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The Impact of the East Asian Economic Integration Regime on Taiwan's Attractiveness for International Investment

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In recent years, economic integration has become an important driver of economic development both in East Asia and throughout the world. By the end of 2007, there were 205 regional trade agreements under negotiation and consideration worldwide, of which 109 involved Asian countries. In particular, Japan, China, and the Association of Southeast Asian Nations (ASEAN) have been aggressive advocates of regional trade agreements, in the hope that they will lead to the formation of an East Asian free trade regime. During the meeting of the Asia-Pacific Economic Cooperation (APEC) forum in 2006, all the participants registered their support for a Free Trade Area of the Asia-Pacific (FTAAP).

However, due to political objections from China, Taiwan was excluded from this wave of East Asian economic integration agreements, despite being the seventeenth largest economy in the world and the fifth largest in Asia, and the world's sixteenth largest trading nation in 2005. As of February 2009, Taiwan only had free trade agreements (FTAs) with Panama (signed in August 2003), Guatemala (July 2005), Nicaragua (June 2006), and El Salvador and Honduras (both signed in May 2007). The bilateral investment agreement between Taiwan and the United States is still under discussion.

During the APEC meeting held in Vietnam in 2006, China implicitly indicated that Taiwan was not eligible for participation in the FTAAP, with the intention of excluding Taiwan from negotiations. By 2007, China was Taiwan's largest trading partner and the most important destination for its outward investment, and Taiwan was China's fifth largest trading partner and the sixth largest source of foreign direct investment (FDI). However, there were still numerous barriers to bilateral economic relations and the two sides had yet to conclude a bilateral economic cooperation and trade agreement.

The Taiwanese government is deeply concerned about Taiwan's exclusion from East Asian economic integration agreements. During his campaign for the presidency in 2007, Ma Ying-jeou (馬英九) reiterated that it was his policy to avoid Taiwan's economic marginalization. Similarly, Ma's running mate Vincent Siew (蕭萬長) also emphasized that Taiwan was facing a crisis of marginalization. During his first international press conference after his inauguration in May 2008, President Ma made it clear that if Taiwan could not participate in East Asian economic integration agreements, it would be marginalized in the future.[1]

From the perspective of international trade, the disadvantages for Taiwan of exclusion from the East Asian economic integration regime are quite limited. According to eight quantitative studies conducted using the computable general equilibrium (CGE) model, the negative impact on Taiwan's gross domestic product (GDP) of exclusion from ASEAN plus one (China) would be around 0.2 percent. Exclusion from ASEAN plus three (Japan, South Korea, and China) would have an impact on Taiwan's GDP of below 2 percent. An impact on Taiwan's GDP of only 2.23 percent would result from exclusion from ASEAN plus six (Japan, South Korea, China, Australia, New Zealand, and India).[2] So far, Taiwan should not be over-anxious about being marginalized through exclusion from the East Asian economic integration regime because it is merely to describe the existing reality under which Taiwan is not permitted to participate in international political and economic forums in Asia.

The impact of the East Asian economic integration regime on Taiwan may lie not in international trade but in international investment. Since much of Taiwan's foreign trade is driven by its outward investment, a re-orientation of international investment would eventually have an impact on international trade. Theoretically, economic integration agreements provide enterprises with the advantages of

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[1] Office of the President, Republic of China, "Transcript of May 21, 2008 Presidential Press Conference," May 21, 2008, http://www.president.gov.tw/en/prog/news_release/document_content.php?id=1105499708&pre_id=1105499708&g_category_number=145&category_number_2=145 (accessed December 4, 2008).

[2] Chen-yuan Tung, "Dongya jingji zhenghe yu Taiwan de zhanlue" (East Asian economic integration and Taiwan's strategy), *Wenti yu yanjiu* (Issues and Studies) 45, no. 2 (March/April 2006): 25-60.

economies of scale, growth opportunities, and resource integration efficiency within the economic integration area, and these advantages increase incentives for local and foreign businesspeople to expand their investment in the area; at the same time, discrimination against and competition with states outside the area may have the effect of reducing investment by multinational corporations in those states. Furthermore, many current economic integration agreements liberalize and facilitate international investment, and this directly influences the attractiveness of both member-states and non-member-states as destinations for international investment.

Overall, participation in the economic integration regime benefits "investment creation" in the member-states, which helps them attract more international investment. Participation also avoids the negative impact of "investment diversion" (the diversion of investment from non-member-states to member-states because of the tariff and non-tariff barriers set up by the latter against the former), averting obstacles discriminating against international investment. However, participation in regional economic integration agreements does not guarantee that a member-state will attract more international investment. This still depends on the economic competitiveness of that state, including its location advantage and overall investment environment.[3]

Existing CGE models cannot analyze the impact of economic integration agreements on international investment (including both international portfolio investment and FDI) or the impact of service industry liberalization (which involves international investment) in their quantitative models.[4] Furthermore, analysis using a gravity model can only be carried out after trade liberalization has taken place; it cannot assess the effects of economic integration in advance. Thus we cannot

[3] Florence Jaumotte, "Foreign Direct Investment and Regional Trade Agreements: The Market Size Effect Revisited," *IMF Working Paper*, WP/04/206 (November 2004); and Dirk Willem te Velde and Dirk Bezemer, "Regional Integration and Foreign Direct Investment in Developing Countries," *Transnational Corporations* 15, no. 2 (August 2006): 41-70.

[4] Joseph F. Francois, Matthew McQueen and Ganeshan Wignaraja, "European Union-Developing Country FTAs: Overview and Analysis," *World Development* 33, no. 10 (2005): 1557; comments on my previous paper by Zhi Wang (王直), an expert on CGE models, October 22, 2005; World Bank, *Global Economic Prospects: Trade, Regionalism, and Development* (Washington, D.C.: World Bank, 2005), 61; Richard Adams, Philippa Dee, Jyothi Gali, and Greg McGuire, "The Trade and Investment Effects of Preferential Trading Arrangements—Old and New Evidence," *Productivity Commission Staff Working Paper* (Australia), no. 11 (May 2003): 29-30; Philippa Dee and Jyothi Gali, "The Trade and Investment Effects of Preferential Trading Arrangements," *NBER Working Paper*, no. 10160 (December 2003): 12-13; and Roberta Piermartini and Robert Teh, "Demystifying Modeling Methods for Trade Policy," *WTO Discussion Paper*, no. 10 (2005).

predict the impact of the East Asian economic integration regime on Taiwan's attractiveness as a destination for international investment. So in this study, a questionnaire survey has been used to gauge the likely impact of East Asian economic integration agreements and a cross-Strait economic integration agreement on the investment behavior patterns of various enterprises.

The empirical results of several gravity models demonstrate that economic integration agreements have had some impact on the ability of both member- and non-member-states to attract international investment. Generally speaking, economic integration agreements help member-states attract more international direct investment, which is the effect of investment creation; in particular, economic integration agreements with a broader content have a greater impact on the ability to attract international direct investment. In addition, several studies show that the effect of investment diversion is often apparent, but it is not comprehensive.[5] Nevertheless, gravity model analysis can be only carried out after the event. This prevents us from predicting the impact of the East Asian economic integration regime on Taiwan's attractiveness as a destination for international investment.

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[5] Paul Brenton, Francesca Di Mauro, and Matthias Lucke, "Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe," *Empirica* 26, no. 2 (1999): 95-121; V. N. Balasubramanyam, David Sapsford, and David Griffiths, "Regional Integration Agreements and Foreign Direct Investment: Theory and Preliminary Evidence," *The Manchester School* 70, no. 3 (June 2002): 460-82; Eduardo Levy Yeyati, Ernesto Stein, and Christian Daude, "The FTAA and the Location of FDI," *Central Bank of Chile Working Paper*, no. 281 (December 2004), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=726949; Claudio Frischtak, "Multinational Firms' Responses to Integration of Latin American Markets," *Business and Politics* 6, no. 1 (2004), http://www.bepress.com/bap/vol6/iss1/art5; Andreas Waldkirch, "The 'New Regionalism': Integration as a Commitment Device for Developing Countries" (Manuscript, November 2002); Karolina Ekholm, Richard Forslid, and James R. Markusen, "Export-Platform Foreign Direct Investment," *NBER Working Paper*, no. 9517 (February 2003), http://www.econ.hit-u.ac.jp/~trade/2003/papers/James_Markusen_EFM.pdf; Massimo Motta and George Norman, "Does Economic Integration Cause Foreign Direct Investment?" *International Economic Review* 37, no. 4 (November 1996): 757-83; Jim Markusen, "Regional Integration and Third-Country Inward Investment," *Business and Politics* 6, no. 1 (May 2004), http://www.bepress.com/bap/vol6/iss1/art3; Maurice Schiff and L. Alan Winters, *Regional Integration and Development* (Washington, D.C.: The World Bank, 2003), 119-21; Adams, Dee, Gali, and McGuire, "The Trade and Investment Effects of Preferential Trading Arrangements," 96; Daniel Lederman, William F. Maloney, and Luis Serven, *Lessons from NAFTA for Latin America and the Caribbean Countries: A Summary of Research Findings* (Washington, D.C.: The World Bank, 2003), 270-301; Jaumotte, "Foreign Direct Investment and Regional Trade Agreements"; Denis Medvedev, "Beyond Trade: The Impact of Preferential Trade Agreements on Foreign Direct Investment Inflows," *World Bank Policy Research Working Paper*, no. 405 (November 2006); Jung Sik Kim and Yonghyup Oh, "Determinants of Intra-FDI Inflows in East Asia: Does Regional Economic Integration Affect Intra-FDI?" *Korea Institute for International Economic Policy Working Paper*, no. 07-01 (June 2007); and Gary Clyde Hufbauer and Jeffrey J. Schott, "Multilateralizing Regionalism: Fitting Asia-Pacific Agreements into the WTO System" (Paper presented at the Conference on Multilateralizing Regionalism, sponsored by WTO-HEI, Geneva, Switzerland, September 10-12, 2007), 25-27, table 10.

Taiwan has neither an extensive market hinterland nor an abundance of resources, so if it is excluded from the East Asian economic integration regime it might find itself at a disadvantage when it comes to attracting domestic and foreign investment. If Taiwan is permitted to join the regime, the island might become an investment base for local and foreign businesspeople with export-led operations, or it could become an East Asian platform for production, marketing, research and development (R&D), and operations, while more international portfolio investment might be attracted to Taiwan's securities market. By contrast, if Taiwan is excluded from the East Asian economic integration regime, it might suffer the negative impact of investment diversion, as local and foreign businesspeople are subject to discrimination and competition pressure from the member-states of the regime and they find themselves unable to utilize the economies of scale, growth effects, and resource integration efficiency that result from regional economic integration.

Taiwan's official statistics indicate that exclusion from the East Asian regime is detrimental to Taiwan's attractiveness as a destination for international investment. Although foreign businesspeople have been increasing their investments in Taiwan in recent years, outward investment has expanded more rapidly than inward investment, in terms of both direct and portfolio investment (see table 1). This indicates that, having been excluded from the East Asian economic integration regime, Taiwan was experiencing a huge net capital outflow and Taiwan's attractiveness as a destination for international investment was obviously not appreciated by most investors.

Table 1
Taiwan's International Investment, 2000-07

Unit: US$ billion

<table>
<tr><td rowspan="2">Category</td><td rowspan="2">Foreign investment in Taiwan</td><td rowspan="2">Taiwan's outward investment</td><td colspan="2">Net international investment</td></tr>
<tr><td>2000-2007</td><td>both types</td></tr>
<tr><td>Direct investment</td><td>57.1</td><td>83.8</td><td>-26.7</td><td rowspan="2">-107.4</td></tr>
<tr><td>Portfolio investment</td><td>132.1</td><td>212.8</td><td>-80.7</td></tr>
</table>

Note: "Net international investment" = "foreign investment in Taiwan" minus "Taiwan's outward investment." These figures should be authoritative as they are from Taiwan's Ministry of Economic Affairs and the Central Bank. However, in an environment of globalization, it may be difficult for the government to accurately track all capital flows across national borders. In addition, Taiwanese businesspeople may not register their outward investment with the Taiwan government if it consists of profits earned by their companies based overseas.

Sources: Investment Commission, Ministry of Economic Affairs, Republic of China, *96 nian tongji nianbao* (Statistical yearbook 2007), http://www.moeaic.gov.tw/system_external/ctlr?PRO=DownloadFile&t=4&id=145; and Central Bank of the Republic of China, "2008 nian 6 yue guoji shouzhi jianbiao" (Summary of the balance of payments: June 2008), http://www.cbc.gov.tw/economic/statistics/bop/cAY.xls.

Using a questionnaire survey, this paper will attempt to assess the impact of the East Asian economic integration regime on the investment behavior patterns of Taiwanese and foreign enterprises with investment interests in Taiwan. It also seeks to discover what priorities these enterprises have in terms of the partners with whom Taiwan should seek to conclude economic integration agreements and the contents of such agreements. The concept of the "East Asian economic integration regime" will be used to indicate the principles, norms, rules, decision-making procedures, and organizations associated with the various economic integration agreements in East Asia. "International regime" is a concept widely accepted by scholars of international relations to embrace the formal and informal principles, norms, rules, decision-making procedures, and organizations associated with particular issue areas.[6] "International investment" here refers to investment in Taiwan conducted by domestic or foreign enterprises having the capacity and experience to make such investment, including both direct investment and portfolio investment.

Methodology

Using empirical data from a questionnaire survey of Taiwanese and foreign enterprises with investment interests in Taiwan, this study analyzes the impact of the East Asian economic integration regime on Taiwan's attractiveness as a destination for international investment. The enterprises included in the survey are classified into five types: Taiwanese parent companies (Taiwanese companies registered with Taiwan's Ministry of Economic Affairs, MOEA), Taiwan-listed companies (including those in the over-the-counter market), Taiwan-invested enterprises in China, foreign-invested enterprises in Taiwan, and international investment consultancy

[6] James E. Dougherty and Robert L. Pfaltzgraff, Jr., *Contending Theories of International Relations: A Comprehensive Survey*, fourth edition (New York: Addison Wesley, 1996), 436-41.

companies that invest in Taiwan or have a significant interest in investing in Taiwan.

The population of Taiwan-listed companies should be included within the population of Taiwanese parent companies since the listed companies included in the survey are Taiwanese companies with average registered capital amounts of NT$5.65 billion and the latter are Taiwanese companies with registered capital amounts of over NT$10 million. Nevertheless, Taiwan-listed companies should be more influential than regular Taiwanese parent companies in terms of the impact of their investment behavior patterns and thus they deserve further investigation and analysis. In addition, Taiwanese parent companies might not include the majority of Taiwan-invested companies in China, as not all Taiwanese parent companies have established branches or subsidiaries in China. Indeed, only 30.3 percent of Taiwanese parent companies in this survey have established such branches or subsidiaries. Some Taiwan-invested enterprises in China have actually closed down their companies in Taiwan.

The questionnaires were produced in both Chinese and English, with questionnaires in Chinese being sent to Taiwanese parent companies, Taiwan-listed companies, and Taiwan-invested companies in China, and questionnaires in both Chinese and English being sent to foreign-invested enterprises in Taiwan and international investment consultancy companies.

With respect to the sampling of Taiwanese parent companies, according to statistics issued by the Investment Commission of the MOEA, there were about 130,000 companies nationwide whose registered capital amounts were over NT$10 million as of September 2006. According to the number weight of 35 kinds of industries, 9,824 companies in total were sampled through stratified random sampling. Questionnaires were sent out starting in January 2007, and by May 2008 435 responses had been received, a return rate of about 4.43 percent. Based on a 95 percent confidence interval, the sampling error was ±4.7 percent.

This study surveyed 1,194 listed companies registered with the MOEA at the end of 2005. A total of 861 questionnaires were sent out to these listed companies, with only one questionnaire being sent to a group of companies all headed by the same responsible person. The questionnaires were dispatched from July 2007, and by February 2008 a total of 164 had been returned, a return rate of about 19.1 percent. Based on a 95 percent confidence interval, the sampling error was ±7.7 percent.

According to MOEA statistics, there were 29,737 foreign-invested enterprises registered in Taiwan between 1950 and 2006. Based on the number weight of investment projects of each country investing in Taiwan, 5,000 companies in total were sampled through stratified random sampling. Questionnaires were dispatched from August 2008. By October that year 145 had been returned, a return rate of about 2.90 percent. Based on a 95 percent confidence interval, the sampling error was ±8.14 percent.

Because the major foreign investors in Taiwan's securities market are qualified foreign institutional investors (QFIIs), this study attempts to understand the impact of the East Asian economic integration regime on Taiwan's attractiveness as a destination for international portfolio investment by surveying analysts working for international investment consultancy companies. Questionnaires were e-mailed to 46 analysts of the author's acquaintance, all of whom had visited Taiwan or whose companies had established branches there, starting in July 2007. By July 2008, 14 questionnaires had been returned, a return rate of about 30.4 percent.

The questionnaire is divided into four main sections. The first section deals with the companies' views concerning East Asian economic integration agreements, including the likely impact on their investment policies if Taiwan is included or excluded from such agreements. The second section relates to the companies' views concerning an economic integration agreement between Taiwan and China. The third section allows the company to list preferred partners with whom Taiwan should conclude economic integration agreements and the preferred content of such agreements. In the fourth section, the company is asked to supply certain basic information, such as what category of industry it is engaged in, the location of its parent company, areas of its investment in China, its amount of registered capital, and the number of its employees.

With respect to East Asian economic integration agreements, the questionnaire refers to ASEAN plus one (China), ASEAN plus three (China, Japan, and South Korea), Japan and South Korea, ASEAN and India, and China and Hong Kong. With respect to a future economic integration agreement between Taiwan and China, the questionnaire refers to a free trade agreement or an economic integration agreement that would enable commodities, services, capital, people, and information to flow more smoothly between the two sides.

Although the questionnaire does not describe the contents of East Asian economic integration agreements in detail, respondents should have been able to understand, by means of the examples and explanations given, that the agreements referred to in the questionnaire are East Asian economic integration agreements with ASEAN at their core. If the questionnaire had asked the company's views on each of the possible economic integration scenarios, this would have made the questionnaire too long and companies may have been unwilling to complete it. Furthermore, the answers to the questionnaire are no more than immediate and preliminary responses and the respondents could hardly be expected to distinguish between different scenarios of economic integration. By asking companies to make policy recommendations, including listing which countries Taiwan should give priority to in signing economic integration agreements and the preferred content of such agreements, the above research limitation is partially offset and we can gain some understanding of the detailed preferences of the enterprises in the survey.

In order to assess the impact of East Asian economic integration agreements on the investment policies of both Taiwanese and foreign enterprises, this study has designed two observation indicators: the "net investment effect" and the "complete net investment effect." The "net investment effect" indicator is the share of Taiwanese or foreign companies increasing their investment in Taiwan minus the share of Taiwanese or foreign companies decreasing their investment in Taiwan. This indicator reflects the net effect on the investment decisions of Taiwanese or foreign companies of Taiwan's participation or non-participation in East Asian economic integration agreements. For instance, if the "net investment effect" of Taiwan's participation in East Asian economic integration agreements is positive, Taiwan's participation will produce a "net investment creation" effect; if the "net investment effect" is negative, participation will produce a "net investment diversion" effect. The formula used to calculate the "net investment effect" is: $A = B - C$, where A: net investment effect; B: the share of Taiwanese or foreign companies increasing their investment in Taiwan; and C: the share of Taiwanese or foreign companies decreasing their investment in Taiwan.

The "complete net investment effect" indicator is the "net investment effect in the event of Taiwan's participation in East Asian economic integration agreements" minus the "net investment effect in the event of Taiwan's exclusion from East Asian economic integration agreements." This indicator reflects the net effect on the investment decisions of Taiwanese or foreign companies of Taiwan's participation and its non-participation in East Asian economic integration agreements. For instance, if the "net investment effect" of participation is 20 percent and the "net investment effect" of exclusion is minus 30 percent, then the "complete net investment effect" on Taiwan is 50 percent. This reflects the fact that, compared to the scenario of Taiwan's exclusion from East Asian economic integration agreements, 50 percent of Taiwanese or foreign companies will increase their investment in Taiwan if it participates in East Asian economic integration agreements. The formula used to calculate the "complete net investment effect" is: A = B – C, where A: complete net investment effect on Taiwan of East Asian economic integration agreements; B: "net investment effect" of Taiwan's participation in East Asian economic integration agreements; and C: "net investment effect" of Taiwan's exclusion from East Asian economic integration agreements.

The Impact of East Asian Economic Integration Agreements

Taiwanese Parent Companies

The number of questionnaires returned by Taiwanese parent companies was 435. Of the main industry categories, electronic components and electrical appliance manufacturing accounted for the highest percentage (9.9 percent), machinery supplies and equipment manufacturing was second (8.7 percent), basic metallic mineral products manufacturing was third (8.5 percent), the construction industry was fourth (7.4 percent), and transportation/warehousing and communication industry was fifth (7.1 percent). Concerning the total registered capital amount of Taiwanese parent companies, of the 407 responses, the average capital amount was NT$529 million, the maximum being NT$35.6 billion and the minimum being NT$100,000. With respect to the number of employees, of the 406 responses, the average number of employees was 142, the maximum number being 6,622 and the minimum 1 (see table 2).

Table 2
The General Situation of the Surveyed Taiwanese Parent Companies

Unit: NT$1,000; person

Category		Statistic	Number of companies responding
Total registered capital amount	Average	529,298	407
	Maximum	35,553,730	
	Minimum	100	
Number of employees	Average	142	406
	Maximum	6,622	
	Minimum	1	

Source: Survey questionnaire.

According to the results of this survey of parent companies, the net investment effect of Taiwan's participation in East Asian economic integration agreements is 21.6 percent, while the net investment effect of Taiwan's exclusion from East Asian economic integration agreements is -26.1 percent, and the complete net investment effect on Taiwan by East Asian economic integration agreements is 47.6 percent.

Taiwan-Listed Companies

The number of questionnaires returned by Taiwan-listed companies was 164 in total. In the main industry categories, electronic components and electrical appliance manufacturing accounted for the highest percentage (37.2 percent), basic metallic mineral products manufacturing was second (7.3 percent), petroleum and chemical manufacturing was third (6.7 percent), food and beverages was fourth (6.1 percent), and machinery supplies and equipment manufacturing was fifth (5.5 percent). Among the 163 listed company responses concerning investment amount, the average amount was NT$5.65 billion, with a maximum of NT$105.9 billion and a minimum of NT$5 million. The average number of employees was 1,021, the maximum number being 16,787 and the minimum 13 (see table 3).

Table 3
The General Situation of the Taiwan-Listed Companies in the Survey

Unit: NT$1,000; person

Item		Amount/number	Number of companies responding
Total registered capital amount	Average	5,652,250	163
	Maximum	105,866,720	
	Minimum	5,000	
Number of employees	Average	1,021	
	Maximum	16,787	
	Minimum	13	

Source: Survey questionnaire.

For Taiwan listed companies, the net investment effect of Taiwan's participation in East Asian economic integration agreements is 16.5 percent, while the net investment effect of Taiwan's exclusion from East Asian economic integration agreements is -17.7 percent, and the complete net investment effect on Taiwan of East Asian economic integration agreements is 34.1 percent.

Taiwan-Invested Enterprises in China

The number of responses from Taiwan-invested enterprises in China was 261. In the main industry categories, electronic components and electrical appliance manufacturing accounted for the highest percentage (12.5 percent), rubber and plastic products manufacturing was second (10.3 percent), food and beverages was third (6.0 percent), agriculture/forestry/fishing/livestock was fourth (5.4 percent), the textile industry was joint fifth with petroleum and chemical manufacturing (4.9 percent each), and clothing accessories manufacturing was sixth (4.4 percent); all other industries accounted for less than 4 percent. The general situation of these Taiwan-invested enterprises is presented in table 4. It is obvious from these figures that the Taiwan-invested enterprises in China included in the survey are enterprises of considerable scale, at least by Taiwan standards.

Table 4
The General Situation of the Taiwan-Invested Enterprises in China Included in the Survey

Unit: US$1,000; person

Category		Amount/number	Number of enterprises responding
Investment amount	Average	25,211	201
	Maximum	1,996,970	
	Minimum	24	
Number of employees	Average	1,696	203
	Maximum	80,000	
	Minimum	4	

Source: Survey questionnaire.

According to the results of this survey, the net investment effect of Taiwan's participation in East Asian economic integration agreements for this group of enterprises is 19.0 percent, while the net investment effect of Taiwan's exclusion from East Asian economic integration agreements is -33.7 percent, and the complete net investment effect on Taiwan of East Asian economic integration agreements is 52.7 percent.

Foreign-Invested Enterprises in Taiwan

The number of responses from foreign-invested enterprises in Taiwan was 145 in total. Of these, 44 were returned from enterprises whose parent companies were located in Europe (accounting for 30.3 percent of the total returned questionnaires), 38 (26.2 percent) were returned from American enterprises, 34 (23.5 percent) were from Japanese enterprises, 8 (5.5 percent) were from Southeast Asian enterprises, and 21 (14.5 percent) were from enterprises whose parent companies were located elsewhere. These 145 enterprises were mainly engaged in seven categories of industry: 22 were in the professional science and technology services industry (15.2 percent), 22 were in electronic components and electrical appliance manufacturing (15.2 percent), 20 were in machinery supplies and equipment manufacturing (13.8 percent), 17 were in finance and insurance (11.7 percent), 7 were in the transportation/warehousing and communication industry (4.8 percent), 7 were in transport equipment manufacturing (4.8 percent), and 7 were in the wholesale or retail sector (4.8 percent). These seven categories accounted for 70.3 percent of all the foreign-invested enterprises in the survey.

Among the 126 responses from foreign-invested enterprises concerning registered capital amount, the average amount was US$82.42 million, the maximum being US$2.5 billion and the minimum US$16,000. Among the 140 responses concerning the number of employees in Taiwan, the average number was 364, the maximum being 11,000 and the minimum 1. This indicates that the foreign-invested enterprises that responded to the survey are enterprises of considerable scale (see table 5).

Table 5
The General Situation of the Foreign-Invested Enterprises in Taiwan Included in the Survey

Unit: US$; person

Item		Amount/number	Number of enterprises responding
Total registered capital amount	Average	82,424,449	126
	Maximum	2,500,000,000	
	Minimum	16,000	
Number of employees	Average	364	140
	Maximum	11,000	
	Minimum	1	

Source: Survey questionnaire.

For this group of companies, the net investment effect of Taiwan's participation in East Asian economic integration agreements is 35.2 percent, while the net investment effect of Taiwan's exclusion from East Asian economic integration agreements is -17.2 percent, and the complete net investment effect on Taiwan of East Asian economic integration agreements is as high as 52.4 percent.

International Investment Consultancy Companies

A total of 14 questionnaires were returned by international investment consultancy companies. These respondents included companies from the United States, Japan, and Europe that have either set up branches in Taiwan or have sent analysts to Taiwan to conduct interviews and collect information. According to the 2005 data they supplied, these companies had substantial amounts of net assets and net revenues. For example, one had net assets as high as US$175 billion, while another enterprise's net revenue was US$35.86 billion; another enterprise, however, had net revenue of only US$10 million. One enterprise registered net revenue earned in Taiwan of US$250 million. With these kinds of sums at their disposal, the views of the analysts employed by these companies should reflect to a considerable extent the trend of portfolio investment, or even direct investment, made by foreign-invested enterprises in Taiwan.

According to the responses of this group of companies, the net investment effect of Taiwan's participation in East Asian economic integration agreements is 92.9 percent, while the net investment effect of Taiwan's exclusion from East Asian economic integration agreements is -78.6 percent, and the complete net investment effect on Taiwan of East Asian economic integration agreements is as high as 171.4 percent.

The Impact of a Cross-Strait Economic Integration Agreement

According to the results of this survey, the conclusion of a cross-Strait economic integration agreement would result in "net investment creation" in each of the types of enterprises surveyed. For all types of companies, with the exception of international investment consultancy companies, the prospect of a cross-Strait economic integration agreement has a far greater net effect on willingness to invest in Taiwan than does any kind of East Asian economic integration agreement. This is because a cross-Strait economic integration agreement would allow domestic and foreign-invested companies in Taiwan to take advantage of China's market and production resources. The net investment effects on the various categories of companies of Taiwan signing a cross-Strait economic integration agreement and of Taiwan's participation in East Asian economic integration agreements are presented in table 6.

Table 6
The Net Investment Effects of a Cross-Strait Economic Integration Agreement and East Asian Economic Integration Agreements

Enterprise type	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies
Cross-Strait economic integration agreement	27.75%	29.87%	25.54%	37.93%	85.72%
East Asian economic integration agreements	21.58%	16.46%	19.02%	35.17%	92.86%

Source: Survey questionnaire.

Clearly, the net investment effects of Taiwan's participation in East Asian economic integration agreements are much smaller for domestic enterprises (Taiwanese parent companies, Taiwan-listed companies, and Taiwan-invested enterprises in China) than they are for foreign enterprises, particularly international investment consultancy companies. In addition, the net investment effects of a cross-Strait economic integration agreement are generally larger than those of East Asian economic integration agreements. Nevertheless, according to the t-test model for the difference between two population means with unequal variances, with 5 percent of statistical significance, observed value t = 0.24 is smaller than the critical value t = 2.31 of the two-tailed test. So the difference between the average net investment effects of a cross-Strait economic integration agreement and East Asian economic integration agreements is not statistically significant.

Comparative Analysis

From this survey, it can be seen that the average net investment effect for Taiwanese and foreign-invested companies of Taiwan's exclusion from East Asian economic integration agreements is -34.7 percent, and the weighted average of net investment effects based upon sample size for Taiwanese enterprises and foreign-invested enterprises is -26.1 percent. That means that roughly 26-35 percent of the surveyed Taiwanese and foreign-invested companies would decrease their investment in Taiwan under this scenario. If Taiwan does participate in East Asian economic integration agreements, the average net investment effect for Taiwanese enterprises and foreign-invested enterprises is 37.0 percent, and the weighted average is 23.0 percent, meaning that around 23-37 percent of the surveyed Taiwanese enterprises and foreign-invested enterprises would increase their investment in Taiwan if this happens. The average complete net investment effect on Taiwan of East Asian economic integration agreements is 71.7 percent, and the weighted average is 49.2 percent. So compared with the scenario of Taiwan's exclusion from East Asian economic integration agreements, the scenario of Taiwan's participation in these agreements would result in 49-72 percent of the surveyed Taiwanese enterprises and foreign-invested enterprises increasing their investment in Taiwan. If Taiwan and China were to sign a cross-Strait economic integration agreement, the average net investment effect for Taiwanese and foreign-invested companies would be 41.4 percent, and the weighted average would be 29.8 percent. This indicates that about 30-41 percent of the surveyed Taiwanese enterprises and foreign-invested enterprises would increase their investment in Taiwan in these circumstances. The extent of these effects is quite astonishing (see table 7).

Table 7
Comparison of the Net Investment Effects of Taiwan's Participation in East Asian Economic Integration Agreements and of a Cross-Strait Economic Integration Agreement

Enterprise type	Sample size	East Asian economic integration agreements			Cross-Strait economic integration agreement
		Net investment effect of exclusion	Net investment effect of participation	Complete net investment effect	
Taiwanese parent companies	435	-26.06%	21.58%	47.64%	27.75%
Taiwan-listed companies	164	-17.68%	16.46%	34.14%	29.87%
Taiwan-invested enterprises in China	261	-33.70%	19.02%	52.72%	25.54%
Foreign-invested enterprises in Taiwan	145	-17.24%	35.17%	52.41%	37.93%
International investment consultancy companies	14	-78.57%	92.86%	171.43%	85.72%
Average	1,019	-34.65%	37.02%	71.67%	41.36%
Weighted average	1,019	-26.13%	23.01%	49.15%	29.77%

Note: "Complete net investment effect" is net investment effect of participation minus that of exclusion; "average" is average net investment effect in each type of enterprise in the survey; and "weighted average" means the net investment effect calculated for weighted average based on the sample size of each type of enterprise in the survey.

Source: Survey questionnaire.

Reasons behind the Impact of East Asian Economic Integration Agreements on the Surveyed Enterprises

There is a clear consensus among the companies in this survey that if Taiwan fails to participate in the East Asian economic integration regime, they will reduce their investment in Taiwan. This is because of the discrimination and competition that these companies will be subject to from the member-states of the economic integration regime, added to the fact that these companies will be unable to take advantage of the economies of scale, growth opportunities, and resource integration efficiency afforded by economic integration. The reasons indicated by respondents for reducing their investment in Taiwan in the case of Taiwan's exclusion from the East Asian economic integration regime are presented in table 8.

Table 8
Reasons Why the Surveyed Companies Would Reduce Investment in Taiwan if Taiwan Fails to Participate in East Asian Economic Integration Agreements

Reasons for decreasing investment in Taiwan	Taiwanese parent companies	Taiwan listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies	Average	Weighted average
To avoid trade discrimination in regional integration markets (tariff and non-tariff)	47.24%	54.55%	38.61%	41.94%	54.55%	47.38%	44.88%
Unable to compete with other companies in regional integration markets	66.93%	54.55%	42.57%	54.84%	54.55%	54.69%	55.78%
Unable to take advantage of economies of scale in regional integration markets	51.97%	48.48%	17.82%	51.61%	63.64%	46.70%	40.59%
Unfavorable to the integration of production resources and operating activities in regional integration markets	50.39%	42.42%	28.71%	32.26%	36.36%	38.03%	39.93%
Unable to take advantage of growth opportunities in regional integration markets	45.67%	39.39%	25.74%	51.61%	54.55%	43.39%	39.27%
Others	3.15%	6.06%	2.97%	12.90%	0.00%	5.02%	4.29%
Number of companies responding	127	33	101	31	11	303	303

Note: The question asked is multiple-choice; “average” means the average of each type of company surveyed; “weighted average” means the average based on sample size of each type of company surveyed.

Source: Survey questionnaire.

By contrast, there is quite a strong consensus among the companies in the survey that if Taiwan participates in the East Asian economic integration regime, they will make Taiwan their platform for production, marketing, R&D, and operations in East Asia. The reasons why these companies would increase their investment in Taiwan in the event of Taiwan participating in East Asian economic integration agreements are presented in table 9.

Table 9
The Reasons Why the Surveyed Enterprises Would Increase Their Investment in Taiwan if Taiwan Participates in East Asian Economic Integration Agreements

Reasons for increasing investment in Taiwan	Taiwanese parent companies	Taiwan listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies	Average	Weighted average
Favorable to forming an East Asian platform in Taiwan for integrating production resources and operating activities	52.34%	63.33%	34.67%	54.72%	53.85%	51.78%	49.28%
Favorable to forming an East Asian base in Taiwan for developing high value-added industry and R&D activities	63.55%	56.67%	24.00%	54.72%	53.85%	50.56%	50.00%
Favorable to forming an East Asian platform in Taiwan for services and marketing	57.94%	40.00%	20.00%	56.60%	61.54%	47.22%	45.68%
Favorable to forming an East Asian production base in Taiwan to export products to regional integration markets	55.14%	36.67%	44.00%	35.85%	7.69%	35.87%	44.24%
Others	2.80%	6.67%	0.00%	7.55%	0.00%	3.40%	3.24%
Number of replying enterprises	107	30	75	53	13	278	278

Note: The question asked is multiple-choice; "average" means the average of each type of company surveyed; "weighted average" means the average based on sample size of each type of company surveyed.

Source: Survey questionnaire.

The Impact of Industry Category on the Investment Behavior Patterns of the Surveyed Enterprises

Of the Taiwanese parent companies in the survey, those engaged in basic metallic mineral products manufacturing and electronic components and electrical appliance manufacturing are those for whom participation in East Asian economic integration agreements would have the biggest impact. Of the Taiwan-listed companies, those which would experience the biggest impact are those in rubber and plastic products manufacturing and electronic components and electrical appliance manufacturing industry. Companies engaged in agriculture/forestry/fishing/livestock and those in petroleum and chemical manufacturing indicated that they would experience the biggest impact among the Taiwan-invested enterprises in China. Among the foreign-invested enterprises included in the survey, those that registered the biggest impact of East Asian economic integration agreements are engaged in transportation/warehousing and communication and professional science and technology services (see table 10).

Table 10
The Complete Net Investment Effects of East Asian Economic Integration Agreements on the Surveyed Enterprises (by Major Industry Category)

Industry categories	Taiwanese parent companies		Taiwan listed companies		Taiwan-invested enterprises in China		Foreign-invested enterprises in Taiwan	
	Number of companies responding	%	Number companies responding	%	Number of companies responding	%	Number of companies responding	%
Electronic components and electrical appliance manufacturing	43	63.29	61	24.59	23	47.83	22	36.37
Machinery supplies and equipment manufacturing	38	48.95	9	22.22	-	-	20	40.00
Basic metallic mineral products manufacturing	37	69.44	12	58.34	-	-	-	-
Construction	32	41.03	-	-	-	-	-	-
Transportation/warehousing and communication industry	31	38.71	-	-	-	-	7	114.29
Wholesale and retail	21	20.53	-	-	-	-	7	57.15
Petroleum and chemical manufacturing	-	-	11	45.45	9	55.55	-	-
Food & beverage industry	-	-	10	20.00	11	-0.91	-	-
Rubber and plastic products manufacturing	-	-	6	66.67	18	38.89	-	-
Agriculture/forestry/fishing/livestock	-	-	-	-	10	103.33	-	-
Textiles	-	-	-	-	8	48.61	-	-
Clothing accessories manufacturing	-	-	-	-	8	12.50	-	-
Professional and technical services	-	-	-	-	-	-	22	72.73
Finance and insurance	-	-	-	-	-	-	17	47.06
Transport equipment manufacturing	-	-	-	-	-	-	7	57.15

Note: For each type of company within the survey, statistics are given only for the categories of industry with the most representatives, as in some categories there are too few samples.

Source: Survey questionnaire.

The Impact of Scale of Investment on the
Investment Behavior Patterns of the Surveyed Enterprises

Among the Taiwanese parent companies in the survey, those for whom the impact of East Asian economic integration is most powerful are companies with a capital amount in excess of NT$10 billion. Among Taiwan-listed companies, the biggest impact would be felt by those with a capital amount of between NT$100 and NT$999 million. As for Taiwan-invested enterprises in China, it is those with a capital amount of less than NT$100 million which would feel the biggest impact, and among foreign-invested enterprises in Taiwan the biggest impact would be felt by those with a capital amount of less than NT$100 million and those with capital of above NT$10 billion. Overall, the difference in the complete net investment effects of the companies according to their scale of investment is not statistically significant; on average, the average and weighted average complete net investment effects for the companies in the survey are 42.5 percent and 45.2 percent, respectively (see table 11).

Table 11
The Complete Net Investment Effects of East Asian Economic Integration Agreements on the Surveyed Enterprises (by Investment Scale)

Capital amount	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	Average	Weighted average
NT$10 billion and above	80.00%	20.01%	0.00%	57.15%	39.29%	47.96%
NT$1-9.9 billion	50.00%	34.45%	47.62%	45.83%	44.48%	46.06%
NT$100-999 million	40.00%	46.34%	46.16%	38.64%	42.79%	42.34%
Less than NT$100 million	46.83%	11.76%	56.38%	58.83%	43.45%	44.28%
Number of companies responding	407	163	201	126	897	897

Note: "Average" is the average for each type of enterprise in the survey; "weighted average" is the average based on sample size of each type of enterprise in the survey.

Source: Survey questionnaire.

The Impact of Scale of Enterprise on the Investment Behavior Pattern of Companies in the Survey

Among the Taiwanese parent companies in the survey, those that would experience the biggest impact from East Asian economic integration agreements are the large companies. Among Taiwan-listed companies of all sizes, the impact would be relatively equal, as their complete net investment effects range from 32 percent to 35 percent. It is the medium-sized companies among the Taiwan-invested enterprises in China that would experience the biggest impact, and as for foreign-invested enterprises in Taiwan, the biggest impact of East Asian economic integration agreements would be experienced by the large enterprises. Overall, the impact of East Asian economic integration agreements on medium-sized companies in the survey is smaller; the average and the weighted average of complete net investment effects for companies in all categories being 45.4 percent and 46.8 percent, respectively (see table 12).

Table 12
Complete Net Investment Effects of East Asian Economic Integration on the Surveyed Enterprises (by Enterprise Scale)

Enterprise scale	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested companies in China	Foreign-invested companies in Taiwan	Average	Weighted average
Large	55.13%	34.78%	50.50%	57.50%	49.48%	50.83%
Medium	44.44%	31.81%	64.71%	18.18%	39.79%	42.66%
Small	45.86%	34.61%	53.71%	53.85%	47.01%	46.82%
Number of companies responding	406	163	203	140	912	912

Note: According to the Ministry of Economic Affairs, Republic of China, companies with 200 or more employees are classified as "large," those employing between 100-199 are classified as "medium," and those employing less than 100 are classified as "small." "Average" means the average of each type of enterprise in the survey and "weighted average" means the average based on sample size of each type of enterprise in the survey.

Source: Survey questionnaire.

The Impact of Parent-Company Location on the Investment Behavior Patterns of the Surveyed Foreign-invested Companies in Taiwan

The complete net investment effects of East Asian economic integration agreements are smallest for enterprises whose parent companies are based in the United States (39.5 percent) or those based in Japan (41.2 percent) (see table 13).

Table 13
Net Investment Effects of East Asian Economic Integration Agreements on Foreign-invested Enterprises in Taiwan (by Parent-Company Location)

Parent-company location	Number of companies responding	Exclusion	Participation	Complete net investment effect
United States	38	-7.89%	31.58%	39.47%
Japan	34	-17.65%	23.53%	41.18%
Europe	44	-20.45%	34.09%	54.54%
Southeast Asia	8	-25.00%	50.00%	75.00%
Other countries	21	-23.81%	57.14%	80.95%

Note: "Exclusion" means the net investment effect of Taiwan's exclusion from East Asian economic integration agreements, "participation" means the net investment effect of Taiwan's participation in East Asian economic integration agreements, and "complete net investment effect" is calculated by subtracting "participation" from "exclusion."

Source: Survey questionnaire.

Policy Recommendations for Taiwan Offered by Companies in the Survey

Preferred Partners for Economic Integration

Concerning the priority list of countries with whom Taiwan should seek to conclude economic integration agreements, a strong consensus has emerged among the companies in the survey. In general, top priority is given to China and the United States, while Southeast Asia, the European Union, and Japan are in the second rank, and all other countries and regions rank below them. Indeed, China gets the highest score, with an accumulative total of 1,066, far higher than the United States, whose score is 698. The scores of the European Union, Southeast Asia, and Japan range from 293 to 379, and those of other economies are all below 74 (see table 14).

Table 14
Preferred Partners with Whom Taiwan Should Conclude Economic Integration Agreements

Unit: Total accumulative score

Suggested partner	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies	Accumulative total score	Ranking
China	170.23	212.80	237.54	195.01	250.35	1,065.93	1
United States	132.14	134.75	111.91	125.63	193.71	698.14	2
EU	90.65	69.53	67.03	103.14	48.94	379.29	3
Southeast Asia	99.96	82.94	70.57	66.42	30.76	350.65	4
Japan	68.17	56.70	45.94	72.77	48.94	292.52	5
South Asia	7.73	13.42	12.92	12.41	27.27	73.75	6
Australia & New Zealand	9.73	9.15	7.92	8.02	0	34.82	7
Canada	8.35	3.66	12.61	3.65	0	28.27	8
Latin America	7.47	6.71	10.81	2.9	0	27.89	9
Russia	3.09	3.05	16.14	4.34	0	26.62	10
Africa	0.50	1.22	0.73	0.75	0	3.2	11
Number of companies	409	164	261	141	13	988	---

Note:

1. Total accumulative score is the weighted score given by each type of enterprise in the survey to a suggested partner. The calculation formula is（Ax3+Bx2+Cx1）x100, where A, B, and C are the percentage ratios of the first priority, the second priority, and the third priority, respectively.
2. Accumulative total score is the sum of the total accumulative scores of each type of company in the survey.
3. Accumulative ranking is the ranking of accumulative total scores.

Source: Survey questionnaire.

Preferred Content of Economic Integration Agreements for Taiwan

The companies in the survey generally share the opinion that any economic integration agreements signed by Taiwan should be more than traditional free trade agreements and should instead be comprehensive and multi-functional. In addition, there is quite a strong consensus concerning the preferred content of future agreements.

In general, given that Taiwan is currently excluded from East Asian economic integration agreements, companies in every category suggest that tariff reduction should be the top priority for any economic integration agreement. According to the weighted average ratio, the seven most popular items for inclusion in any economic integration agreement are: tariff reduction (74.0 percent), trade facilitation (48.8 percent), open government procurement (40.8 percent), open capital mobility (40.6 percent), free flow of high-tech expertise (36.1 percent), open investment fields (34.8 percent), and protection of intellectual property rights (33.7 percent). In brief, the companies in the survey want to see agreements that facilitate and protect the flow of merchandise, capital, and high-tech expertise (see table 15).

Table 15
Suggestions for the Content of Economic Integration Agreements for Taiwan

Content of agreement	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies	Weighted average ratio	Ranking
Reduction in tariffs	74.71%	87.80%	63.98%	76.32%	---	74.02%	1
Trade facilitation	41.84%	54.27%	40.23%	63.45%	64.29%	48.79%	2
Open government procurement	64.60%	74.39%	17.62%	21.38%	35.71%	40.83%	3
Open capital mobility	35.40%	51.83%	35.25%	---	64.29%	40.64%	4
Open flow of high-tech expertise	42.53%	39.02%	29.12%	---	64.29%	36.07%	5
Open investment fields	24.14%	25.00%	42.53%	44.74%	---	34.80%	6
Protection of intellectual property rights	36.32%	30.49%	27.59%	43.45%	57.14%	33.70%	7
Open trade in services	20.46%	28.66%	34.87%	42.07%	57.14%	32.47%	8
Open communication and internet services	37.24%	42.07%	22.61%	26.21%	42.86%	31.00%	9
Mutual recognition of professional qualifications	18.85%	17.68%	38.31%	33.10%	57.14%	29.12%	10
Provision of legal assistance	28.97%	22.56%	30.27%	31.72%	57.14%	29.08%	11
Coordination of competition policy	33.10%	25.00%	23.75%	26.21%	35.71%	26.61%	12
Unified standards for product and quarantine inspection	13.79%	10.98%	28.74%	31.03%	57.14%	22.77%	13

Promotion of electronic commerce	23.91%	20.12%	21.46%	17.93%	35.71%	21.22%	14
Number of companies responding	435	164	261	145	14	1,019	---

Note:
1. The question is multiple-choice, so the sum of the percentages for each type of company exceeds 100%.
2. “Reduction in tariffs” and “open investment fields” were not included in the English version of the questionnaire distributed to foreign-invested enterprises in Taiwan, so the percentages for these are taken from the 114 Chinese questionnaires returned by foreign-invested enterprises. The weighted average is based on the number 114.
3. ”Open flow of high-technology expertise” and “open capital mobility” are not listed on the Chinese version of the questionnaire distributed to foreign-invested enterprises in Taiwan.
4. ”Reduction in tariffs” and “open investment fields” are not listed on the version of the questionnaire distributed to international investment consultancy companies.
5. “Weighted average ratio” is the ratio based on the sample size of each type of company in the survey.
6. “Ranking” means the ranking of weighted average ratio.

Source: Survey questionnaire.

China’s Obstacles and Opportunities

For Taiwan, China remains the biggest, and maybe even the only, obstacle to participation in the East Asian economic integration regime. Nevertheless, China also provides Taiwan with very important benefits in terms of comparative advantage in the international economic division of labor and in integration. The consensus consistently shared by the various categories of companies in the survey is that China should take precedence even over the United States as an economic integration partner for Taiwan. Furthermore, from the responses to the survey, it is clear that a cross-Strait economic integration agreement would boost Taiwan’s attractiveness as a destination for international investment much more than would Taiwan’s participation in the East Asian economic integration regime.

Since a cross-Strait economic integration agreement would facilitate the flow of products, services, and production factors between China and Taiwan, and companies of all categories would be able to engage in the most efficient division of labor across the Taiwan Strait, this would not necessarily have the effect of increasing investment in Taiwan. If Taiwan had no advantages as an investment location, companies might divert their investment to China instead. However, according to this survey, even though some of the companies indicated that they would reduce their investment in Taiwan in the event of a cross-Strait economic integration agreement, many of them indicated that they would increase their investment in Taiwan, because they consider Taiwan to be a more suitable platform than China for production, marketing, R&D, and operations in East Asia. So it seems that the conclusion of a cross-Strait economic integration agreement would increase Taiwan's advantages in the international division of labor and reinforce Taiwan's international comparative advantage; as a result, Taiwan would attract more international investment (see table 16).

Table 16
Net Investment Effects of a Cross-Strait Economic Integration Agreement on Taiwan's Attractiveness as a Destination for International Investment

Impact on investment	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies
Decrease investment in Taiwan	7.89%	9.15%	11.96%	6.21%	7.14%
Increase investment in Taiwan	35.65%	39.02%	37.50%	44.14%	92.86%
No impact on investment in Taiwan	56.46%	51.83%	50.54%	49.66%	0.00%
Net investment effect	27.75%	29.87%	25.54%	37.93%	85.72%

Note: "Net investment effect"= "Increase investment in Taiwan" minus "Decrease investment in Taiwan."

Source: Survey questionnaire.

Reviews

Research Limitations

Various scenarios of East Asian economic integration: The questionnaire does not include details of the contents of East Asian economic integration agreements. If it had done so, the questionnaire would have been too long and the companies would have been unwilling to respond to it. Furthermore, the answers to the questionnaire are simply the immediate and preliminary responses of the companies, and the respondents could hardly be expected to distinguish among a number of hypothetical economic integration scenarios. However, by asking the respondents to make policy recommendations, including their choice of partners with which Taiwan should sign economic integration agreements and the preferred contents of such agreements, this research limitation should be at least partly offset. This limitation also indicates that further research is necessary into the desirability for Taiwan of various East Asian economic integration scenarios. In addition, more detailed interviews are necessary to clarify the impact of economic integration on the investment behavior of various kinds of companies and the reasons for it.

Opinions of potential international investors: This study consisted of a questionnaire survey of five types of companies—Taiwanese parent companies, Taiwan-listed companies, Taiwan-invested enterprises in China, foreign-invested enterprises in Taiwan, and international investment consultancy companies. However, it was not possible to investigate the opinions of potential international investors, those who have not already invested in Taiwan and are likely to be unwilling to do so because Taiwan is excluded from the East Asian economic integration regime, as it was impossible to identify them. This research limitation raises the possibility that the study has underestimated the impact of the East Asian economic integration regime on Taiwan's attractiveness as a destination for international investment. For example, the exclusion of potential international investors means that the net investment diversion effect may be underestimated, and the net investment creation effect may be underestimated as potential international investors might be willing to invest in Taiwan if Taiwan were to join the East Asian economic integration regime.

Sampling method and quantity of returned samples: The sample size of each type of company was limited, resulting in a greater sampling error, and this affected the estimate of population parameters made by this study. However, the questionnaire survey was conducted over two years, and resources were insufficient to continue with this line of research. Furthermore the proportion of responses was generally close to the proportion of the population in terms of the number of investment projects and investment amounts. In addition, these companies were all quite large in terms of their average capital amounts and number of employees.

Therefore, the respondents' opinions should be fairly representative and important. In addition, the accumulative sample size of these five types of companies in the survey was 1,019. If the five types of companies represent the sampling size of the population of companies that are likely to make international investment in Taiwan, the sampling error was ±3.07 percent, based on a 95 percent confidence interval.

Effectiveness of investment decision-making information: The questionnaires were generally completed by personnel at or above manager level, often employed in finance departments or government relations departments of companies, while some questionnaires were completed by deputy general managers, general managers, or even the persons in charge of the companies. Thus the responses may be said to reflect the hypothetical investment policies of these companies, but may not represent actual future polices. Furthermore, investment policy is affected by many variables, and whether or not Taiwan participates in the East Asian economic integration regime is merely one of these. Therefore, the results of this survey show only the marginal effect on the respondents' investment policies of Taiwan's participation or non-participation in the East Asian economic integration regime. In addition, although the questionnaire contained a general explanation of the contents of East Asian economic integration agreements and a cross-Strait economic integration agreement, these agreements are very complicated, and it is difficult to predict their outcomes. Therefore, the managers of the companies in the survey might have found it difficult to predict their likely investment policies in the event of such agreements, which explains why a high proportion of respondents chose the response: "no impact on investment policy for Taiwan."[7] Some foreign-invested enterprises in Taiwan even responded that investment policies were decided by their parent companies, so all they could do was answer "no impact" or give no answer at all.[8]

Estimation of "net investment effect": This study adopted the numerical changes of each type of surveyed company as the statistical basis of "net investment effect," instead of changes in the scale of investment. For example, if one large company reduces its investment by NT$1 billion, this reduction is equivalent to one thousand companies reducing their investment by NT$1 million each. Therefore,

[7] Responses by foreign-invested enterprises in Taiwan, returned questionnaires FT032 and FT 123.

[8] Many managers of foreign-invested enterprises in Taiwan expressed such opinions. Returned questionnaire FT107.

using the numerical changes as the statistical basis may not produce an accurate estimate of the change in scale of investment. However, in this study, by cross-validation on investment policy and investment scale, it is found that the difference between the tendency ratios in the overall survey result and in the cross-validation survey result is not statistically significant. According to the one-way analysis of variance (ANOVA), with 5 percent statistical significance, statistical value $F = 0.44$ is smaller than $F_{3,12,0.05} = 3.49$; this means that there is no statistically significant difference between the average net investment effects of East Asian economic integration agreements on companies with different scales of investment in the survey (see table 11). Therefore, this research limitation should have little impact on the conclusions of this study.

Impact of time difference: This study was conducted over two years and enterprises in each category responded to the questionnaire in a different timeframe, which means that environmental changes over this period may have had an impact on the results. Since a great deal of work and material resources were involved in conducting the survey, this stage-by-stage method was probably unavoidable considering the limited resources available. Over the two years, there were no significant developments in the East Asian economic integration regime or in World Trade Organization (WTO) negotiations; neither did Taiwan conclude any economic integration agreements with its major trading partners. Therefore, the impact of time difference on the survey should not be too significant.

International Comparative Advantage: Static versus Dynamic

The East Asian economic integration regime facilitates the integration of markets and production resources in East Asia, creating economies of scale, growth opportunities, and resource integration efficiency. If Taiwan fails to participate in East Asian economic integration, it will of course be excluded from the benefits of the regime and will suffer from the negative impact of discrimination effects and competition pressure. As a result, Taiwan will be at a disadvantage when it comes to attracting international investment. However, even if Taiwan is able to participate in the East Asian economic integration regime, it will be afforded no more advantages than the other East Asian member-states. Whether Taiwan can attract international investment depends on its static international comparative advantage, or on advantages of investment location proposed in John H. Dunning's eclectic theory of international production. These advantages include factors such as production factor endowment, costs of international transportation and communication, economic systems, policy incentives and efficiency, infrastructure, market access, and industrial clustering effect.[9]

If Taiwan participates in the East Asian economic integration regime, it will no longer be at a disadvantage in the contest to attract international investment, but it will not necessarily attract more investment than the other members of the regime. Taiwan's participation in East Asian economic integration would increase the division of labor in the international economy, and this would augment Taiwan's static international comparative advantage. However, compared with other members of the regime, this static international comparative advantage could be less favorable in attracting international investment, and hence investment in Taiwan made by domestic and foreign enterprises might decline. For example, some companies in the survey think that China's business environment is better than that of Taiwan, so Taiwan's participation in the East Asian economic integration regime could help them form a platform of production, marketing, R&D, and operations in East Asia based in China, instead of Taiwan. That is why some scholars worry that cross-Strait economic exchanges will result in an industrial hollowing-out effect in Taiwan.

However, according to the results of this survey, if Taiwan were to participate in the East Asian economic integration regime its static international comparative advantage or advantage of investment location would be more likely to make Taiwan a platform of production, marketing, R&D, and operations in East Asia for each type of company surveyed, as the net investment effect of participation is 21.6 percent for Taiwanese parent companies, 16.5 percent for Taiwan listed companies, 19.0 percent for Taiwan-invested enterprises in China, 35.2 percent for foreign-invested enterprises in Taiwan, and 92.9 percent for international investment consultancy companies. Therefore, Taiwan's participation in the East Asian economic integration regime should help Taiwan utilize its excellent static international comparative advantage and strengthen its advantage of investment location, thereby attracting more international investment (see table 17).

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9 John H. Dunning, "The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions," *Journal of International Business Studies* 19, no. 1 (Spring 1988): 1-31.

Table 17
Net Investment Effects on Taiwan's Attractiveness as a Destination for International Investment of East Asian Economic Integration Agreements

Investment impact	Taiwanese parent companies	Taiwan-listed companies	Taiwan-invested enterprises in China	Foreign-invested enterprises in Taiwan	International investment consultancy companies
Decrease investment in Taiwan	4.08%	1.83%	9.78%	1.38%	0.00%
Increase investment in Taiwan	25.66%	18.29%	28.80%	36.55%	92.86%
No impact on investment in Taiwan	70.26%	79.88%	61.41%	62.07%	7.14%
Net investment effect	21.58%	16.46%	19.02%	35.17%	92.86%
Number of companies responding	435	164	261	145	14

Note: "Net investment effect" = "Increase investment in Taiwan" minus "Decrease investment in Taiwan"

Source: Survey questionnaire.

Traditionally, division of labor in the international economy is determined by international comparative advantage, which in turn is determined by labor productivity, production factor endowment (including natural resources, labor, physical capital, human capital, and technology), quality of production factors, economies of scale, and consumption preferences. However, from the economic development and international investment experience of other countries, we can see that flows of labor, technology, and capital dynamically change the international comparative advantages of related countries, and change the choices regarding international production locations made by international investors as well as the international trade patterns that are partly driven by international investment. In particular, the policy intervention of promoting technology adopted by some East Asian countries and the flows of international investment (including capital, expertise, and technology) in East Asia have, according to the so-called theory of product life cycle, dynamically changed the international comparative advantages of the East Asian countries and thus promoted their industrial transformation and rapid economic development.[10]

Traditional free trade agreements are no longer the mainstream in the East Asian economic integration regime. Most countries negotiate comprehensive and multi-functional economic integration agreements instead. Against the background of more liberalized flows of international production factors, even though these documents are called “free trade agreements,” their impacts extend to international investment and further affect countries’ international economic advantage and position in the international division of labor, including choice of location for regional production, marketing, R&D, and operations. These impacts affect the international flows of capital, expertise, and technology, and further dynamically change countries’ international comparative advantages, strengthening and consolidating the newly-emerging international economic division of labor created by the East Asian economic integration regime. This impact will be permanent and ongoing for both members and non-members alike.

According to the results of this survey, if Taiwan fails to participate in East Asian economic integration agreements, the discrimination effects and competition pressure of the East Asian economic integration regime against the companies in the study, as well as these companies’ inability to take advantage of the economies of scale, growth opportunities, and resource integration efficiency of the regional economic integration regime, will all be reasons for them to decrease their investment in Taiwan (see table 8). By contrast, if Taiwan participates in East Asian economic integration agreements, Taiwan is in a good position to become a platform for production, marketing, R&D, and operations in East Asia and this will encourage companies like those in the survey to increase their investment in Taiwan (see table 9). The flows of capital, expertise, and technology, and the re-orientation of international trade caused by international capital flows resulting from the East Asian economic integration regime, means that if it is excluded, Taiwan’s comparative advantage and competitiveness will be undermined, thus inflicting permanent and ongoing damage

[10] Gerald M. Meier, *Leading Issues in Economic Development*, sixth edition (New York: Oxford University Press, 1995), 455-57; and J. Malcolm Dowling and Rebecca Valenzuela Ma, *Economic Development in Asia* (Singapore: Thomson Learning, 2004), 100-102.

on Taiwan.

Conclusion

There are two dimensions to the impact of the East Asian economic integration regime on Taiwan: international trade effects and international investment effects. The impact of the former would inflict only limited damage on Taiwan, according to the existing quantitative studies carried out using CGE models and gravity models, but the impact of the latter might be larger. Using a questionnaire survey of five types of companies, this paper has assessed the impact of the East Asian economic integration regime on the investment behavior patterns of domestic and foreign enterprises with investment interests in Taiwan, as well as exploring their preferences regarding partners for future economic integration agreements and the content of future economic integration agreements with China.

Based on the results of the survey, if Taiwan cannot participate in East Asian economic integration, 26-35 percent of the companies surveyed will reduce their investment in Taiwan. If Taiwan does participate in East Asian economic integration, 23-37 percent of the companies in the survey will increase their investment in Taiwan. So for the companies in the survey, the complete net investment effect of participation in the regime minus the complete net investment effect of exclusion is between 49 and 72 percent. If Taiwan and China were to sign an economic integration agreement, between 30 and 41 percent of the companies in the survey would increase their investment in Taiwan.

The survey results indicate that the effects of economies of scale, growth opportunities, and resources integration efficiency brought about by Taiwan's participation in the East Asian economic integration regime will increase the incentives for domestic and foreign enterprises in Taiwan to invest there. In addition, while Taiwan is excluded from the East Asian regime, discrimination and competition pressure from within the regime will reduce incentives to invest in Taiwan. Furthermore, the East Asian economic integration regime will dynamically change the comparative advantages of related countries, reinforcing and consolidating the division of labor in the international economy created by the regime, and thus it will have a permanent and ongoing effect on Taiwan.

Finally, there is a strong consensus among the companies in the survey as to their policy recommendations. They suggest that Taiwan’s first priority targets for an economic integration agreement should be China and the United States and that the content of any economic integration agreement should be comprehensive and multi-functional, thereby facilitating and safeguarding international flows of commodities, capital, and technological expertise. China, in particular, would provide Taiwan with important leverage to advance its comparative advantage and competitiveness in the international division of labor. The results of the survey show that economic integration between Taiwan and China would be more helpful in increasing Taiwan’s attractiveness as a destination for international investment than would participation in East Asian economic integration, although the difference is not statistically significant.

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