistance in foreign subsidiaries and just-in-time delivery of intermediate products across countries. Kimura and Ando (2005) also suggest the existence of the scale economy in infrastructure strengthening the advantage of more intensely used service links.

4. Border effect between China and Japan

The theoretical analysis in the previous subsection is useful to understand the nature of the emergence of fragmentation as the result of interaction between the transportation cost and scale economy. The direct implication of this result is that the fragmentation is likely to be sustained in close distance due to the importance of the transport cost. The most notable real example can be seen the production network between China and Japan. Figure 7 depicts the

economic size of each region of China and Japan in terms of gross regional domestic product (GRDP) of year 2000. The geographical proximity between the two countries and existence of sizable market in the costal area of China attract multinational firms' cross-border multiplant operation.

Our next task is to evaluate the magnitude of the effect of transportation cost on trade using the actual data. For this, we constructed the simple version of McCallum (1995) type gravity model to analyze the border effect involved in the intra-regional trade between China and Japan. The estimated model is given by

$$LN(x_{ij}) = \text{constant} + a_1 LN(y_i) + a_2 LN(y_j) + a_3 LN(d_{ij}) + b\text{DUMMIES} + \varepsilon_{ij}$$

where x_{ij} denotes the shipment between from region i and j, y_i and y_j are respectively the gross regional domestic products (GRDP) of region i and j, d_{ij} is the distance between i and j and ε_{ij} is an error term (For the detailed explanation of the data, see Appendix.). DUMMIES are following dummy variables:

China−intra- and inter-regional trade in China;

Border_China−cross-border inter-regional trade from a Japanese region to a Chinese region;

Border_Japan−cross-border inter-regional trade from a Chinese region to a Japanese region;

Inland−cross-border inter-regional trade from a Japanese region to Chinese inland regions.

Notice that the data set includes the intra-regional trade, i.e, $i = j$.

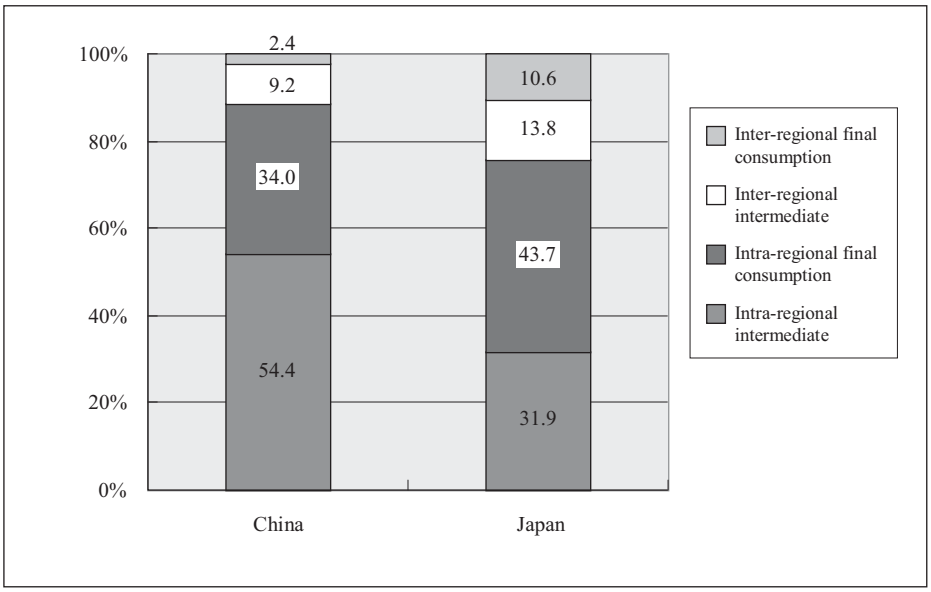
The estimated results are shown in Table 3. It can be seen that this simple model has

Table 3 Gravity model estimates of China-Japan intra-regional trade

	1		2	
	coef.	S.E.	coef.	S.E.
Constant	-8.28	2.20	-21.84	2.37
LN (y_i)	0.86	0.08	1.21	0.08
LN (y_j)	0.72	0.07	1.00	0.07
LN (d_{ij})	-1.22	0.05	-1.24	0.08
China	1.14	0.14	1.48	0.18
Border_China			-2.38	0.19
Border_Japan			-2.31	0.18
Inland			-2.76	0.15
Observation	226		450	
Standard error	0.79		1.11	
Adjusted R^2	0.82		0.90	

S.E.: standard error. All estimated coefficients are statistically significant at 1% level.
Equation:
1 Domestic regional trade: China and Japan;
2 Both domestic and cross-border inter-regional trade.

Figure 8 Structure of inter-regional trade between China and Japan



(Source) Compiled based on IDE-JETRO 2007

reasonably good explanatory power with adjusted R-square above 0.8. The elasticities of trade with respect to GRDP of the region of origin and that of destination are respectively 0.86 and 0.72 according to the equation 1 which includes observations of domestic regional trade in both China and in Japan. These coefficients are estimated larger in equation 2 which includes the cross-border inter-regional trade. On the other hand, the elasticity with respect to distance is of similar magnitude in both equations. In equation 1, the coefficient of the dummy variable *China* implies that the domestic trade among regions in China is approximately twice as large as that of Japan (exp(1.14)-1=2.13). One possible explanation to this difference may rest on higher specialization within China due to wider factor price difference within the country. In fact, as Figure 8 shows, the domestic trade in China is heavily concentrated to intra-regional trade. The share of the trade within each region in China is distributed between 62.5% and 85.8% for the intermediate transactions and between 81.1% and 92.8% for the final demand, compared to that of Japanese regions between 48.3% and 62.5% for intermediate transactions and between 69.6% and 83.3% for final demand in Japan.) This fact points to higher intra-regional heterogeneity in China than in Japan.

Our primary interest is the magnitude of the border effect. Our result shows that the border effect from China to Japan and that of from Japan to China have almost the same magnitude. Namely, other things being equal, the Chinese regions trade with the Japanese regions about 10 times less than they do with Chinese regions (exp(2.31)-1=10.1), whereas the Japanese regions cross-border trade with the Chinese regions is 11 times less than their

domestic regional trade (exp(2.38)-1=10.8). These magnitudes are the half of McCallum's estimate which found that the cross-border provincial trade from Canada to the US states is 22 times less than the inter-provincial trade.[1] For example, in our data the distance between Huadong (including Shanghai) has similar distance with Huanan (including Guangdong), 1650 km, and with Kanto (including Tokyo), 1771 km and Kanto's GRDP is 12.7 times as large as that of Huanan. Still, Huadong exports 2.3 times more to Guangdong than to Kanto. Interestingly, however, if we separate the transaction for intermediate input from that for the final demand, while Huadong exports 6.2 times more goods for final demand to Guangdong than to Kanto, it exports almost twice as large intermediate goods to Kanto than to Guangdong. Hence, we can infer that the border effect on intermediate goods transaction is smaller than that on final goods.

We also found that the effect of partner region's location in inland reduce substantially the regional trade (both exports and imports), which turns out to be about 16 times less. Therefore, we can conclude that the low border effect in China is restricted to the costal regions.

5. Conclusion

This paper explains that the intra-regional trade in East Asia has progressed remarkably due to the increase of intermediate goods trade. Increasing presence of multinational firms has been the driving force of this process leading to the fragmentation of production. Our theoretical analysis identified that the interaction between the scale economy and transportation cost is the key factor for the emergence of fragmentation. Through the empirical analysis, we found that the border effect in costal regions of China is as low as that of Japan. Yet, there is significant border effect in inland regions of China. This result provides an evidence for concentration of the Japanese direct investment in China in the costal regions.

Appendix: The data of the analysis of China-Japan border effect

The estimation uses interregional transaction data from IDE-JETRO's *Transnational Interregional Input-Output Table between Japan and China 2000.* This dataset comprises 7 Chinese regions (Dongbei, Huabei, Huadong, Huanan, Huazhong, Xibei, Xinan) and 8 Japanese regions (Hokkaido, Tohoku, Kanto, Chubu, Kinki, Chugoku, Shikoku, Kyushu) and reports intra-regional and both intra- and trans-national inter-regional flow of trade directed as intermediate inputs as well as for the final demand. The table classifies the transaction data

1 McCallum (1995) explains that the intensive use of transportation by air and land is partly responsible for the high magnitude of the border effect in the North American regional trade, while most international trade, like in our case, is transported by water.

into 10 sectors (Agriculture, livestock, forestry and fishery; Mining and quarrying; Household consumption products; Basic industrial materials; Processing and assembling; Electricity, gas and water supply; Construction; Trade; Transportation; Services) which does not allow us to track the input-output relationship at detailed level. We designate a representative city for each region: Shenyang, Beijing, Shanghai, Guangzhou, Wuhan, Xian, and Chengdu for Chinese regions in above order; and Sapporo, Sendai, Tokyo, Nagoya, Osaka, Hiroshima, Takamatsu, Fukuoka for Japanese regions. Road distances between cities in China are from the web site http://www.yusen.co.jp/china/english/distance/index.html. Using software *Eki-spert* of Val Laboratory Corporation we obtain rail road distances between Japanese cities. The average distance within each region is defined as $d_{ii} = \sqrt{S_i/\pi} \times (Rural_i)$ where S_i is the land area, π is the circular constant (≈ 3.14), and $Rural_i$ stands for rural population ratio of region i. Namely, we assume that the region is a circle with the same land area and calculate its radius. The region with higher rural population ratio has a higher intra-regional trade cost because the population is more scattered. Thus, the radius is multiplied by $Rural_i$. In order to get distances between regions of China and Japan, we measure the great circle distance between representative cities utilizing *Google Earth*. Market size variables y_i and y_j are total output/input of each region, except the case of trade flow for final demand for which y_j is aggregate demand in the recipient region.

References

Ando, M., "Fragmentation and vertical intra-industry trade in East Asia," *The North American Journal of Economics and Finance* 17, 2006: 257-281.

Baldwin, R. (2006) Managing the noodle bawl, mimeo, (http://hei.unige.ch/~baldwin/PapersBooks/Manage_CEPR_DP.pdf) accessed on October 23, 2007.

Fujita, M., T. Mori, J. V. Henderson and Y. Kanemoto, "Spatial distribution of economic activities in Japan and China," in J. V. Henderson and J-F Thisse eds. *Handbook of Regional and Urban Economics,* Volume 4, Elsevier, Amsterdam, 2004: 2911-2977.

Fujita, M., "Globalization, Regional Integration, and Spatial Economics: An Introduction," in M. Fujita ed. *Regional Integration in East Asia: From the Viewpoint of Spatial Economics,* Palgrave Macmillan, New York, 2007: 1-20.

Gill, I. and H. Kharas, *An East Asian Renaissance,* World Bank, Washington, D.C., 2007

IDE-JETRO, *Transnational Interregional Input-Output Table between China and Japan 2000,* Chiba, 2007.

IDE-JETRO, *Asian International Input-Output Table 2000,* Chiba, 2006.

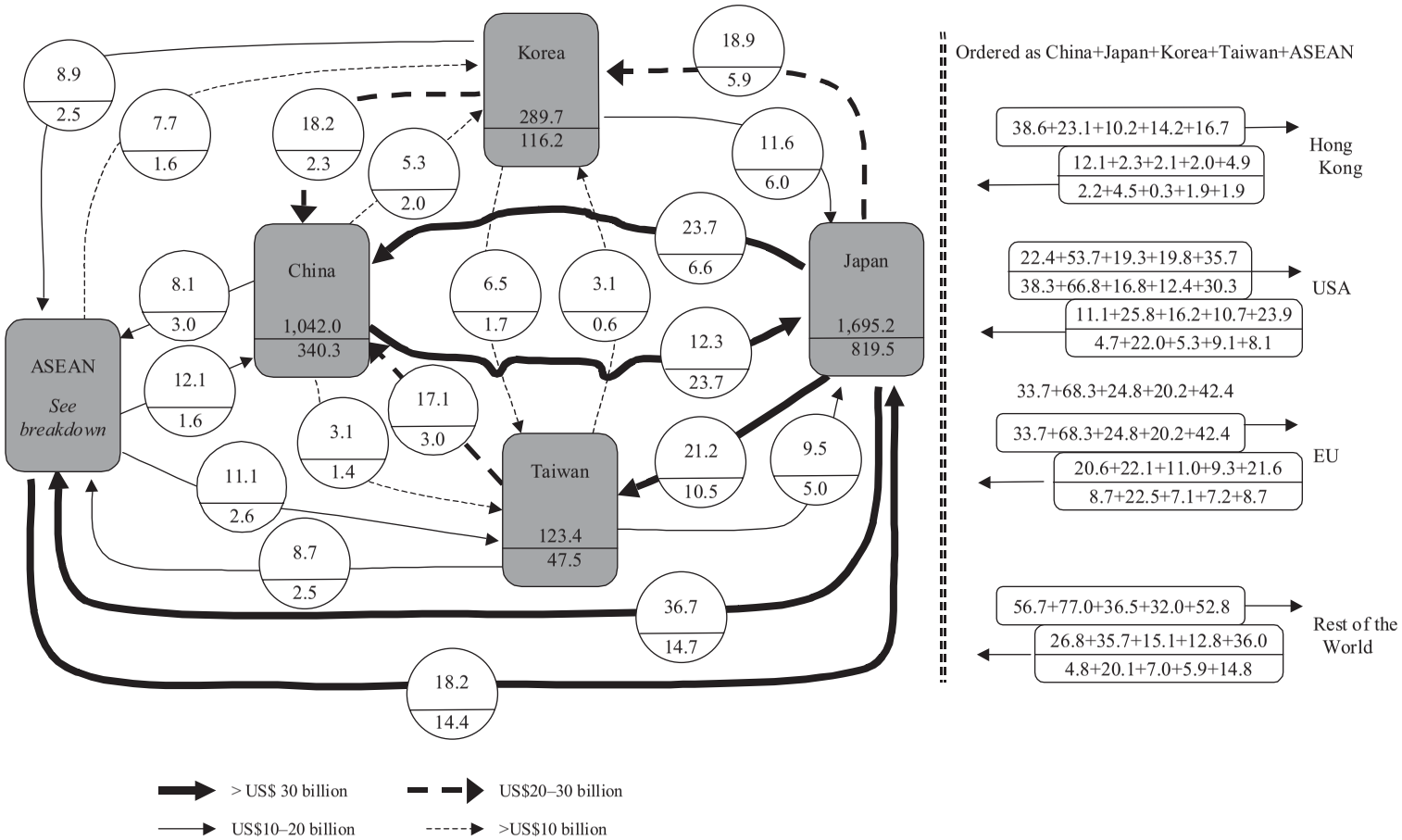
Jones, R. and H. Kierzkowski, "A framework for fragmentation," in S. Arndt and H. Kierzkowski ed. *Fragmentation: New Production Patterns in the World Economy,* Oxford, Oxford University Press, 2001: 17-34.

Kimura, F. and M. Ando, "Two-dimensional fragmentation in East Asia: Conceptual framework and empirics," *International Review of Economics and Finance* 14, 2005: 317-348.

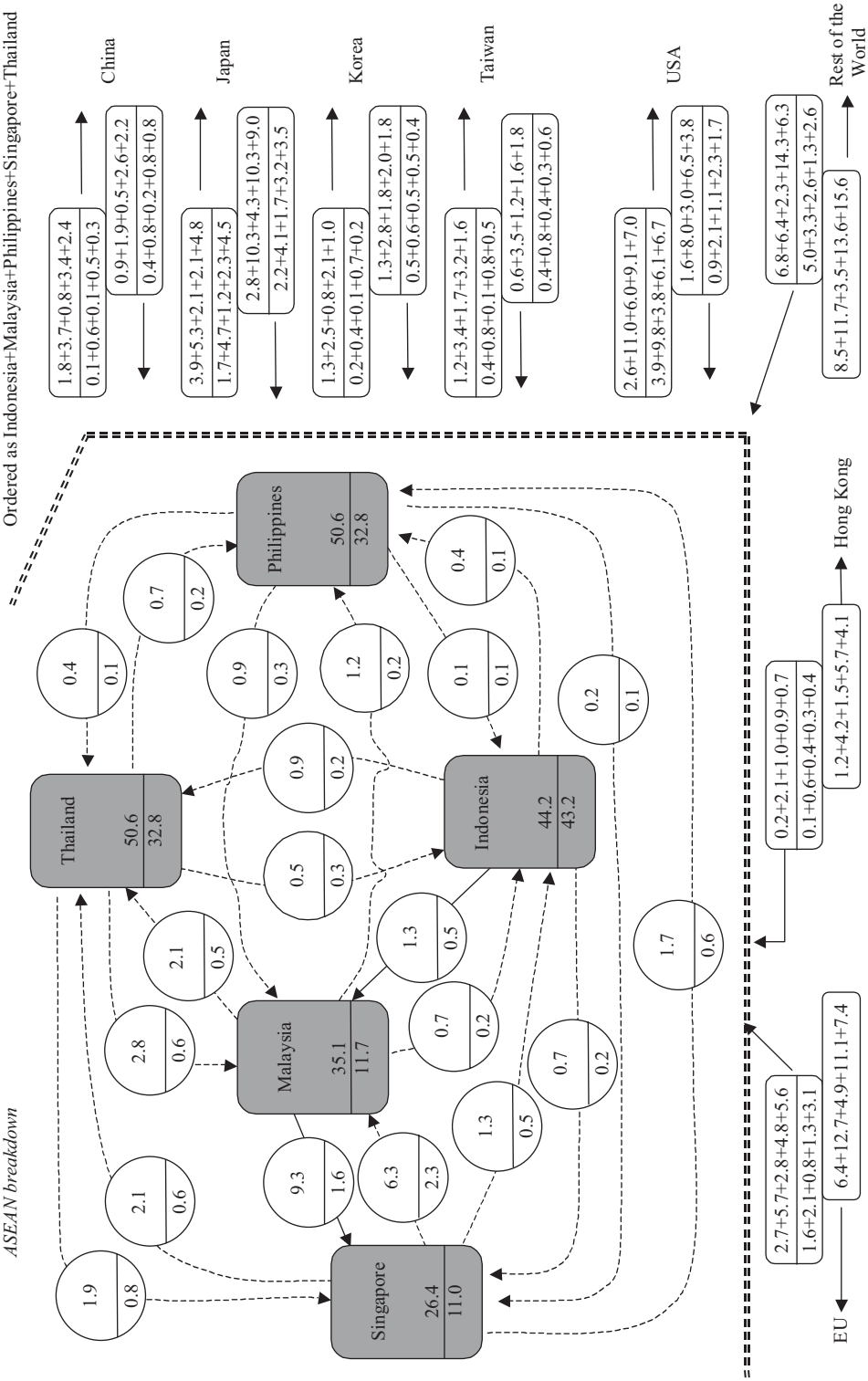
McCallum, J., "National borders matter: Canada-U.S. regional trade patterns," *American Economic Review* 8, 1995: 615-623.

World Bank, *The East Asian Miracle,* Oxford University Press, New York, 1993.

Appendix: International input-output structure of manufacturing sector in East Asia 2000 (US$ billion) Upper : intermediate transactiond,; lower final demand



(Source) Author's own calculation based on Institute of Developing Economies (2007).


ASEAN breakdown
Ordered as Indonesia+Malaysia+Philippines+Singapore+Thailand
Thailand 50.6 32.8
Philippines 50.6 32.8
Indonesia 44.2 43.2
Malaysia 35.1 11.7
Singapore 26.4 11.0
China
Japan
Korea
Taiwan
USA
Rest of the World
Hong Kong
EU
1.8+3.7+0.8+3.4+2.4
0.1+0.6+0.1+0.5+0.3
0.9+1.9+0.5+2.6+2.2
0.4+0.8+0.2+0.8+0.8
3.9+5.3+2.1+2.1+4.8
1.7+4.7+1.2+2.3+4.5
2.8+10.3+4.3+10.3+9.0
2.2+4.1+1.7+3.2+3.5
1.3+2.5+0.8+2.1+1.0
0.2+0.4+0.1+0.7+0.2
1.3+2.8+1.8+2.0+1.8
0.5+0.6+0.5+0.5+0.4
1.2+3.4+1.7+3.2+1.6
0.4+0.8+0.1+0.8+0.5
0.6+3.5+1.2+1.6+1.8
0.4+0.8+0.4+0.3+0.6
2.6+11.0+6.0+9.1+7.0
3.9+9.8+3.8+6.1+6.7
1.6+8.0+3.0+6.5+3.8
0.9+2.1+1.1+2.3+1.7
6.8+6.4+2.3+14.3+6.3
5.0+3.3+2.6+1.3+2.6
8.5+11.7+3.5+13.6+15.6
0.2+2.1+1.0+0.9+0.7
0.1+0.6+0.4+0.3+0.4
1.2+4.2+1.5+5.7+4.1
2.7+5.7+2.8+4.8+5.6
1.6+2.1+0.8+1.3+3.1
6.4+12.7+4.9+11.1+7.4

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A NOTE ON POLITICAL EU-JAPAN RELATIONS AND ECONOMIC TIES: EFFORTS THROUGH COOPERATION PROGRAMS

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Abstract

On October 1st, 2005, the EU Institute Japan, Kansai (EUIJ Kansai) officially opened its doors with a symposium at Kobe University. High ranking EU officials came to celebrate a strengthening relationship between the EU and Western Japan. In recent years, several initiatives between the EU and Japan have been introduced and it is apparent that a lot of effort is being made by politicians from both sides to improve reciprocal economic ties. This paper sheds some light on the status quo of political efforts and concludes that even if economic ties are still weak, political efforts have increased to a large extent.

JEL Classification: F59
Keywords: EU and Japan, Economic ties, Cooperation program, Business Dialogue.

1. Introduction

Over the last few decades the number of trading zones in the world economy, both in the East and in the West, has increased to a large extent. In the case of the EU and Japan, two different strategies have been followed: While the EU has continued to integrate more member states (27 member countries as of January 1st 2007), Japan on the other hand has preferred to sign free trade agreements, e.g. with Singapore in 2002 and with Mexico in 2005. In 2007 several initiatives were undertaken by the Japanese government to enhance agreements with four other countries, namely with Philippines, Thailand, Malaysia and Chile. In April 2007, new agreements were signed with Chile and Thailand and the agreement with Singapore was amended. Furthermore, negotiations started for an agreement with Australia and discussions were opened with South Korea (Country Profile Japan, 2007).

For Japan and the EU, politicians from both areas want to develop better economic ties.

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EU member states are economically not so well off. One of the signaling effects was that member states of EU have fallen behind their Lisbon agenda aims (Cameron, F. 2004). For 2005 the real GDP growth for the euro-area was estimated at 1.3%, and for the EU-25 countries at 1.7% (Business Outlook, 2006). On the other hand, the Japanese economy is considered to have recovered after the so called "lost decade" (Keck, 2006). In fact, Japan is a rich country and Japanese citizens accumulate the greatest savings of any nation (¥1,200 trillion, equivalent to 250% of Japan's GDP); Japan also has the largest foreign currency reserves in the world. Japan is not only a rich country but also promises enormous opportunities for European businesses (External trade relations, 2007).

This paper first describes the economic situation of the EU and Japan. It will shortly highlight the EU's trade with Japan, where it states the role of the EU in contrast to other countries. Furthermore, concerns which were previously often mentioned about structural barriers to enter the Japanese market will be discussed.

Regarding the political EU-Japanese relationship, cooperation programs will be focused on. Furthermore, export promotion activities and the so-called Business Dialogue will be described. In addition, the EU Institutes in Japan and the EU Year of People Exchange will be introduced. This paper closes with a short summary.

2. Economic ties between the EU and Japan: two leading economic powers and trading partners?

The EU and Japan each form two of the main pillars of the world economy next to the U.S. (Sonoda, A. 2004, p.7). The EU and Japan combine a population of 617 million citizens means that they comprise less than 10% of the world's population, but count for over 40% of the global GDP (External relations II, 2007). In other words, the EU and Japan together account for two-fifths of world GDP and Japanese GDP on its own accounts for one-seventh, almost 14%, of the world GDP as well as for around 10% of world exports and imports. Japan is also by far the largest economy in Asia, accounting for two thirds of the regional GDP.

Japan has recently also been liberalizing many fields of its economy. One example might be the deregulation of the previously state-run postal system. The Japanese government deregulated the postal system and with it the state-run postal savings system (yucho). Japan Post was split into three core business areas: delivery services, banking and insurances. Already in 2002, Japanese exports played a significant role for the country's economic recovery. There has been an increase of cross-border movements of capital and labor force as well as expanded overseas investment (Takenaka, H. 2004, pp.191-204). However, these investments were mainly done in Asian countries and not in the EU. Next, we look at the Japanese trading partners, as stated in the table below.

Table 1: Main trading partners for Japan in 2006

Exports to:	% of total	Imports from:	% of total
US	22.5	China	20.5
China	14.3	US	11.8
South Korea	7.8	Saudi Arabia	6.4
Taiwan	6.8	UAE	5.5
Hong Kong	5.6	Australia	4.8
EU	14.5	EU	10.3

Source: Economist Intelligence Unit Limited 2007 (data derived from Ministry of Finance) Country Profile Japan, 2007, p.46.

Table 2: Japanese trade in goods, in 2006 (US$ bn)

Exports (fob)	647.1
Imports (cif)	-577.5
Trade balance	**69.6**
US	77.6
China	-25.6
EU	33.9

(US$ bn) Source: Economist Intelligence Unit Limited 2007 (data derived from Ministry of Finance) Country Profile Japan, 2007, p.44.

Looking at the table above, it is apparent that the export market is dominated by the US and China. There is a similar situation for the import market, where China accounts for 20.5%, which is almost double that of the US with 11.8%. It is important to note that Japanese exports to all 27 EU member states represent only the size of the exports to China. There are many experts who believe that this relationship will change in the coming years in favor of China. The import side is more important to consider. Imports from Saudi Arabia and UAE in 2006 overtook European imports by a combined 11.9% to only 10.3%. In other words, European companies are still not as active in Japanese business as the EU (and the regional governments) would like their companies to be. Also, there is an understanding that Japanese exports to the EU — in contrast to the US — can still increase. In other words, trade between Japan and the EU is relatively low. In 2004, trade between the EU and Japan in goods and services exceeded 116 billion euros (External Relations, 2007).

From a Japanese point of view, the trade balance of goods showed a surplus of US$ 69.6 bn. (see table 2)

Looking at the table above, it is clearly visible that there is a Japanese trade imbalance. Japanese trade with the US is the biggest surplus with US$ 77.6 bn, while the European trade balance with the US is $ 33.9 bn, which is still very high. In contrast to this, the trade balance with China is negative US$ -25.6 bn.

There are several reasons for this. As Japan is the nation with the highest saving rate

in the world, a capital surplus flows out of the country and merchandise trade will conversely lead to a surplus. A second major reason is that there are structural barriers for foreign companies when entering Japan (Country profile, 2007). In previous literature, there are deeply rooted historical critics about one-way trade relationships with Japan, which often result with a strong trade surplus for Japan.

Also experts from the EU raise the discussion about possible structural barriers (Monnet, J. 2003, p.24). Besides joint EU related activities to "more open access" of the Japanese market, some countries try by themselves to support their industries when launching products in Japan. In the 1990s for example, the UK launched the so called "Opportunity Japan, Priority Japan, and Action Japan" campaign. This initiative was done with the support of the Japan External Trade Organization (JETRO), where mutually supportive activities were implemented to enhance the opportunities for British goods to enter the Japanese market (Moni, 2006).

It is clear that the EU as well as Japan are world leading economic powers. However, economic ties between the two sides are relatively low, especially concerning merchandise trade from Europe to Japan.

3. Political efforts for strengthening EU-Japan economies

3-1. Introduction

Looking at the political scenery, economic relations between the EU and Japan are said to be prospering. EU Commission President Barroso (2005) points out: "I now want to deepen our political relationship (with Japan) so that it matches up to the very strong economic ties we already enjoy" (External Relations, Summit). The EU consistently stated its support for a strong Japanese economy because a strong Japanese economy is not only in the interest of the Japanese themselves and of Japan's Asian neighbors, but it also benefits the EU. For its part, the EU encouraged Japan to adopt policies aimed at restoring private sector domestic demand. It is politically correct that the EU and Japan have common trade and investment links and a strategic interest in the economic health of one another. Even if there is a belief from EU officials that a strong economy and efficient markets will help Japan itself, there is also a clear understanding that economic globalization should not endanger cultural diversity. Officials of neither the EU nor Japan wish to see their societies, their longstanding cultural values or their heritage and their traditional ways of life subverted and dominated by market forces (External trade relations, 2007).

After showing important EU-Japan events in chronology, the Action Plan and several other agreements will be discussed. The table below shows important events in EU-Japan Relations, starting from 1959.

Table 3: EU-Japan Relations

Nov. 29th	2006	EU-Japan Regulatory Reform Dialogue Tokyo
April 1st	2005	2nd EU Institute in Japan launched (EUIJ-Kansai)
Jan. 17th	2005	2005 EU-Japan Year of People-to-People Exchanges launched in Tokyo
April 1st	2004	1st EU Institute in Japan launched (EUIJ-Tokyo)
July 10th	2003	Agreement on cooperation and Anti-competitive Activities
April 25th-27th	2002	President Romano Prodi becomes first President of the European Commission to address the Japanese Diet.
Dec. 8th	2001	10th EU-Japan Summit in Brussels (The Action Plan)
April 4th	2001	EU and Japan sign Mutual Recognition Agreement (MRA)
Jan. 13th	2000	Speech by Japanese Foreign Minister: "A Decade of Japan-Europe Cooperation"
Oct. 7th-8th	1999	1st EU-Japan Business Dialogue Roundtable
	1996	EU-Japan Centre for Industrial Cooperation, Brussels, Vulcanus program installed.
March	1995	European Commission to the European Council "Europe and Japan: The Next Steps"
July 19th	1991	The "Joint Declaration" The Hague. (1st EC-Japan Summit)
	1987	The EC-Japan Centre for Industrial Cooperation is established in Tokyo
	1979	The Executive Training Program (ETP) is set up by the European Commission
	1974	Establishment of the Delegation of the European Communities in Tokyo
	1959	Japan's Ambassador in Belgium accredited as Japan's first Representative to the three European Communities

Source: European Union, http://jpn.cec.eu.int/relation/showpage_en_relations.chronology.php, accessed on June 15th 2007 (some events changed and added).

3-2. EU-Japan cooperation agreements

EU-Japan ministerial meetings and government-level summits are held on an annual basis. At the 10th EU-Japan Summit in Brussels on December 8th 2001, summit leaders adopted the so-called Action Plan to reinforce EU-Japan partnership efforts and to demonstrate efforts of joint action. The Action Plan serves as a framework for cooperation between Japan and the EU and is considered as a succession to the Joint Declaration on the relations between the EC and its Member States and Japan. This declaration treaty was signed in 1991 and promoted a dialogue mainly based on economic and trade issues. Having signed the Action Plan, a commitment and an investment from the EU as well as from Japan was made for creating a broader partnership. In this way, the EU-Japanese relationship has been strengthened in accordance to a more coherent policy for cooperation and dialogue. Not only economic issues but also a wider range of disciplines are included, such as the promotion of peace and security as well as global societal challenges.

One economic pillar of the Action Plan can be seen as a measure of improvement for bilateral trade and furthering the investment partnership, leading to better market access. By the same token, the Japanese government encourages their companies to jointly work with

other countries' companies and to take advantage of foreign sources through partnerships or even through takeovers. The Japanese government understands that investment by foreign companies in Japan might provide new ideas and innovation and can facilitate industrial restructuring. Therefore, the Japanese government provides a business environment for non-Japanese companies. Recently, the law was amended to such an extent that e.g. so called triangle mergers become possible. In this case, a foreign investor can acquire a Japanese company by a Japan-based subsidiary, paying with stocks instead of cash.

This European-Japanese approach can be seen as being in common with the multilateral rule-based trading system embodied in the WTO. Already in Nov. 2001, the EU and Japan launched bilateral consultations that contributed to the successful WTO Ministerial meeting in Qatar (what finally led to the adoption of the Doha Development Agenda).

In accordance with the Action Plan, several new agreements were established. One of the highlights is the recent Mutual Recognition Agreement between the EU and Japan which led to the first recognition agreement for exchanging technologies between Japan and the EU. The Mutual Recognition Agreement entered into force on January 1st, 2002. The Agreement permits the acceptance of conformity assessment conducted by one party according to the regulations of the other in four areas (telecommunication equipment, electrical equipment, chemicals and pharmaceuticals). This marks an important step in facilitating market access. In this agreement, both partners created a number of informal 'dialogues' about general areas as well as on specific details.

The EU-Japan reciprocal trading enhancement is further connected through several other significant cooperation agreements. The Agreement on Cooperation and Anti-Competitive Activities was finalized on June 16th 2003 and should facilitate bilateral cooperation in assessing competition aspects of major merger and acquisition cases (External trade relations, 2007). Some positive results are already visible.

There are several objectives that focus on a stronger economic partnership such as "the strengthening of the Economic and Trade partnership" through bilateral relations. Basically, the EU welcomes Japanese FDI and vice versa. The EU wants their companies to have more open access to the Japanese market as well as structural obstacles to investment in the Japanese market to be removed.

A major pillar of bilateral EU-Japan relations is the two-way Regulatory Reform Dialogue. This former Deregulation Dialogue aims at reducing or improving regulations that hamper trade and foreign investment. Since 1995, the EU and Japan have participated actively in each other's regulatory reform efforts through dialogue. Ambassador Zepter, the Head of the Delegation of the European Commission to Japan comments: "The Regulatory Reform Dialogue has developed into a cornerstone of the EU-Japan relationship, and has greatly contributed to solidifying the mutual trade and investment flows between us. I am hopeful that the upcoming round of discussions will further strengthen our good relationship and

benefit the business environment, both in Japan and the European Union" (European Union, 2007).

The EU endorses Japan's commitment to reform its economy. Naturally, the effectiveness of these reforms will be determined by the government's commitment to ensure their rapid, transparent and effective implementation. As seen with recent efforts of reformation of the postal system in Japan, any implementation of a measure challenges the old system and, therefore, is hard to introduce. The EU for its side, of course welcomes these new opportunities that create new possibilities for EU companies which want to deal with Japan.

3-3. Previous export promotion initiatives

From as early as 1979, the European Commission has been encouraging European enterprises to penetrate the Japanese market. These European initiatives to penetrate the Japanese market are conducted through so-called EXPROM initiatives (EXport PROMotion). Various promotional activities were initiated to further maximize business opportunities and European exports to Japan. These promotional activities in the Commission's EXPROM program consist of three pillars (External Relation 2007).

There is the "Gateway to Japan" promotion campaign, which assists small and medium-sized companies in entering the Japanese market. In this field, trade missions and trade fairs in specific areas of industries are held (Yamaguchi, 2004)[1]. Another program is the Executive Training Program, an 18-month Human Resources development program to enable executives of EU companies to build up knowledge of the Japanese business culture and language with the aim to develop specialists for the Japanese market. This program was also established in 1979.

Finally, there is the EU-Japan Centre for Industrial Cooperation, established in Tokyo in 1987 and in Brussels in 1996. The EU-Japan Centre for Industrial Cooperation is technically oriented and organizes training courses and seminars for EU managers in Japan. In one or two-week training programs, EU managers can get acquainted with and gain an insight into specific sectors of the Japanese industry and business. Each of the so-called missions focuses on a topical theme, such as WCM (World Class Manufacturing) like in October 2004, food distribution in Japanese and Asian Markets in 2005 and again the manufacturing issue coming up this year in 2007. Missions are organized three to four times a year in Japan. In the time span from 1987 until 2003, a total of 672 managers have participated in these kind of missions (EU-Japan Center).

EU-Japan Centre for Industrial Cooperation also manages the "Vulcanus Program," which

1 Especially small and medium sized companies are focused on in providing entrance into Japanese market, who count more than 99% of EU companies, see Yamaguchi, T. (2004), p.227.

offers courses combining language and in-company training for Japanese engineering students in Europe and for European engineering students in Japan.

3-4. Business Dialogue

In order to foster economic relations through discussions, a special EU-Japan Business Dialogue Round Table was established in 1995. The EU-Japan Business Dialogue Round Table consists of about 50 chief executives from leading enterprises in a variety of areas in the EU and Japan. Participants meet on a yearly basis that take place once in Japan and once in Europe (EU-Mission Statement[2]).

The missions of EU-Japan Business Dialogue Round Tables' are twofold. First, members of the Round Table discuss EU-Japan related issues as well as the ever-changing global environment in general.

Second and more concrete, results of these discussions will be submitted as policy recommendations to the highest authorities for the EU (the Presidents of the European Council and Commission) and for Japan to the Prime Minister. Since 2000, round table members receive a so called progress report. This report can be seen as information concerning which recommendations actually have been implemented. The chairman of the round table, Baron (2005) mentions: "Based on the experience of several years, I am convinced that the Round Table can continue to create a mutual understanding on concrete issues and make valid recommendations to the Authorities of Japan and the EU, contributing therefore to a sustainable development of our economies".

Three key points are the bases of discussions and recommendations. The first key point is the general improvement of the business environment for European companies in Japan and for Japanese companies in the EU. Second, discussions and recommendations were done on the implementation of international rules like the introduction of IAS-accounting standards. Third, it is recommended that Japan and the EU promote the IT industry in order to develop a network based society.

In the EU-Japan Business Dialogue Round Table of the year 2000, a need to improve mutual economic relations between the EU and Japan was articulated; for example, both partners (the EU and Japan) enjoy a stable economic relationship with the US. There is success in implementing recommendations only to a limited degree. The European concern with regards to post-privatization is resolved. At the Round Table in 2005, the EU-side was concerned about the potential for continuation of cross shareholding between the mail services, postal savings, postal life insurance and the branch network as a whole (Round Table, 2005). At the 7th EU Japan Business Dialogue Round Table of the year 2006, several recom-

2 The statement is visible at: http://www.eujapan.com/roundtable/mission_statement.pdf, accessed on May 5th, 2007.

mendations focused on specific issues in the area of life sciences and R&D (Round Table 2006).

The results of the Round Table recommendations are limited, however. The latest official press release regarding 2006 outcomes states that the members "concluded that there had been some progress on about half the recommendations. But the progress was so limited that the vast majority (87 of the original 94) were resubmitted this year (2006), making a total number of 99 recommendations in all" (Round table 2006, II).

This development is in contrast to what the first Round Table stated in their first Joint Recommendation. That was in the year 2000, and it reads as follows: "Whilst business relations between the EU, Japan and the United States are both the engine of the world economy and the main factor in its stability, economic relations between the EU-Japan are yet to realize their true potential" (Joint Recommendation 2000).

4. EU Institutes in Japan, Tokyo and Kansai

Recent efforts from the EU side have resulted in the establishment of EU Institutes in Japan. The first EU Institute was established in Tokyo in April 2004 and headquartered at Hitotsubashi University. A consortium out of Hitotsubashi University, International Christian University, Tokyo University of Foreign Studies, and Tsuda College aims to increase knowledge and general awareness of the EU in Japan.

After initiatives by Dr. Reiterer and other EU-Commission executives, a second EU Institute (EUIJ, Kansai) was established exactly one year later in western Japan in the Kansai area. The EUIJ, Kansai opened its doors, after a preparation phase of six months, officially on October 1st 2005. The EUIJ, Kansai is a consortium existing out of three leading universities in Kansai and headquartered at Kobe University. Besides Kobe University, Osaka University and Kwansei Gakuin University also participate in this project.

In his remarkable inauguration speech, Clive Wilkinson, Vice President of the European Economic and Social Committee, echoed the thoughts of many people in the auditorium when he pointed out: "we share much the same fundamentals even if we are located on opposite sides of the globe."[3] The EUIJ, Kansai Institute has three concrete intentions (like the first Tokyo EU institute). First, Japanese students are to be prepared for Europe. In this regard, special EU related lectures are offered and students from the three aforementioned universities can obtain an EU-certificate issued by the EUIJ in addition to their usual studies. Second, more scholars from the EU are expected to be invited by EUIJ Kansai, to give more insight into Europe and the EU in order to lead to a better understanding and a better exchange. A third area of interest for the EUIJ, Kansai is apart from educational activities. The so-called

3 Original part of his speech in Kobe, on Oct. 1st 2005 (own transcript at auditorium).

out reach group attempts to connect and improve EU business relationships. Japanese Companies from Kansai shall be motivated to put stronger focus on the EU; while companies from the EU shall be further motivated to come to Kansai to improve business relations and opportunities.

One year after the establishment of the institute, the President of the European Commission himself, Barroso came personally to the EU Institute Kansai and was showing the importance that the EU Institute has for himself and for the European delegation. Two years after the inauguration, the Italian Minister Bindy came to Kobe for a presentation and dozens of other European guest speakers have been directly or indirectly invited to talk about European issues at the EU Institute Kansai.

5. EU-Japan Year of People Exchange

Apart from cooperation agreements and business dialogs, or the establishment of EU Institutes in Japan, there are also one time events scheduled to improve reciprocal relations. Commissions from EU and Japan agreed at the 11th EU-Japan Summit in Tokyo in 2002 to designate 2005 as the "EU-Japan year of people to people exchange." This is in accordance with the general goal of the so-called Action Plan for EU-Japan Cooperation, signed in December, 2001. The aim was to promote "people to people exchanges", and therefore, to facilitate grass root exchanges as well as to broadly establish more contact and better understanding between citizens in Japan and the European Union. Both sides encourage and promote face-to-face exchanges and contacts between citizens of the EU and Japan. Events and initiatives were set up to promote better mutual understanding of European and Japanese society and culture (External Relations, 2005). Naturally, the EU hoped that the year was not seen as a one-off event, but more to act as a boost to long-term promotion of EU-Japan people exchanges.

The "people-to-people" year was organized by the European Commission, as well as by the Member States of the EU and the Japanese government. Activities covered a wide range of sectors, such as science and technology, culture, art, politics, sports and economics. Special emphasis was laid on encouraging young people to participate in the program. Overall, for the year of exchange in 2005, there were more than 850 events scheduled, mostly in the area of environment protection (Waldner, B. F. 2005, p.9).

According to the then Japanese Prime Minister, the 2005 EU-Japan Year of People-to-People Exchanges has been very successful with regard to the number of countries, the events, and also regarding the broad range of participants and the great diversity in terms of the contents of the events. The then Prime Minister stated: "I believe that we should utilize the experience we have attained this year as a new starting point from which the Japan-EU exchanges will take further steps forward into the future" (Koizumi 2005).

6. Concluding Remarks

Recently, EU-Japan political relations have been improved in several areas to a great extent. The EU and Japan are strengthening their political relationship through many cooperation programs, e.g. the implementation of a Joint Action Plan, with the aim of enhancing reciprocal trade, working together to tackle global challenges and connecting their citizens and their cultures to each other in a stronger sense than ever before. The 2005 EU-Japan "Year of People to People Exchanges" brought younger Japanese to Europe and vice versa. Recent progress towards the objectives of the Action Plan includes the adoption of the Investment Framework to foster growth in two-way direct investment. Finally, two EU Institutes in Japan — one in the east and one in the west — have been established with the aim to connect EU stronger to Japan.

In contrast to these political efforts, economic ties — especially with views to European companies who want to enter Japan — are still relatively weak. Also, by judging the outcomes of the Round Table recommendations, the fruits of these efforts are limited. By all means, the future will show whether these political efforts will lead to stronger economic ties and create an increasingly prosperous EU-Japanese economic relationship.

References

Bara, Z. (2002) *The Role and the Significance of SMEs During Transition. A comparison of Postwar Japan and the Hungarian Transition in the Nineties.* in: Hoos, J. Haba, K/T. Palankai, (eds) The Enlargement of the European Union toward Central Europe and the Role of the Japanese economy, 209-237.

Baron, G. (2005) Roundtable, in internet: http://www.eujapan.com/europe/roundtable.html, accessed on May 2nd, 2007.

Business Outlook (2006) Europe. in: *Economist Intelligence Unit,* Jan. 1-15th, 12p.

Cameron, F. (2004) *Europe's Future,* in: The Future of Europe: Integration and enlargement, F. Cameron (Ed.), 149-161.

Country Profile Japan (2007) *The Economist Intelligence Unit,* Great Britain.

European Union (2007) in internet: http://www.jpn.cec.eu.int/home/news_en_newsobj1422.php, from May 3rd, 2007.

EU-Japan Center (2007) EU-Japan Center for Industrial Cooperation, at: http://www.eu-japan.gr.jp/base/topmis1.html, accessed on May 2nd, 2007.

EU-Mission Statement (2007) The EU-Japan Business Dialogue Round Table, in internet: http://www.eujapan.com/roundtable/mission_statement.pdf, from May 2nd, 2007.

External Relations (2005) EU-Japan economic & trade relations 2005. in internet: http://europa.eu.int/comm/external_relations/japan/eu2005/, from May 4th, 2007

External Relations (2007) in internet: http://www.europa.eu.int/comm/external_relations/japan/intro/index.htm, from May 1st, 2007.

External relations II (2007) in internet: http://ec.europa.eu/comm/external_relations/japan/intro/eu_jap_relations.htm, from May 5th, 2007.

External relations, summit (2007) in internet: http://www.europa.eu.int/comm/external_relations/japan/summit_05_05/index.htm, from May 3rd, 2007.

External trade relations (2007) in internet: http://www.europa.eu.int/comm/external_relations/japan/intro/eco_trade_relat.htm, from May 4th, 2007.

Hoos, J. (2002) *Multinational Corporations in Hungary.* Hoos, J. Haba, K/T. Palankai, (eds) The Enlargement of the European Union toward Central Europe and the Role of the Japanese economy, 189-208.

Joint Recommendation (2000) Original text of the Joint Recommendation of the EU-Japan Business Dialogue Round Table, Tokyo Meeting 17-18 July 2000, p.1. in internet: http://www.eujapan.com/roundtable/joint_recommendations_july00.pdf, from May 2nd, 2007.

Keck, J. (2006) Renewed strength of the Japanese economy and Japan — EU-relations. *Asia Europe Journal,* Vol.4 No.3, 323-331.

Koizumi, J. (2005) Message from Prime Minister Junichiro Koizumi on the closing of the "2005 EU-Japan Year of People to People Exchanges" in internet: http://www.mofa.go.jp/region/europe/eu/exchange2005/pm_message.html, from May 5th, 2007.

Moni, H. M. (2006) Japan — UK: perspectives of partnership. *Asia Europe Journal,* Vol.4, No.3, Sept. 2006, 351-363.

Monnet, J. (2003) *A Ferment of Change.* in: B.F. Nelsen, A. Stubb (eds) The European Union, Readings on the Theory and Practice of European Integration, 3rd. ed., 2419-26.

Round Table (2005) EU-Japan Business Dialogue Round Table 2005, Recommendations from the EU, p.15: 1-J-6, in internet: http://www.eujapan.com/roundtable/joint_recommendations_july00.pdf, accessed on May 4th, 2007.

Round Table (2006) EU-Japan Business Dialogue Round Table press release. in internet: http://www.eujapan.com/roundtable/press_release_july06.doc, accessed on May 3rd, 2007.

Round Table (2006, II) EU-Japan Business Dialogue Round Table, Tokyo Meeting, 13-14 July 2006. in internet: http://www.eujapan.com/roundtable/press_release_july06.doc, official press release. accessed on May 2nd, 2007.

Sonoda (2004) *EU ni okeru seisaku kettei no seidoteki shikumi,* (Framework of political regulations coming to EU), in: A. Fukuyama, EU no keizai to kigyo (Unternehmen und Wirtschaft in der EU, Ochanomizu, 3-23.

Takenaka, H. (2004) Annual Report on the Japanese Economy and Public Finance, 2003-2004 — No Gains Without Reforms. in: *Cabinet Office Government of Japan.*

Waldner, B. F. (2005) *Nihon to EU wa kokurenkaikaku ni daini kouken dekiru* (In the reform of the United Nations Japan and the EU can make a big contribution (original in Japanese). in: Europe. Published by Delegation of the European Commission to Japan, No.241, Spring, 2005, 8-9.

Yamaguchi, T. (2004) *EU chushokigyou no genjo to chusho kigyou seisaku no mondai* (Status quo of SME's and issues for SME's, in. A. Fukuyama, EU no keizai to kigyo (Unternehmen und Wirtschaft in der EU, Ochanomizu), 227-253.

Zepter, B. (2005) *EU submits Proposals for Regulatory Reform to the Government of Japan.* In EU News 89/2005, from Oct. 28th 2005. in internet: http://jpn.cec.eu.int/home/news_en_newsobj1422.php, accessed on June 6th, 2007.

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