

# PROSPECTS FOR ECONOMIC COOPERATION IN NORTHEAST ASIA

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## **Abstract**

In contrast to developments in other world regions, efforts to institutionalize regional economic cooperation in East Asia have been weak. Though Southeast Asian economies have taken action toward trade liberalization (ASEAN Free Trade Area), the major economies of the region such as China, Japan and Korea have not been part of any formal trade groupings until recently. Ongoing economic cooperation in Northeast Asia has been exclusively informal, driven by market forces. However, given the slow pace of progress within AFTA and the importance of the Northeast Asian countries in terms of weight in the Asian economy, a *de facto* Northeast Asian economic cooperation is a necessary condition for an East Asian integration. This paper investigates the substance of current and prospective economic cooperation in Northeast Asia. The trilateral economic cooperation is analyzed through examination of trade and direct investment links in the 1990s and early 2000s. The analysis reveals an increasing trend of trade cooperation. Although intra-regional direct investment between the three countries is limited the increase is propelled by intra-regional trade. As Japan is the main investor in the region, this paper emphasizes the determinants of Japanese direct investment and provides an estimate of the impact of changes in the yen-yuan exchange rate and yen-won exchange rate on Japanese direct investment in China and Korea. This paper concludes from an analysis of the effects of the exchange rate on direct investment that Japanese direct investment has been largely driven by the yen appreciation and the growth prospects in recipient countries.

**JEL Classification:** F14, F15, F21

**Keywords:** New Asian regionalism, Economic integration, Trade and capital flows

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## **1. Introduction**

In the wake of the progress achieved in Europe and North America, regional cooperation has recently gained momentum all over the world. Regional cooperation is of course not an end in itself but has to be considered as a way of enhancing economic growth and development. Most of the industrial and developing countries have concluded some regional trade and investment agreements. Compared to other international regions, Asia lagged in

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concluding formal trade agreements. Almost all countries of North and South America, and many countries in Africa and the Caribbean are members of at least one regional trading arrangement. In the Asia-Pacific region, regional cooperation took shape as APEC (Asia-Pacific Economic cooperation) at the end of the 1980s. At Bogor, Indonesia in 1994, the leaders of the APEC countries set a target to achieve free trade and investment no later than 2010 in the case of industrial country members, and 2020 in the case of developing country members. At Osaka in November 1995, an agreement was reached on a set of fundamental principles to bring about the liberalization of trade and investment. But in the late 1990s, Asian economies appeared to seek another path for regional integration, namely Free Trade Areas (FTAs) in the subset of the Asia-Pacific region. ASEAN country members have taken action toward trade liberalization. In 1992, the ASEAN Free Trade Area (AFTA) was set up formally to realize a free trade area within 15 years beginning 1 January 1993. In September 1994, the time frame was shortened to 10 years with the aim of achieving the AFTA goals by 2003. More recently, there have been agreements to study FTAs for broader groups. China has proposed an FTA between China and ASEAN country members. However, the ASEAN countries put forward an ASEAN+3 (including China, Japan and Korea).

Despite the rise of regionalism in East Asia, regional integration has not long been prevalent in Northeast Asian countries<sup>1</sup>. So far, Northeast Asian countries have not been part of any formal trading areas. There is now some willingness to form FTAs on bilateral sub-regional levels. For instance, Korea has recently begun negotiations with Chile. Japan has also begun to study the potential of FTAs. In October 2002, Japan and Singapore concluded a “New-age” free-trade agreement<sup>2</sup>. It includes promoting mutual recognition on some licensing procedures and increasing worker mobility between the two countries.

China, Japan and Korea have also been discussing and investing the feasibility of a trilateral FTA. Separately, Japan and Korea have announced that they will conclude a bilateral FTA by the end 2005. A China and Korea bilateral FTA may be the next one. These are manifestations of a real willingness in East Asia toward closer regional cooperation. While ASEAN is often presumed to be the most important economic cooperation in the region, its impact on promoting intra-regional trade and investment has been limited. The initiation of

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<sup>1</sup> There are different geographical definitions of Northeast Asia. The broadest definition would include China, Japan, North and South Korea, Mongolia, Hong Kong, Taiwan and the Russian Far East and Siberia. This paper, concentrates on the three major Northeast Asian economies i.e. China, Japan and south Korea.

<sup>2</sup> The « New Age » Partnership goes beyond a traditional free trade agreement. It focuses on new issues such as : “rules governing foreign investment, e-commerce regulations, trade in services, harmonization of technical standards, sanitary and phyto-sanitary regulations, and the streamlining of customs procedures” Hertel, Walsley and Itakura (2001).

FTAs was soon followed by the 1997 financial crisis affecting the region. Since then, paradoxically, the regional financial proposals are moving faster than any serious intention of regional economic cooperation<sup>3</sup>. Traditionally, trade arrangements are most prominent regional groupings and, precede any financial integration. The European Monetary Union started with a customs union, and developed into a single currency full-fledged economic area. MERCOSUR and NAFTA are FTAs. In comparison, the relationship between the economic and financial components of the East Asian regional process is ill-defined. There now appears to be little or no coordination between economic and financial initiatives.

In any case (economic or financial cooperation), Northeast Asian economies are expected to play a key role in regional integration. Further, a change in the attitudes of Japan and China is emerging. Both countries seem to be more resolute about a regional grouping than before. A shift of the center of gravity of political initiatives toward closer economic and financial cooperation has been perceivable. Given the slow progress within AFTA and the importance of the Northeast Asian countries in terms of size and weight in the Asian economy, a free trade arrangement between China, Japan and Korea could be achieved prior to wider agreements in the style of ASEAN+3. Furthermore, since it is difficult to expect an East Asia FTA in which at least one of the three major Northeast Asian countries does not participate, a *de facto* Northeast Asia cooperation is a necessary condition for an East Asian integration. Thus, a China-Japan-Korea cooperation is crucially important for the formal economic integration of both Northeast and East Asia.

The purpose of this paper is to investigate the substance of current and prospective economic cooperation in Northeast Asia. The trilateral economic relationship is analyzed through trade and direct investment linkages.

The paper is organized as follows. The next section analyses the factors explaining the emergence of a new regionalism in East Asia which illustrates the progression of *de facto* regionalism towards *de jure* regionalism. Section 3 characterizes the general trend of the trade relationship between China, Japan and Korea. It is shown that, in the context of these countries, a trend of trade cooperation appears to have accelerated in the 1990s. Section 4 focuses on the direct investment flows. The paper demonstrates that the level of direct

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<sup>3</sup> The new international environment and the Asian currency crisis have created a strong impetus for regional financial cooperation and have provided Asian countries with a common interest, which has led to the Chiang Mai Initiative (CMI) agreement (May 2000) on bilateral swaps and discussions of the possibility of creating a monetary union among the ASEAN+3 as a long-run objective. More recently, at the informal ASEAN+3 Finance and Central Bank Deputies' Meeting held in Tokyo on 13 November 2002, Korea made a proposal to discuss regional bond market development under the ASEAN+3. In furtherance of this proposal, Japan presented

investment among Northeast Asian countries is much lower than that of trade. The role of Japan as one of the main investors in the region is stressed and the Japanese FDI determinants are analyzed, with a special emphasis on the instability of the yen/rupee exchange rate and yen/won exchange rate. Section 5 concludes the paper.

## **2. Origins of the New Asian Regionalism**

Before 1997, most Asian economists considered East Asian economic cooperation (through trade and investment) as an example of a successful *de facto* regionalism i.e. explained by the play of pure economic forces. However, the financial crisis of 1997-98 demonstrated the weaknesses of informal regional cooperation and gave East Asians a strong impetus to search for a regional mechanism that could forestall future crisis. This search is now gathering momentum and opening the door to possibly significant *de jure* integration in East Asia.

The Asian financial crisis is often regarded as the outbreak for the rise in regionalism in East Asia. The crisis and its subsequent contagion to a number of economies in Northeast and Southeast Asia painfully demonstrated that the East Asian economies were closely related and a resolution to the crisis could required a regional cooperation. A rising sense of East Asian identity has emerged since the crisis. After the proposal to create an Asian Monetary Fund (AMF) failed to lead to progress, the leaders of ASEAN responded by inviting China, Korea and Japan to join in an effort to seek economic cooperation in the region. The ASEAN+3 summit in November 1999 released a “Joint Statement on East Asian Cooperation” that covers a wide range of possible areas for regional cooperation. In the early 2000s, other new economic situations - such as the quick recovery and recurring growth in Korea, the emergence of China as a fast post-crisis growing economy and the continuing stagnant state of Japan - gave rise to a new Asian economic regionalism and FTAs. It is noteworthy that FTAs projects are numerous and proliferating at startling speed. These include regional agreements as well as bilateral treaties<sup>4</sup>. Table 1(pp. 23-24) gives an overview of the intra-regional and extra-regional arrangements in East Asia.

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a comprehensive approach to foster bond markets in Asia, the “Asian Bond Markets Initiative” at an ASEAN+3 informal session held in Chinag Mai on December 2002.

<sup>4</sup> Most intra-regional trade agreements of Asian countries are FTAs, the effect of which is to eliminate trade barriers between members. Following the Japanese, the term “Economic Partnership Agreement” (EPA) is also used, which intends to imply that the scope of the agreement is broader than the elimination of barriers of trade in goods.

Although the financial crisis might have been the direct cause, a number of additional factors contributed to the breakthrough and proliferation of the policy-led regionalism in East Asia. First, regionalism was the natural result of decades of fast growth and a number of economic restructuring and industrial transformations in East Asia, particularly in Northeast Asia (with the emergence of Japan as a major industrial power in the 1960s, and rapid growth of the newly industrializing economies of Northeast and Southeast Asia in the late 1970s and 1980s). These economic developments have created a new center of East Asia economic power that has begun to compete with North America and Europe in terms of its contribution to world output and world trade. Second, it was the result of a “benign neglect” from international organizations such as IMF in the aftermath of the Asian crisis (Tran Van Hoa, 2002). East Asian economic policy makers perceived international institutions and the main global trading powers (especially, the USA) fell short in their support for the region. That is why to escape this crisis, countries initially attempted some kind of “go it alone” strategy (for example, uncontrolled devaluations, interruption of payments...). These countries were rapidly called to order by the IMF in the name of global world interest. The IMF reaction illustrated for regional policy makers not only the inefficiency of “go it alone” strategy but also the lack of institutional regional coordination in Asia. Finally, the successful integration initiatives in other parts of the world, such as the EU and NAFTA, illustrated for academics and politicians the possibilities that deepening and widening economic cooperation could bring in East Asia. For a long time most East Asian countries, and in particular Japan, considered multilateral agreements (in the sense of WTO) alone sufficient to establish fair economic relationships. They were strongly encouraged by the USA in that way of thinking. However, when the USA itself decided to engage in regional agreements with first Canada and then Mexico in 1992, the Asian countries started to dread being left isolated between what seemed to be possible future trade blocs. Understanding the logic of NAFTA and EU was a lesson to Asian countries: regional agreements are a mix of political and economic objectives. Once traditional barriers to trade and investment are eliminated, there are still many other impediments to abolish. The regional integration is in fact a result of economic forces and political willingness. In the case of East Asia, political issues have long been major obstacles to regional economic cooperation. Nonetheless, prospect for *de jure* regionalism in East Asia is not totally disappeared as new approaches and initiatives are in recent times put forward by the regional states. East Asian regionalism is undergoing a phase of new interpretation. It is no longer limited in economic sense. Growing interdependence and tightening financial links are not sufficient to make this regionalization more consistent:

strategic thinking is being inserted as the concept of regionalism begins to expand in terms of both geography and agenda<sup>5</sup>.

### 3. Regional cooperation through trade

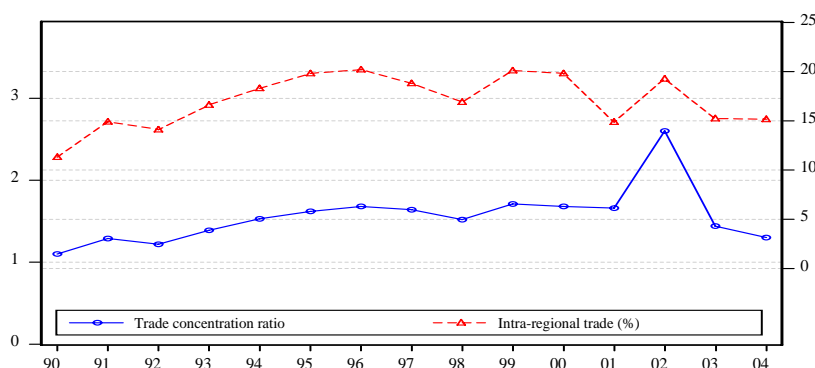
In the context of Northeast Asia, a trend of trade liberalization was noticeable in the 1990s and, indeed appears to have accelerated in the late 1990s. It is striking that Northeast Asian economies, which are not part of any formal trade grouping, appear as the main source of increased trade in East Asia. Moreover, trade liberalization measures institutionalized in the process of China's accession to World Trade Organization (WTO) have undoubtedly contributed to accelerate this trend and promote tighter trade relations among China, Japan and Korea.

#### *Intra-regional trade*

To assess the trend of intra-regional trade cooperation, two indicators are usually considered: the relative measure that compares the region's internal trade to its total trade and, the double relative measure – also called intra-regional concentration ratio - that compares the share of the region in its own trade to its share in worldwide trade.

These indicators are evaluated for China, Korea and Japan and presented in Figure 1.

Figure 1: Intra-regional Trade between China, Japan and Korea



Source: IMF, Direction of trade, authors' calculations.

<sup>5</sup> This has been done at the Chinese initiative, with Japan trying to follow. Beijing is increasingly driving East Asia's agenda. China's suggestion to extend invitation to India, New Zealand, and Australia, but not to the USA for the East Asian Summit meeting in November 2005 in Malaysia was accepted by the members of ASEAN+3, and it reflects China's growing influence over East Asia's emerging regional architecture.

We can notice that, during the 1990s, trade between the three countries increased in general. The share of intra-regional trade between China, Japan and Korea increased substantially from 11.4% in 1990 to 20.5% in 1996. It fell abruptly to 16.8% in 1998 after the Asian financial crisis, then recovered to 20.0% in 1999 before falling to 19.8% in 2000. It is noteworthy that in the early 2000s, trade levels between the three countries moved abruptly. After a rapid slowdown (14.87) in 2001, trade increased to 19.3% in 2002 before falling to 15.3% in 2003 and 15.2% in 2004. The movement of the concentration ratio does not differ significantly from that of the intra-regional share and shows the same evolution.

To put this in international context, it is important to take examine trade of Northeast Asian countries in terms of trading partners. Table 2 presents the major trade partners of China, Japan and Korea as of 2005. The USA appears as the largest partner for both China and Japan. For Korea, China is the main trading partner. It is striking that the three Northeast Asian countries do not have FTAs with their top five trade destinations.

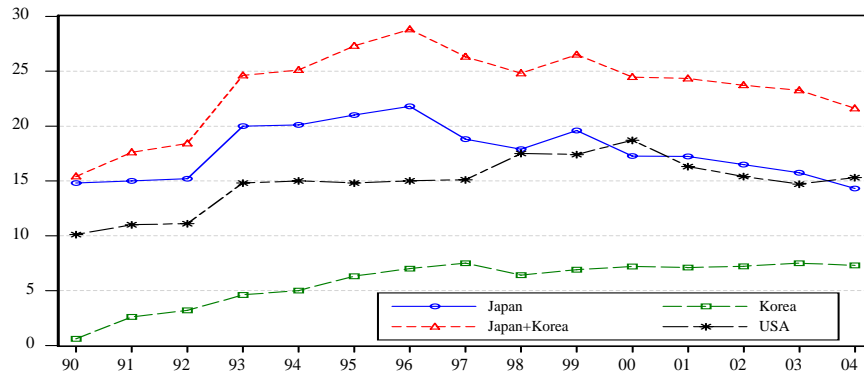
Table 2: Northeast Asian Economies' Major Trade Partners as of 2005

Rank	(share)					
	China		Japan		Korea	
1	USA	(21.1)	USA	(24.6)	China	(18.1)
2	Hong Kong	(17.4)	China	(12.2)	USA	(17.7)
3	Japan	(13.6)	Korea	(7.4)	Japan	(8.9)
4	Korea	(4.6)	Taiwan	(6.6)	Hong Kong	(7.6)
5	Germany	(4.0)	Hong Kong	(6.3)	Taiwan	(3.6)

Source: KITA (2005).

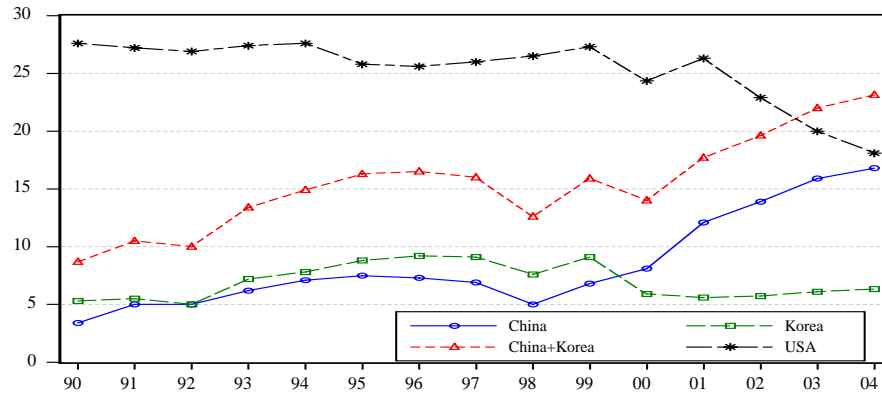
Figures 2, 3 and 4 illustrate the evolution of trade in terms of trade partners in China, Japan and Korea for the period 1990-2004.

Figure 2: Share of trading partners of China



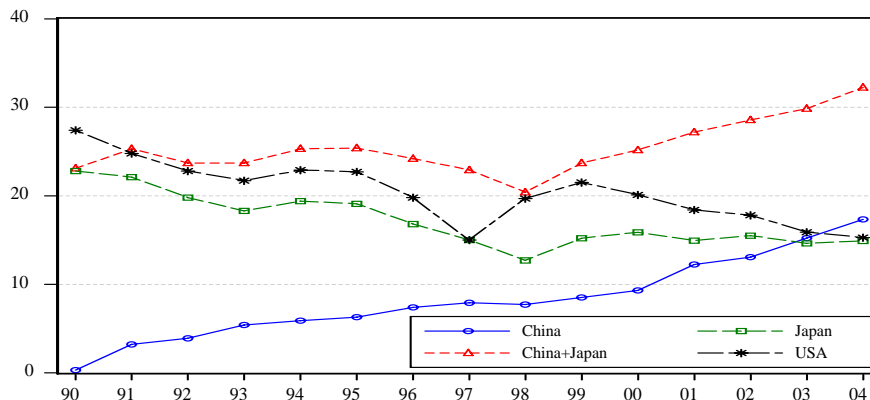
Source: IMF, Direction of Trade, Yearbooks, various issues.

Figure 3: Share of trading partners of Japan



Source: IMF, Direction of Trade, Yearbooks, various issues.

Figure 4: Share of trading partners of Korea



Source: IMF, Direction of Trade, Yearbooks, various issues.



Japan appears as the major trading partner for China until 1999 and, ranks second after the USA in 2000. This situation is inverted in 2001 when, for the first time the USA appeared as the main trade partner for China. The combined share of trade with Japan and Korea peaked at 27.5% in 1996 then fell. It recovered in 1999 but declined to 24.4% in 2000, before declining smoothly to 21.6% in 2004. Meanwhile, the US share of China's trade grew continuously from 10.5% in 1991 to 18.7% in 2000. From 2001 to 2003, the USA ranked as China's second biggest trade partner after Japan, and from then on the USA appears as the largest trading partner for China. During the same period, Japan's share increased only slightly from 14.4% to 17.26% in 2000 and followed a slow downward move to 14.3% in 2004, while Korea's share rose substantially from 0.7% to 7.3%.

Japan's trade structure is characterized by heavy dependence on the USA. In the 1990s, the US share of Japan's trade fluctuated between 25.3% and 27.6% and then followed a downward trend from 2001 (26.3%) to 2004 (18.2%). Korea and China's shares increased, except during the Asian financial crisis. The rise of trade with China is more striking and strengthened from 2001. As a result, their combined share grew steadily from 9.2% in 1990 to 17.2% in 2000 and 23.14% in 2003 and 2004, when their combined trade with Japan outweighed the US share for the first time.

Japan is the second largest trading partner for Korea after the USA. The combined trade share of Japan and China with Korea has fluctuated between 21.1% and 25.5% in the 1990s, then moved upward in the early 2000s. The Chinese share continued to grow, reaching 9.3% in 2000. China's importance to Korea's trade continued to grow from 2001 to 2004. In 2003, China (excluding Hong Kong) became Korea's number one trading partner, overtaking the USA for the first time. The Japanese share shrunk from 23.1% in 1990 to 15.8% in 2000. In the early 2000s, it stayed stagnant at around 15%. The US share also decreased from 27.2% in 1990 to 20.2% in 2000 and from then on followed a downward move to 15.2% in 2004. The USA remains however an important partner for Korea.

It is noteworthy that while the USA is the *single* most important trading partner for Northeast Asian economies, its share is quite smaller than the combined power of Asian markets.

For the period under study, Japan enjoyed a substantial amount of surplus in its world trade. China also recorded a surplus in world trade except in 1993 and, since 1997, this surplus has become quite significant. However, Korea experienced a deficit in world trade for 1990-1997 and 2000-01, and has shown a surplus in the sub-periods 1998-2000 and 2002-2004. Table 3 (pp. 25) shows the bilateral trade balance between the three countries. Korea

recorded a deficit in its trade with Japan over the whole period, and a surplus with China from 1993 onwards. Japan has greater importance as source of imports than as a destination for Korean exports, while China has become the second largest destination for Korean exports. Meanwhile, Japan recorded a deficit in trade with China, over the whole period. Korea is an important export market for Japan while, for meeting its import needs, China is the prominent market.

To provide an in-depth analysis of the intra-regional trade in Northeast Asia, it is useful to evaluate the “trade intensity indexes”. In fact, trade share is a suitable indicator of the relative importance of the respective trade partners. It does not, however, explicitly show the intensity of trade. Even though the export share for a given country may be small, it cannot be concluded that a trade relationship is weak if the importing country is small and that it has a small share in the global market. Such relative intensity is captured by the “trade intensity index”.

### ***Trade intensity indexes***

To capture the trade intensity between two countries, there are two indicators. The “export intensity index” (*XII*) adjusts export shares of the exporting country by the relative size of total imports in the importing country, and it is defined as follows:

$$XII_{ij} = \frac{X_{ij}/X_i}{M_j/MW - M_i}$$

where,  $(X_{ij}/X_i)$  represents the share of country  $j$  in the total export of country  $i$  and,  $(M_j/MW - M_i)$  means the share of country  $j$  in the total world imports except for country  $i$ 's imports. An index greater than unity indicates that the two countries have relatively strong ties.

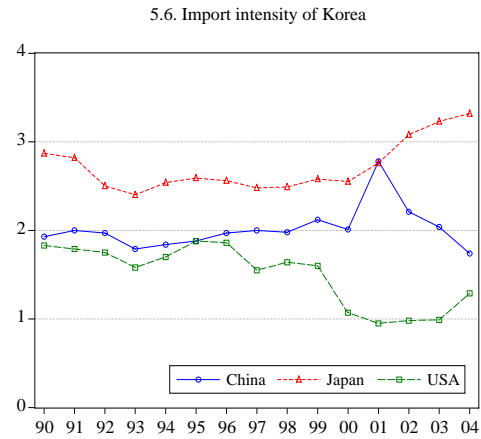
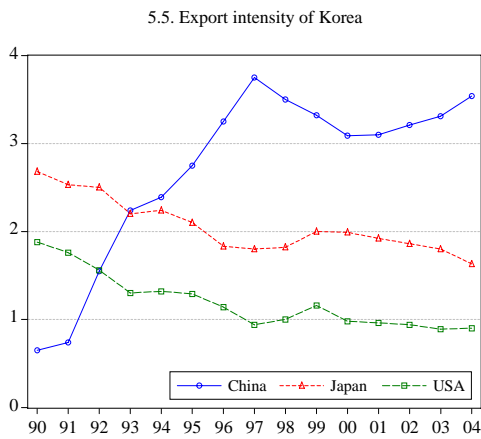
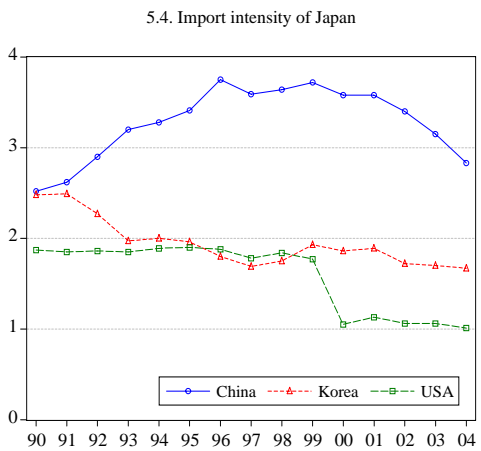
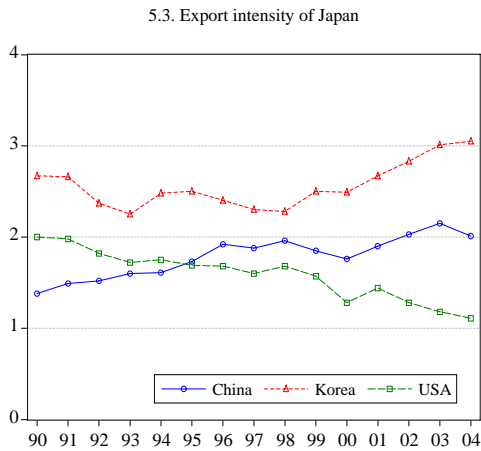
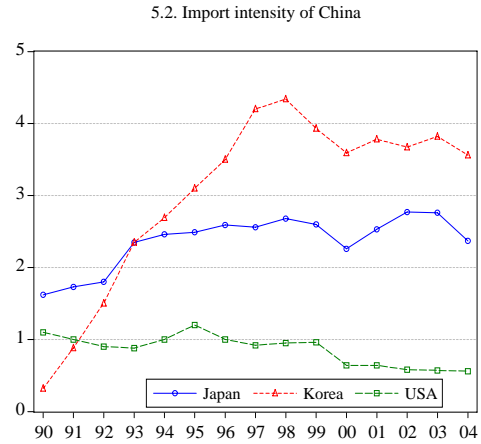
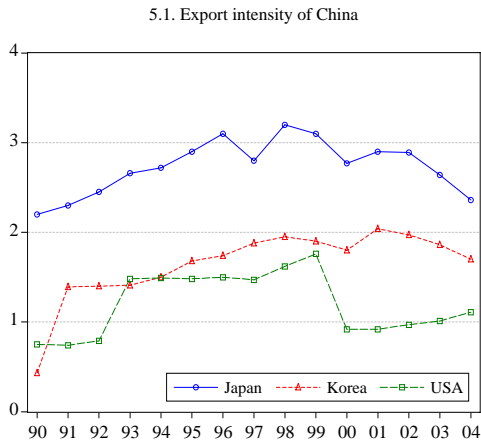
Symmetrically, the “import intensity index” (*MII*) is obtained as follows:

$$MII_{ij} = \frac{M_{ij}/M_i}{X_j/XW - X_i}$$

Where,  $(M_{ij}/M_i)$  is the share of country  $j$  in the total import of country  $i$  and,  $(X_j/XW - X_i)$  means the share of country  $j$  in the total world exports except of country  $i$ 's exports.

These indexes for the Northeast Asian economies are presented in Figure 5.

Figure 5: Trade intensity indexes for Northeast Asian economies



Source: IMF, Direction of Trade Statistics Yearbooks and authors' calculations.

China's export intensity index with Japan is and continued to be high, at a level of 2 to 3 (Figure 5.1). In particular, the index rose in the 1990s, when the increase in China's export was so rapid that exports to Japan did not catch up, and declined smoothly in the early 2000s. The intensity index of exports to Korea has shown a similar trend to that of Japan in the 1990s, but the level was lower, around 1.5 to 2. In the 2000s, it followed a gentle upward move. It is striking that China's export intensity index with the USA decreased abruptly in the 2000s. As for the intensity of China's imports, the most significant feature is the rise of the index of imports from Korea (Figure 5.2). The index rose from a level below 1 to more than 4, while the intensity index of imports from Japan remained relatively high, at an average level of 2.5, after that of Korea.

The export intensity index of Japan with Korea is relatively high, around 2.5 in the 1990s and rose to near 3 in the 2000s, while that with China is less than 2 (Figure 5.3). The export intensity with the USA remained relatively moderate and, showed a falling-off in the early 2000s. The rise in the intensity index of imports from China is significant, approaching almost 4 in the late 1990s (Figure 5.4). Compared with China, the index of Korea has declined over the period under study, but the level is still high about 2. The low intensity of import from USA was strengthened in the 2000s.

As far as Korea is concerned, the export intensity index with China rose rapidly in the 1990s (Figure 5.5). It has declined since 1998, but the level is still high, at around 3 in 2000 and 3.6 in 2004. The index with Japan declined gently over the 1990s and was stagnant in the 2000s at around 2, higher than that with the USA. The import intensity index with Japan was relatively high in the 1990s, around 3 and then followed an upward trend in the 2000s (Figure 5.6). That with China remained stable, at around 2, in the 1990s but went up suddenly in 2001 before declining to less than 2 in 2004.

These results confirm those of the general trade trend between the three countries articulated previously. Moreover, it can be stressed that as of 2004, China and Japan have become the third and the fourth largest trading countries in the world after the USA and Germany. Whether or not China, Japan and Korea successfully negotiate a FTA among them, they are important trade partners to the USA. With a successful FTA, the importance of Northeast Asian countries could become even greater. Trade linkages are not the only means of economic cooperation. Also at work is integration brought about by direct investment.

#### **4. Investment and financial integration**

Foreign Direct Investment (FDI) combines aspects of both international trade in goods and international financial flows. FDI is often considered to be a desired form of investment for host countries. Compared to other capital flows (portfolio flows or bank lending) it is more difficult and costly to retreat investment which have become real assets. Furthermore, direct investment may help to trigger economic growth in the recipient country through two channels: the process of technological diffusion and capital accumulation. Theories of FDI often emphasize the links between developed and developing countries, using these arguments<sup>6</sup>. However, the relationship between recipient and investor countries is not one-way. The ownership implied by FDI allows a parent company to transfer technological knowledge to the subsidiary, but it equally allows the parent to receive knowledge from the subsidiary<sup>7</sup>. FDI leads thus to economic interdependence and stimulates economic integration.

##### ***Trend in direct investment flows to Northeast Asian countries***

Historically, Japan and Korea have not had a strong reliance on FDI, as domestic firms dominated the export sector and governments preferred to rely on the importance of capital goods as a mean of acquiring skills and technology. By the late 1990s, this pattern has changed: Northeast Asian economies have become more open to FDI as services sectors have become more important, and as FDI restrictions were liberalized in the wake of the financial crisis, especially in Korea.

From Figure 6, it is evident that FDI inflows were not a major source of investment in Japan. While Japan is traditionally a major outward investor, FDI inflows into this country gained in importance only since the mid-1990s. Even though the net inflows of FDI into Japan are sometimes negative, the gap between inflows and outflows have slightly decreased since the mid-1990s. Korea followed the same path until 1997, but then Korea switched its

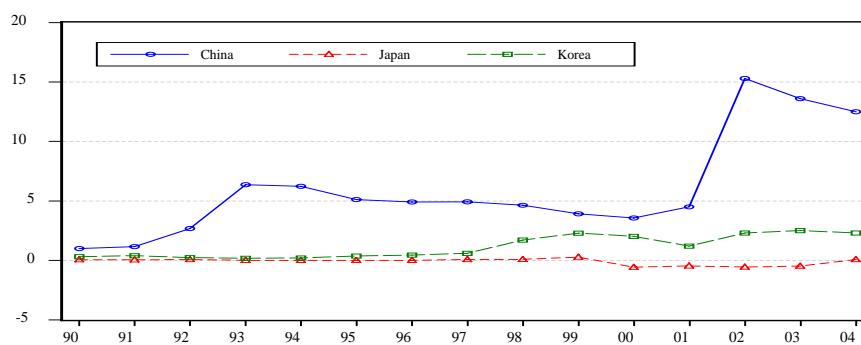
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<sup>6</sup> The growth rates of developing countries are supposed to be highly dependent to the extent to which these countries can adopt and implement new technologies available in developed countries. Thus, growth rates in developing countries are explained by a 'catch-up' process in the level of technology. Technology diffusion can take place through different channels that involve the transmission of ideas and new technologies: import of high-technology products, adoption of foreign technology and acquisition of human capital. Among these channels, FDI by multinational corporations (MNCs) is considered to be the most important. MNCs are among the most technologically advanced firms and are supposed to invest heavily in research and development, which is why their FDI may exert a positive influence on the process of technological change in the host country. This knowledge spillover leads to higher productivity of capital and labor in the host country, and the main contribution of FDI is therefore in terms of improving total factor productivity.

<sup>7</sup> This argument may explain the interest for developing countries to invest in developed countries.

policy toward attracting foreign capital in accordance with structural adjustment measures taken in the aftermath of the Asian financial crisis<sup>8</sup>. China has been the main absorber of FDI, especially in the 2000s, due to low costs, strong growth, entry into the WTO, and overall efforts to improve the investment climate<sup>9</sup>.

Figure 6: FDI net inflows to Northeast Asia  
(as a percent of GDP)



Source: World Bank database.

Table 4 presents the major country investors in Northeast Asian countries in 2004. The USA appears as the leading foreign investor followed by Japan which appears as the main Asian investor. Historically, Korea as well as Hong Kong and Taiwan, have tended to source investment from outside the region while investment to China has predominately been from within the region. FDI inflows into Japan mainly originate from developed countries outside of East Asia. It is worth mentioning that, although European countries individually are investing in Japan or Korea, effects of FDI in Northeast economies depend mostly on Japanese and American investors' behaviors because of their economic dependence and trade linkages.

<sup>8</sup> Korea established a free economic zone (FEZ) Committee to coordinate policies relating to the development and operation of FEZs in the country. It also announced a strategy to attract TNCs' regional headquarters and a seven-year tax exemption to foreign business involved in high-tech services. It opened non-domestic legal services to foreigners (UNCTAD, World Investment Report, 2004).

<sup>9</sup> China opened its finance and travel industries to foreign investment. It also cancelled a first batch of investment approval requirements for 789 items. A Closer Economic Partnership Arrangement agreement was signed with Hong Kong in 2003, which provides certain privileges to Hong Kong firms investing in the mainland. A similar agreement was also signed with Macao (UNCTAD, World Investment Report, 2004).

Table 4: Major Investors in Northeast Asian Economies as of 2004  
(as a percent of total)

Rank	China		Japan		Korea*	
1	Hong Kong	(42.98)	USA	(65.06)	USA	(19.18)
2	USA	(8.54)	Netherlands	(12.74)	UK	(13.46)
3	Japan	(8.33)	Cayman Islands	(3.12)	Japan	(8.36)
4	Taiwan	(7.05)	UK	(1.89)	Germany	(5.73)
5	Virgin Islands	(6.56)	Singapore	(1.41)	Netherlands	(2.50)
6	Korea	(4.61)	France	(1.12)	France	(2.31)

\* as of 2003

Source : MOF (2005), KITA (2005).

Although Japan is not the largest investor in Northeast Asian economies, its role in FDI within the region is important. Japan has been the largest regional source of FDI and bank lending to East Asia. Rapid growth and industrialization saw Japanese firms seek increased market share offshore and establish manufacturing production chains in the NIEs and Southeast Asia in response to rising production costs at home. Japan invested in the NIES (Korea, Taiwan, Singapore and Hong Kong) during the 1980s<sup>10</sup> and, to a lesser extent, in the 1990s. ASEAN countries (the favorite destinations were Thailand, Malaysia, Indonesia, The Philippines) have been important hosts for Japan's FDI through 1990s and the early 2000s. By the mid-1990s, China became the major recipient of Japanese FDI. As mentioned in JOI Bulletin (2005), it is noteworthy that Japan's FDI was more diversified in ASEAN countries in the 1990s and the early 2000s while global FDI was more concentrated in China and Hong Kong in the same period. This continuously positive FDI by Japan in ASEAN countries was based on well-developed international production and sales networks, which Japanese firms have constructed in these countries. However, a new trend triggered by prominent economic development of China has produced improvement of Japanese firms performances in China in recent years. On the other hand, the Asian financial crisis seriously damaged the performance of Japanese firms in ASEAN countries. As a result, China and ASEAN countries are now in competition as hosts for inward Japanese FDI.

<sup>10</sup> The Japanese direct investment in East Asia is explained within the "flying geese" model. According to this literature, during the 1960s and 1970s, the Japanese development strategy was applied successfully to Korea and Taipei, China. From the early 1970s, the strategy spread to Southeast Asia with contributions from Japan and also Korea and Taipei, China. With the economic expansion of Japan and other newly industrialized countries, this strategy passed on to China from the late 1980s. However, since the 1990s, the flying geese approach has been slowing down in East Asia mainly because of the weakening of the Japanese economy. While Japan is still the main intra-regional source of FDI, Korea is an important source of FDI to China and ASEAN countries as it continues to relocate its labor-intensive manufacturing production to these lower cost economies.

Before studying the main FDI determinants in Northeast Asia, let's investigate the statistical trilateral FDI inflows.

### ***Overview of bilateral direct investment flows***

With regard to direct investment, China is mainly a recipient, while Korea and Japan are both investors and recipients. Japan is the largest investor and China the main recipient of direct investment, with Korea positioned between the two.

Table 5 (pp. 25) presents bilateral direct investment between China and Japan. It is noteworthy that Japanese direct investment in China increased in the mid-1990s, with a slight slowdown following until 2000. Japan's direct investment in China declined, amounting to \$4.47 billion in 1995 (8.8% of total ODI), and dropping to \$995 million in 2000. From then on it rose to attain \$2.986 billion in 2003. Following the first boom in 1991-1995, Japanese FDI into China enjoyed a second boom that began in 2000, a year before China's WTO accession. The share of China in Japan's total FDI dropped to 1.1% in 1999 in the wake of the Asian crisis. It continued to increase since then, and in 2003 the share recovered to the 1995 level of 8.7%. At the same time, it is notable that China is emerging as a source of investment into Japan. Table 5 shows that China's role as an investor in Japan has been weak but steady since the start of the 1990s.

Table 6 illustrates bilateral direct investment between Korea and China. Korean direct investment in China reached \$836 million in 1996 and, continuously decreased from then on down to \$307 million in 2000. Meanwhile, Korean direct investment in China as a share of Korea's total overseas direct investment (ODI) peaked in 1994, when it reached 27.5%, before falling to 8.3% in 2000. In the sub-period 2001-2003, Korean direct investment in China grew rapidly to \$2.778 billion, making Korea one of the largest investors in China. Symmetrically, China's outward investment into Korea is negligible.

As shown in Table 7 (pp. 26), the flow of investment between Korea and Japan lags behind their bilateral trade. The highest amount of Korean direct investment in Japan, \$105.1 million, was reached in 1995 and represented 3.4% of Korea's total ODI. The Japanese direct investment in Korea showed an upward trend until 1995 and then, a downward trend until 1999. It remained stagnant in the 2000s.

As a whole, a trend of progress in intra-regional direct investment until the mid-1990s and a decline since then is noticeable, mainly because of the weakening of the Japanese economy. With the Japanese economic slump, the flows of direct investment to East Asian



countries have been declining, as has been the capacity for the Japanese economy to absorb exports from East Asian economies. In the aftermath of the 1997 Asian financial crisis, trade and investment relationship in the region has been weakened, even though at the same time willingness and political initiatives towards strengthening financial and economic cooperation have increased. That is why in the early 2000s, trade and investment flows followed a smooth upward trend and China became an important market (for investment as well as trade) for both Japan and Korea. Trade and investment flows are creating a self-propelling cycle in the region. While inflows from major developed economies, - especially the USA and Japan – continue to be important, the expansion of trade linkages and the development of regional trading arrangements are increasing intra-regional investment flows.

### ***Japanese direct investment determinants***

Theories of FDI - and Japanese FDI in particular - can be divided into two categories: the literature explaining FDI in micro-economic terms (industrial organization) and the literature focusing on macro-economic factors of FDI (cost-of-capital)<sup>11</sup>. Proponents of the micro-economic approach to Japanese FDI consider that most of FDI has been motivated by industrial restructuring and evolving comparative advantage, with direct investment occurring in countries and branches that complemented Japanese trading positions. Alternative explanations for FDI have emphasized regulatory restrictions that either encourage or discourage cross-border acquisitions. The import substitution regimes could lead to inflows of FDI to “jump” the tariff barriers or quotas, and to counteract this, host countries impose various restrictions on FDI. As far as the hypothesis that FDI occurs in response to trade restrictions is concerned, it is evidenced that trade restrictions in the USA have boosted FDI from Japan. It may also have supported FDI in Asia in order to build an “export platform” for the US market. Another explaining macro-economic factor of FDI is the exchange rate. The exchange rate depreciation of the host country may have a positive impact on FDI inflows, because it lowers the cost of production in host countries relative to the cost in source countries, raising the profitability of FDI. The wealth effect is another channel through which a depreciation of the exchange rate could enhance FDI and depends on the idea that firms have less than perfect access to capital markets for loans (Froot and Stein, 1991). Since an

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<sup>11</sup> For a literature survey, see Bayoumi and Lipworth (1998)

appreciation of their exchange rates make firms wealthier in terms of their purchasing power abroad, this will increase their ability to finance foreign direct investment.

With regard to East Asia, Japanese direct investment is presumed to be mostly motivated by optimistic expectations on the Asian economic prospects and the yen appreciation (Ito, 1999). Since the mid-1980s, most East Asian economies have pegged their currencies gradually, but without coordination, to the US dollar, by overwhelmingly high weights to dollar in determining the nominal value of their currencies. The advantage of such fixed exchange rate policies was to improve macro-economic discipline by maintaining prices of tradable goods in accordance with foreign prices (Edward and Savastano, 1999). These exchange rate policies contributed to the relative stability of the real exchange rate in East Asian countries until 1995, and helped Asian countries to promote export-led high economic growth. In fact, East Asian countries have chosen the US dollar pegs even though they were more deeply linked with the Japanese economy. As a result, they took advantage of the yen appreciation against the dollar and conversely suffered from the depreciation of the yen (Kwan 1998, Sazanami and Yoshimura 1999).

To complete these studies and to view the main determinants of FDI inflows in China and Korea from a focused perspective, we broadened the range of explanatory variables to the fluctuations of bilateral exchange rates without using the UD dollar as intermediate, and examined to what extent the Japanese direct investment to China and Korea in the 1990s and the early 2000s have been influenced by the yen/yuan exchange rate and yen/won fluctuations. Putting all of these factors together implies the following equation:

$$FDI_{ij} = f(STDTX_{ij}, G_j, TX_{ij}, TRADE_{ij}, DPNB_{ij}) \quad (1)$$

where,

$FDI_{ij}$  : FDI flows from country  $i$  (Japan) to country  $j$  (China or Korea), and from country  $j$  (china or Korea) to country  $i$  (Japan);

$STDTX_{ij}$  : proxy of the exchange rate risk;

$G_j$  : growth of the  $j$  country (China or Korea);

$TX_{ij}$  : yen/yuan exchange rate and yen /won exchange rate;

$TRADE_{ij}$  : bilateral trade flows;

$DPNB_{ij}$  : per capita GDP gap between the country  $i$  (Japan) and the country  $j$  (China or Korea).

To test equation (1) empirically, the FDI flows from Japan to China and Korea are regressed on the proxy of the exchange rate risk. The latter variable is calculated from the standard deviation mobile for every two years. A set of explanatory variables was taken into account such as the gap of per capita GDP between Japan/China and Japan/Korea and bilateral trade values. Several data sources are used. The GDP and GDP per capita data used in this paper are available from IMF's *International Financial Statistics* (2004). The bilateral trade values are obtained from ADB's *Key Indicators of Developing Asian and Pacific Countries* (2005) as far as China and Korea are concerned, and from MOF's statistics on *Foreign Trade and Balance of Payments* (2005) as Japan is concerned. The bilateral FDI flows and exchange rate data are taken from MOF (Japan) and MOFE (Korea). Annual observations are used for all variables. As the sample period covers only 13 years (1990-2003), the individual series were combined into a single panel data set – that is pooled cross-section (N) and time-series (T\_I) data – thereby increasing the number of data points and the precision of parameter estimates.

### **Regression results**

Table 8 (pp. 27) reports the regression results. We have used a model with individual random effects. A balanced panel has been considered, in which the same number of points in the temporal dimension for all individuals are taking into account, with  $N=4$  et  $T_I=14$  i.e. 56 observations. As far as our sample is concerned, the realization of Fischer's statistics related to the total homogeneity hypothesis, noted  $F_1$ , is equal to 2.2247. Taking into account the dimension of our panel and the explanatory variables ( $K=5$ ), we have compared the value of the realization against the Fischer's critical value  $F_1(18,32)$  and the P-value; the latter is below 5% this is why we can reject the null hypothesis of homogeneity. On the other hand, the realization of Fischer's statistics related to the homogeneity test of coefficients, noted  $F_2$ , is equal to 0.86329, this value is to be compared against the critical value of  $F_2(15,32)$ . The P-value shows that the null hypothesis can not be rejected. We are thus able to confirm the structure of the panel; we can assume that there are common coefficients for the three countries between the dependent variable (FDI) and the regressors. Finally, the realization of Fischer's statistics, noted  $F_3$ , is equal to 9.4440. This value is to be compared against  $F_3(3,47)$  degrees of freedom. The P-value is largely less than 5% that is why we reject the null hypothesis of constant terms; it is then necessary to introduce individual effects.

The realization of the statistics of Hausman test is equal to 0.27038. The P-value shows that the null hypothesis related to the absence of correlation between individual effects and the regressors can not be rejected. We can thus assume that the explanatory variables are not correlated to structural and non temporal specificities of FDI flows. That is why we have chosen the MCG estimation of a random effects model, and we consider that our model has individual country's specificities. It is noteworthy that the realization of the THETA estimator is equal to 0.12356. In this case, THETA parameter converges towards 0 and then the MCG estimator converges towards WITHIN ESTIMATOR, that is to say that in our panel the temporal variance for each country (intra class) dominates the variance between countries (inter class).

The regression results are comparable to those of the existing literature and confirm for the period 1990-2003 the existence of:

- an inverse relationship between FDI flows and the risk of the exchange rate (i.e. the rise of the depreciation risk in the source country leads to a decrease of FDI outflows) on the one hand, and an inverse relationship between bilateral FDI flows and exchange rates fluctuations, on the other hand. In other words, the exchange rate appreciation of the source country (Japan) has a positive impact on FDI outflows (of the source country and a positive impact on the FDI inflows of the recipient country), because it lowers the productive and establishing costs in host countries (China, Korea);
- an inverse relationship between Japanese FDI flows and bilateral trade flows, that is to say that the widespread trilateral trade is an inter-industrial trade, bringing out that most of FDI outflows is motivated by industrial restructuring, with an investment occurring in countries and industries complemented the source country trading positions;
- a positive relationship between bilateral FDI flows and the GDP per capita gap between the two countries;
- a positive relationship between the bilateral FDI flows and the growth rate of the host country, showing that FDI is motivated by optimistic growth expectations of the host economy.

## **5. Concluding remarks**

Northeast Asian countries are thought to play a leading role in East Asian economic and financial integration. However, until recently no Northeast Asian country has participated in any trade and financial grouping. In the aftermath of the Asian financial crisis, a trend towards a new regionalism in Asia has been perceivable and, a change in the attitudes of Japan and China is striking. Both countries seem to be more resolute about an intra-regional grouping than before. Since it is difficult to imagine an East Asian free trade area in which the big economies of the North do not participate, an arrangement between the Northern countries is a necessary condition for a wider solution. On the basis of these considerations, we have tried to provide an in-depth analysis of the current economic cooperation in Northeast Asia. The trilateral economic cooperation was examined through trade and direct investment links in the 1990s and the early 2000s. An increasing trend of trade cooperation in the 1990s and the early 2000s was demonstrated while, intra-regional direct investment between the three countries was evidenced to be still weak. To the extent that Japan is the main investor in the region, the determinants of Japanese direct investment were studied, namely the exchange rate fluctuations, the bilateral trade values and the prospects of economic growth. Particular attention has been given to the impact of changes in the yen-yuang exchange as well as the yen-won exchange rate on Japanese investment in China and Korea. The estimation results suggest that the main driving forces for Japanese direct investment have been the yen appreciation, the falling-off of exchange rate risks, industrial restructuring and inter-industrial trade, and optimistic expectations of the recipient country's economic prospects.

The exchange rate thus can be considered thus as one of the main factors of economic links in Northeast Asia. This argument could be extended to the East Asia as a whole, and consequently, the observed expansion in regional trade is expected to produce market pressures for stabilizing bilateral exchange rates of East Asian currencies. Policymakers of Asian countries have realized that stabilizing regional exchange rates can help promote regional economic integration. This interest in regional development and growth has naturally led to the search for a collective exchange rate mechanism (for a discussion see Aminian, 2005).

Table 1: Economic Cooperation Agreements in East Asia

<i>Intra-Regional</i>	Year	Status
<i>Co-operations in force</i>		
ASEAN Free Trade Area (AFTA) 10 ASEAN members	1992	implemented
Japan-Singapore Economic Partnership Agreement (JSEPA)	2002	Effective in November
China-Hong Kong Closer Economic Partnership Arrangement (CEPA)	2003	Signed in June
China-Macao Closer Economic Partnership Arrangement (CEPA)	2003	Signed in June and effective as of January 2004
<i>Agreements being negotiated, studied or considered</i>		
East Asia Free Trade Area (EAFTA)	2000	Proposed at the ASEAN+3 summit meeting
China-Japan-Korea FTA	2000	Zhu Rongji proposition during the ASEAN+3 summit meeting
ASEAN-China FTA (ACFTA)	2001	Realization by 2010 (Framework Agreement signed in November 2002)
Japan-ASEAN Closer Economic Partnership	2002	Realization within 10 years agreed to at an ASEAN-Japan summit meeting
Japan-Korea FTA	2003	Negotiations ongoing
Korea-Singapore FTA	2003	Declared to finish at the end of 2004
ASEAN-Korea FTA	2004	Under joint study
<i>Inter-regional</i>	Year	Status
<i>Co-operations in force</i>		
Singapore-New-Zealand FTA	2001	Effective in January
Singapore-European Free Trade Association FTA	2002	Signed in June and effective in January 2003
Korea -Chile FTA	2003	Signed in February
Singapore-USA FTA	2003	Signed in May
Thailand-India	2003	Signed in October and effective as of January 2004 for selected items
Thailand-Australia	2005	Implemented on January

(continued)

(continued)

<i>Inter-regional</i>	Year	Status
<i>Agreements considered or under consideration</i>		
ASEAN-India Regional Trade and Investment Agreement	2003	Framework Agreement signed in October, negotiations ongoing
China-Chile bilateral		Ongoing Negotiations
Hong-Kong – New Zealand bilaterals		Ongoing Negotiations
Korea bilaterals with Australia, Chile, Mexico, New Zealand, USA		Ongoing Negotiations
Japan bilaterals with Canada, Chile, Mexico		Ongoing Negotiations
Malaysia-USA bilaterals		Ongoing Negotiations
Philippines-USA bilaterals		Ongoing Negotiations
Singapore bilaterals with Canada, Chile, India, Mexico		Ongoing Negotiations

Table 3: Trade balances between China, Japan and Korea  
(in Millions US\$)

	China- Japan	Japan- China	China- Korea	Korea- China	Japan- Korea	Korea- Japan
1990	1,554	-5,912	1,963	-	5,756	-5,936
1991	220	-5,643	1,113	-2,438	7,707	-8,764
1992	-1,987	-5,005	-185	-1,071	6,190	-7,859
1993	-7,521	-3,298	-2,500	1,221	7,450	-8,452
1994	-4,829	-8,882	-2,942	740	10,837	-11,867
1995	-541	-13,988	-3,600	1,797	13,962	-15,509
1996	1,698	-18,578	-4,957	2,953	13,389	-15,394
1997	2,830	-20,135	-5,749	3,625	11,491	-13,060
1998	1,411	-16,897	-8,755	5,493	4,576	-4,581
1999	-5,369	-19,620	-9,420	4,818	10,471	-8,279
2000	1,571	-24,058	-11,159	5,656	10,415	-11,362
2001	2,267	-18,299	-108,513	4,887	8,264	-10,127
2002	-5,006	-15,745	-13,073	6,354	12,581	-14,713
2003	-1,473	-917	-230,833	13,201	16,399	-19,037
2004	-15,508	-6,823	-31,691	26,619	22,237	-28,615

Sources: ABD (2005), MOF (2005).

Table 5: Direct investment flows between Japan and China  
(US \$ Millions, % of total ODI)

	China ⇒ Japan		Japan ⇒ China	
	Amount		Amount	Share of Japan's ODI
1990	3.33		284	0.6
1991	2.15		583	1.3
1992	4.77		1,0624	3.1
1993	14.22		1,691	4.7
1994	6.92		2,565	6.3
1995	13		4,473	8.8
1996	5.31		2,510	5.2
1997	5.16		1,987	3.7
1998	2.01		1,065	2.6
1999	2.48		751	1.1
2000	4.89		995	2.0
2001	3.40		1,529	4.5
2002	2.46		1,656	4.8
2003	2.56		2,986	8.7

Source: MOF (2005)



Table 6: Direct investment flows between Korea and China  
(US \$ Millions, % of total ODI)

	China ⇒ Korea		Korea ⇒ China	
	Amount		Amount	Share of Korea's ODI
1990	0.00		-	-
1991	0.00		-	-
1992	0.00		-	-
1993	0.00		264	20.9
1994	0.00		632	27.5
1995	0.01		824	26.8
1996	0.00		836	19.7
1997	0.00		633	19.6
1998	0.00		631	16.2
1999	0.02		308	12.1
2000	0.07		307	8.3
2001	0.07		1,000	19.8
2002	0.25		2,080	19.5
2003	0.02		2,778	19.00

Source: KITA (2005)

Table 7: Direct investment flows between Korea and Japan  
(US\$ million, % of total ODI)

	Korea ⇒ Japan		Japan ⇒ Korea	
	Amount	Share of Korea's ODI	Amount	Share of Japan's ODI
1990	-	-	284	0.5
1991	23	2.1	260	0.6
1992	12	0.9	225	0.6
1993	6	0.5	245	0.7
1994	58	2.5	400	1.0
1995	105.1	3.4	445	0.9
1996	80.6	1.9	416	0.9
1997	63.7	2.0	442	0.8
1998	22.7	0.6	303	0.7
1999	48.3	1.9	927	1.5
2000	49.6	1.7	850	1.6
2001	25.21	0.5	592	1.7
2002	23.84	0.8	587	1.7
2003	31.93	2.00	269	0.8

Source: MOF(2005), MOFE (2004)

Table 8: PANEL DATA Estimation  
(FDI regression results)  
Individual Random Effects Model, estimated by GLS  
Sample period: 1990-2003  
Balanced data  
N=4 and T\_I=14  
Total panel observations: 56

Dependent variable: FDI<sub>ij</sub>

Explanatory Variables	Coefficient	t-Statistics
C	0.10047e+10	3.70365**
STDTX	-0.202658e+09	-1.93085*
Gj	0.815951e+08	3.60364**
TRADE <sub>ij</sub>	-0.010034	-1.06294
TX	-0.110286e+09	-4.69796**
DPNB <sub>ij</sub>	31351.7	4.58813**
R <sup>2</sup>	0.585760	
Adjusted R <sup>2</sup>	0.544336	
F <sub>1</sub> (18,32)	2.2247	P-value= [0.0235]
F <sub>2</sub> (15,32)	0.86329	P-value= [0.6071]
F <sub>3</sub> (3,47)	9.4440	P-value= [0.0001]
Hausman Test (CHISC(1))	0.27038	P-value= [0.6031]
THETA	0.12356	

Note: Two asterisks indicate that the coefficient is significant at 1 percent level.

## References

- ADB, *ADB Key Indicators for Developing Asian and Pacific Countries 2005*, country data available online at [www.adb.com](http://www.adb.com)
- Agarwala R., Prakash B., (2002), "Regional Cooperation in Asia: Long-term Progress, Recent Retrogression, and the Way Forward", ADB, *ERD Working Paper*, N°28, October.
- Aminian, N., (2005), "Economic integration and the prospects for regional monetary cooperation in East Asia", *Structural Change and Economic Dynamics*, 16, pp. 91-110, available online at [www.sciencedirect.com](http://www.sciencedirect.com).
- Bayoumi T., Lipworth G., (1998), "Japanese Foreign Direct Investment and Regional Trade", *Journal of Asian Economics*, vol. 9, N°4, pp. 581-607.
- Borenrenstein E., De Gregorio J., Lee J.-W., (1998), "How does foreign direct investment affect economic growth?", *Journal of International Economics* 45, pp. 115-35.
- Chen C., Chang L., (1995), "The role of foreign direct investment in China's post-1978 economic development", *World Development*, vol.23, N° 4, pp. 691-703.
- Cuyvers, L., De Lombaerde, Ph., Verherstraeten, S., (2005), « Current Status of East Asian Economic Integration », *University of Antwerp Working Paper*, Belgium.
- De Mello L. R., (1999), "Foreign direct investment-led growth: Evidence from time series and panel data", *Oxford Economic Papers*, 51, pp. 115-135.
- De Mello L. R., Fukasaku K., (2000), "Trade and foreign direct investment in Latin America and Southeast Asia: temporal causality analysis", *Journal of International Development* 12, pp. 903-24.
- Drysdale (2005), "Regional Cooperation in East Asia and FTAs Strategies", *Pacific Economic Papers*, N°344, Australia-Japan Reaserch Center.
- Edward, S., Savatano, M. A. (1999), « Exchange rates in emerging economies : What do we know ? What do we need to know ? », *NBER Working Paper*, 7228.
- Froot K. and Stein J., (1991), « Exchange rates and foreign direct investment : an imperfect capital markets approach », *Quarterly Journal of Economics*, 106, November, pp. 190-207.
- Fry M.J., (1996), "How foreign direct investment in Pacific Asia improves current account", *Birmingham Journal of Asian Economics*, Vol. 7, N° 3, pp. 459-486.
- Hertel, W. T., Walmsley, T., Itakura, K. (2001), "Dynamic Effects of the "New Age" Free Trade Agreement between Japan and Singapore", *Journal of Economic Integration*, 16, pp. 446-484.
- Husain I., Jun K. W., (1992), "Capital flows to South Asian and ASEAN countries; trends, determinants and policy implications" *World Bank Working Paper WPS 842*, Washington DC.
- Ito T., (1999), "Capital flows in Asia", *Working Paper 7134*, NBER, Cambridge.
- Japan Institute for Overseas Investment (2005), *JOI Bulletin*, March, vol. 6.
- Japan Ministry of Finance (MOF), (2005), data on trade and FDI available online at [www.mof.go.jp](http://www.mof.go.jp)
- Korean International Trade Association (KITA), (2005), Trade Statistics Database, available online at [www.kita.org](http://www.kita.org)
- Korean Ministry of Finance and Economy (MOFE), (2005), data on FDI and exchange rate available at [www.english.mofe.go.kr](http://www.english.mofe.go.kr)
- Kwan, C.H. (1998), "Yen for an Anchor? Asia in Search of a New Exchange Rate regime", *Asia: responding to Crisis*, Asian Development Bank Institute, available online at [www.adbi.org/publications/asiaresp/chap4.htm](http://www.adbi.org/publications/asiaresp/chap4.htm)
- Sazanami Y., Yoshimura S. (1999), "Restructuring East Asian exchange rate regimes", *Journal of Asian Economics*, 10, December, pp. 509-523.
- TRAN Van Hoa (2002), "Korea, China, and Japan: Their Trade with the World and Its Impact on New Asian Regionalism ASEAN+3", *University of Wollongong Working Paper*, available online at [www.uow.edu.au/commerce/econ/wplist.html](http://www.uow.edu.au/commerce/econ/wplist.html)
- UNCTAD (2004), *World Investment Report*.